# UNIVERZITA PALACKÉHO V OLOMOUCI 

Pedagogická fakulta
Ústav cizích jazyků

Bc. MICHAL HUDEC<br>II. ročník - prezenční studium

# Obor: Učitelství anglického jazyka pro 2. stupeň základních škol a učitelství německého jazyka pro 2 . Stupeň základních škol 

# English dialects and Czech phonological system (for lower secondary schools) 

(Diplomová práce)

Vedoucí práce: Doc. PhDr. Václav Řeřicha, CSc.

I declare that I have worked on this thesis independently, using only the primary and secondary sources listed in the bibliography.

Author's signature

## Acknowledgments

I would like to thank Doc. PhDr. Václav Řeřicha, CSc., the supervisor of my thesis, for his suggestions, guidance and his positive attitude that cheered me up and helped me find the right direction when I needed it.

## TABLE OF CONTENT

1 Introduction ..... 6
2 Hypothesis ..... 7
3 RP and terminology ..... 8
3.1 IPA ..... 8
4 Classification ..... 9
4.1 Vowels ..... 10
4.1.1 Cardinal vowels ..... 10
4.1.2 Vowels in RP and Czech ..... 10
4.1.3 Full correspondence ..... 10
4.1.4 Articulatory shift ..... 11
4.1.5 Phoneme combinations ..... 11
4.1.6 Hesitation noises ..... 12
4.1.7 Unique phonemes ..... 12
4.1.8 Text Frequencies of vowels ..... 13
4.1.9 Text Frequencies of vowels in comparison with Czech ..... 13
4.2 Consonants ..... 15
4.2.1 Consonants in RP and Czech ..... 15
4.2.2 Full correspondence ..... 15
4.2.3 Articulatory shift ..... 16
4.2.4 Unique phonemes ..... 18
4.2.5 Text frequencies of consonants in RP ..... 19
4.2.6 Text Frequencies of consonants in comparison with Czech ..... 19
4.3 Similarity of RP and Czech expressed as percentage ..... 21
5 Description of the method ..... 22
6 Selected dialects ..... 23
6.1 Cockney ..... 23
6.2 Bristol ..... 26
6.3 Liverpool ..... 28
6.4 Wales ..... 31
7 Research - introduction ..... 33
7.1 Implementation in the lesson ..... 34
7.2 Content of the research ..... 36
7.2.1 Recording ..... 36
7.2.2 Task sheet ..... 37
8 Evaluation of the results ..... 38
8.1 Top-rated accent $-6^{\text {th }}$ grade ..... 38
8.1.1 Groups analysis - $6^{\text {th }}$ grade ..... 39
8.2 Top-rated accent $-9^{\text {th }}$ grade ..... 40
8.2.1 Groups analysis - $9^{\text {th }}$ grade ..... 41
8.3 Top rated accent summary ..... 41
8.4 Sensitivity test ..... 42
8.5 Sensitivity test - Part one ..... 42
8.5.1 Cockney and Welsh accent ..... 43
8.5.2 Bristolian and Liverpudlian accent ..... 44
8.6 Sensitivity test - part 2 ..... 46
8.6.1 Cockney ..... 46
8.6.2 Wales ..... 47
8.7 Liverpool ..... 48
8.7.1 Bristol ..... 49
8.8 Sensitivity test general overview - Accents ..... 50
8.9 Sensitivity test general overview - Distinctive features ..... 51
9 Conclusions ..... 53
10 Summary ..... 55
11 References ..... 56
12 List of tables ..... 58
13 Appendix ..... 59
14 Annotation ..... 64

## 1 Introduction

Received pronunciation has been dominating Czech schools for years but without much success as many pupils, as well as high school students struggle when exposed to the real spoken English outside the classroom desks. I asked myself the following questions before I decided to write more on this topic. Why is it that Czechs are very shy and prefer to avoid any sort of encounters with foreigners? Is it in our nature to expect the worst before even attempting to communicate? Is it the teachers' fault for not knowing how to prepare pupils for the real world or is it simply the difference between the two languages that have very little in common? Maybe our untrained ears and completely different phonological perception makes it harder for us, Czechs, to learn English along with its accents properly. RP is the binding accent that is most likely to be understood by every English speaking being in the world, but what if there is another accent that is, in fact, closer and much more suitable for Czech pupils to learn? There is a great deal of them on Earth and from my personal experience I noticed quite a few accents that could, in theory, be strong candidates to replace RP in its current prominent position.

Even though all the above mentioned questions play undoubtedly their part in the problematics of Czechs' attitude towards communicating in English, in my thesis I decided to pursue the answer to the last one - 'What if there is another accent that is, in fact, closer and much more suitable for Czech pupils to learn?' Phonological systems of certain spoken English dialects share parts of their quality with the phonology of Czech. Therefore, Czech English learner should be able to understand selected English accents that share particular similarities with the Czech phonological system better, if presented with their common phonological features before listening to the given accent. The idea behind this research is to make pupils more aware of the different accents and dialects, as only around 3\% of native English speakers use RP and the rest ( $97 \%$ ) of them speak with a variety of English.

The first part of the thesis deals with linguistic aspects and terms that will be explained in the text throughout the work. As this is a scientific thesis and research, it is expected the reader has a basic knowledge of these terms that will only briefly be described. The second part is focused on the analysis of selected accents. Lastly the thesis contains a research that shows the sensitivity and ability of Czech pupils to distinguish the accents as well as their distinctive features.

## 2 Hypothesis

I have already been partially engaged with the issue of finding an accent that would be a good addition or even a substitution for RP in Czech schools. In my bachelor thesis Czech interpretation of distinctive features of selected spoken English dialects, I deal with the comparison of Czech and English phonemic inventories and try to find similarities between them as well as to point out crucial difference. Therefore, I decided to extend this research into a diploma thesis that is based on external examination of my previous work with the aim of verification of the findings in teaching practice. Out of the 4 main skills - reading, listening, writing and speaking, the main focus will be placed on listening and distinguishing the key features of the given accents. Necessary adaptations have to be made in order to simplify the theory for school environment.

The approach chosen in this thesis is placing the distinctive features of Czech next to the spoken English dialects, by breaking them into phonemes, from the least similar one to the most, based on their level of resemblance with Czech. Thereafter, a detailed analysis of RP and another 4 selected spoken English dialects in a simplified form (not including RP) will be presented to the pupils. Distinctive features of each accent will be introduced in pairs to the pupils. Only after they will have known the exact characteristic features of the selected accent, they will listen to it, make an educated guess which one it is and note down the distinctive phonemes they heard. In theory accents that share the most phonemes with the Czech phonemic inventory such as [x] in Liverpudlian English will be easier to understand. Thanks to the heavy aspiration of [ $\mathrm{p}, \mathrm{t}, \mathrm{k}$ ] in the final position of a word, the phoneme [ x$]$ is formed thus giving a Czech English learner an advantage in understanding when aware of such characteristics of the accent (Hudec, 2017, p.24). In the same work Hudec deals with ' $r$ ' phoneme that is described by Hughes, Trudgill and Watt (2013, p. 113) as an alveolar tap [r] that is again closer to the Czech [r]. The pupils' sensitivity to the individual accents in general as well as phonemes will be tested and analyzed. The expected results are that the accents with a higher number of similar phonemes with the Czech phonemic inventory will be easier for the pupils to understand and, hypothetically, easier to reproduce which could be subject to a future research. It is impossible to cover all the varieties of English, but the results may serve as a steppingstone towards the trend of communicative language teaching at Czech schools, finding an alternative variety of English to RP, as well as increasing pupils' sensitivity to English accents.

## 3 RP and terminology

I chose RP (Received Pronunciation) as the standard form of English in this thesis for several reasons. In J.C. Wells' dictionary (2000, p. 8), under the chapter Types of pronunciation recorded, describes RP as the most widespread form and usual norm in teaching language as a foreign language in countries where the BrE model is used. Despite its rapid development and lack of localization ${ }^{1}$ it remains the most common variety in Czech education system thus making it the most meaningful choice for my research. Received Pronunciation will be referred to as 'English' in this thesis, unless specified otherwise.

### 3.1 IPA

International Phonetic Association (IPA, 2015) defines their aims as follows: 'The aim of the IPA is to promote the scientific study of phonetics and the various practical applications of that science. In furtherance of this aim, the IPA provides the academic community world-wide with a notational standard for the phonetic representation of all languages - the International Phonetic Alphabet (also IPA).'

To express the differences as well as similarities in pronunciation in this thesis, all the model words will be transcribed in IPA manner.

## VOWELS



Table 1 from THE INTERNATIONAL PHONETIC ALPHABET (revised to 2015)

[^0]
## 4 Classification

To support my hypothesis, a new division was created based on my previous research. In my bachelor thesis Czech interpretation of distinctive features of selected spoken English dialects, when comparing Czech with RP in chapter 4, Czech and English phonemic inventories, five prominent phenomena occurred. These gave names to the newly arisen groups that were graded from 1-5 based on their difficulty of understanding for a Czech English learner, with 1 being the easiest and $/ 5 /$, formed by unique phonemes, the hardest. Czech was chosen as the reference language and the phonemes were either in full correspondence, meaning the pronunciation was nearly identical, or the place of articulation was shifted with the understanding being slightly more difficult.

As next there were diphthongs or phoneme combinations. These form a category of their own and were assigned a difficulty number $/ 3 /$ as some diphthongs in RP must be a combination of phonemes in Czech, having an articulatory shift. Group /4/ is a steppingstone for the $5^{\text {th }}$ and last group. Even though $/ 4 /$ is formed by two phonemes that appear to be unique in Czech, they still do exist as so-called hesitation noises. In online dictionary SBC.ABZ.cz, Rudolf Kohoutek (2019) describes them as paralinguistic occurrences caused by interruption of coherent speech by not fully articulated vowels as in Czech 'hmm' or 'ééé.' They are usually a sign of hesitation.

To the fifth group belong phonemes that are entirely unique, which means they must be adopted by the learners.

### 4.1 Vowels

A. C. Gimson and Cruttenden (1994, p. 35) define vowels as: 'This category of sounds is normally made with a voiced egressive airstream, without any closure or narrowing... the escape of the air is characteristically accomplished in an unimpeded way over the middle line of the tongue.' Meaning there is no obstacle in the outward flowing airstream through the middle of the tongue.

### 4.1.1 Cardinal vowels

Daniel Jones devised this system and based it on the position of the tongue and rounding of the lips creating 8 cardinal vowels denoted by the numbers $1-8$ and symbols [i], [e], [ $\varepsilon$ ], [a], [ 0 ], [a], [o], [u]. These are the most frequent phonemes with combinations of tongue and lips positions. Front and open vowels are usually unrounded whereas back vowels other than in the open position are typically rounded. (Gimson and Cruttenden, 1994, p. 36,)

### 4.1.2 Vowels in RP and Czech

The same authors claim there are 20 vowels (including diphthongs) that have distinctive function in English. Czech divides its basic vowels into 5 short (based on their quantity) forms [ $\mathrm{a}, \mathrm{e}, \mathrm{i}, \mathrm{o}, \mathrm{u}$ ] and their long versions [á, é, í, ó, ú] with the total of $10+1$ diphthong [ou] (Pálková, p. 171 -172, 1994).

| Czech | Full correspondence | Articulatory shift | Phoneme combinations | Hesitation noises | Unique phonemes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English <br> Vowels | [ $\Lambda] /[\varepsilon]$ | $\begin{aligned} & \text { [a] [i:] [r] [0] } \\ & {[\mathrm{v}][\mathrm{u}:][\mathrm{p}]} \end{aligned}$ | $\begin{aligned} & {\left[a^{i}\right] /\left[e^{i}\right] /\left[\rho^{i}\right] /\left[\partial^{v}\right]} \\ & {\left[a^{v i}\right]} \end{aligned}$ | [3]/[ə] | $\begin{aligned} & {\left[\mathrm{r}^{\mathrm{p}}\right][\mathfrak{æ}]\left[\mathrm{U}^{ }\right]} \\ & {\left[\mathrm{e}^{\mathrm{e}}\right]} \end{aligned}$ |

Table 2-Czech and English vowels

### 4.1.3 Full correspondence

This group is based on sounds both, English and Czech have in common. There is the smallest difference in pronunciation. These phonemes should be easily recognized by Czech English learners when encountered. Melen (2010, p.17) says there is a little auditory difference between Czech and English [a] - [ 1 ] in words like mast - must, when pronounced separately without
context. Melen looks at the problematics from different perspective and the nuances between [ $\Lambda$ ] - [a] are much smaller than those of phonemes in articulatory shift group therefore they remain in the full correspondence section. Czech and English [e] also belongs to this group as the differences in pronunciation are negligible. Skaličková (1979, p. 37) states that the articulation place of English $[\varepsilon]$ is approximately the place of the Czech one.

### 4.1.4 Articulatory shift

The place of articulation of Czech and English phonemes differ greatly but most of them can find their counterpart in the other language. This subgroup deals with the ones whose articulatory shift is to an understandable extent. The differences are usually the rear or frontal position, flatness and roundness of a phoneme resulting in a higher or a deeper sound.

First phoneme of this group is Czech [á] and English [a] that sounds deeper than its Czech counterpart thanks to its rear articulation as in lák - lark on the other hand English [i:], despite being more rear than Czech [í], sounds higher pitched (Melen, 2010, p. 15). As in the first case of the previous two phonemes, English [ I ] is deeper and formed more at the back of a mouth with the tip of the tongue retreated from the bottom incisors, whereas [i] is fronted, sounding higher pitched with the tongue leaning against the incisors (Skaličková, 1979). Melen (2010, p. 18) says English [0] is the rearmost vowel and apart from that it is also more rounded and sounds deeper than Czech [o/ó], unlike in the case of English [u] and [u:] (higher) which are articulated more at the front of the mouth than Czech [u] and [ú].

### 4.1.5 Phoneme combinations

This subdivision is called phoneme combinations as it covers diphthongs as well as combinations of vowels and consonants which makes it harder for a Czech English learner to identify and understand as some of them could be very unusual to their ears.

The most distinctive difference between Czech [á $+j$ ] and English $\left[a^{i}\right]$ is the Czech palatalization of the final element resulting in full articulation of [j] while English variety tends to be unfinished varying greatly from a speaker to speaker says Skaličková (1979, p. 60). Other phonemes in this group are [ $a^{v}$ ], for which the same articulation rules as for [ $a^{i}$ ] hold true, and [ $\mathrm{e}^{\mathrm{i}}$ ] whose closest counterpart in Czech is [ $\left.\mathrm{e}+\mathrm{j}\right]$. [ $\mathrm{o}^{\mathrm{i}}$ ] could be compared to Czech $[\mathrm{o}+\mathrm{j}]$ and just like in the previous case with [ $a^{i}$ ] the quality of the final phoneme is the one of [ I ] rather than of [j] as RP speakers start pronouncing [j] and leave it incomplete (Melen, 2010, p. 22 23). He also points out $\left[\partial^{*}\right]$ and [ou], which is the only true diphthong used in Czech, share
only their graphic quality, as the Czech [ou] is rounded (labialized) for the duration of the phoneme, whereas the English version is fronted with a minor labialization.

### 4.1.6 Hesitation noises

There was a need of placing schwa and [3] into a separate group as they are not completely unique to Czech English learners. The subgroup is called hesitation noises as Czech speakers used these as such, with [3] being, in fact, a longer version of [ə] with a very similar and neutral place of articulation (Melen, 2010, p.20,).

Gimson and Cruttenden (1994, p. 116) state there are two phonemes in English [3], [ə] that have the quality of central vowels and are very frequent in English in unaccented syllables. As Melen (2010) says the phoneme [ə] appears in isolated spelling of every Czech consonant $\left[b^{ }, c^{2}, l^{\mathrm{l}}\right.$, $\mathrm{m}{ }^{\circ} .$. ] and adds that [ $\rho$ ] is a neutral vowel with a neutral lip position.

### 4.1.7 Unique phonemes

These phonemes have no counterpart in Czech and form the most difficult group for a Czech English learner to understand. As for vowels there are 4 unique phonemes
 they glide into [ə] in their final element (Hughes, Trudgill and Watt, p. 51, 2013). As it was mentioned earlier, schwa does exist in Czech only in forms of hesitation noises which are not very common. Melen (2010 p.25) adds that Czech English learners' ears are not sensitive enough to spot and differentiate between these centering diphthongs resulting in frequent mistakes when they give the diphthong a different quality that is closer to their phonetic system fx. [ $\Lambda$ ]. Most Czech English learners will describe pronunciation of [æ] as something between Czech [e] and [a], which suggests there is a problem of them differentiating between the words man [meen] and men [men]. The least common phoneme in English is [ $\mathrm{v}^{\bullet}$ ] and it is usually being replaced by [ $0:]$ in some cases.

### 4.1.8 Text Frequencies of vowels

Based on the number of phonemes in each group we can determine how close an accent is to Czech. To measure how each phoneme shift between RP and the accent can help a Czech English learner understand the given accent better, a table called text frequencies of vowels and consonants in RP from Gimson's Pronunciation of English was borrowed, which can provide us with better and more precise results. They can be expressed in percentage and compared with the success rate of the research.

To determine how similar Czech and English are, it is necessary to take the frequency of individual vowels into consideration, regarding the level of correspondence with Czech as shown in the Table $2^{2}$.

|  | \% |  | \% |
| :---: | :---: | :---: | :---: |
| 2 | 10.74 | ): | 1.24 |
| I | 8.33 | u: | 1.13 |
| e | 2.97 | U | 0.86 |
| $\mathrm{a}^{\text {i }}$ | 1.83 | a: | 0.79 |
| $\Lambda$ | 1.75 | $\mathrm{a}^{\text {s }}$ | 0.61 |
| $\mathrm{e}^{\text {i }}$ | 1.71 | 3 : | 0.52 |
| i: | 1.65 | $\mathrm{e}^{\text {a }}$ | 0.34 |
| $\partial^{\text {r }}$ | 1.51 | $\mathrm{I}^{\text {P }}$ | 0.21 |
| æ | 1.45 | $0^{\text {i }}$ | 0.14 |
| D | 1.37 | $\cup^{\circ}$ | 0.06 |
| Total all vowels: $39.21 \%$ |  |  |  |

Table 3 from Gimson's Pronunciation of English (Gimson and Cruttenden, p. 136, 1994)

### 4.1.9 Text Frequencies of vowels in comparison with Czech

The most significant and, therefore the most similar, are vowels under full correspondence. This group contains [ $\Lambda$ ] with the occurrence frequency in RP of 1.75\% and $[\varepsilon]$ with $2.97 \%$. Hence, their value is set to 5 (as the most efficient).

[^1]The second most similar set of phonemes, called articulation shift, is composed of [a] $0.79 \%$, [ $\mathrm{i}:] 1.65 \%,[\mathrm{r}] 8.33 \%$, [ o$] 1.24 \%$, [ v$] 0.86 \%$, [v] 1.37 and [u:] 1.13\%. Their value for Czech English learners is 4.

Combination of phonemes is the third group formed by [ai] ${ }^{i} 1.83 \%$, [ $\left.\mathrm{e}^{\mathrm{i}}\right] 1.71 \%$, [ $\left.\mathrm{a}^{\mathrm{i}}\right]$ $0.14 \%,\left[\partial^{v}\right] 1.51 \%,\left[a^{v}\right] 0.61 \%$ and the value of 3 .

The group called hesitation noises contains two entries [3] and schwa - [ə]. The first mentioned phoneme [3], is used in $0.52 \%$ of all text and [ə], the most common vowel, with $10.74 \%$. Their value is set to 2 .

The last group, with the value of 1 , is Unique phonemes. It has no similar phonemes or combination of sounds in Czech and comprises of [$]$ with $0.21 \%$, [æ] $1.45 \%$, [ $\left.\cup^{\bullet}\right]$ $0.06 \%$ and $\left[\mathrm{e}^{ }\right] 0.34$.

| Value | Frequency of use of the phonemes | Total percentage | Weighted average |
| :---: | :---: | :---: | :---: |
| 5 | [ $\Lambda$ ] 1.75\% [ $\varepsilon$ ] $2.97 \%$. | 4.72 | 8.47 \% |
| 4 | [a] 0.79\%, [i:] 1.65\%, <br> [r] 8.33\%, [จ] 1.24\%, <br> [v] 0.86\%, [u:] 1.13\% <br> [p] 1.37 | 15.37 |  |
| 3 | $\begin{aligned} & {\left[a^{i}\right] 1.83 \%,\left[e^{i}\right] 1.71 \%,} \\ & {\left[\mathrm{a}^{i}\right] 0.14 \%,} \\ & {\left[\mathrm{a}^{v i}\right] 1.51 \%,} \\ & {[0.61 \%} \end{aligned}$ | 5.8 |  |
| 2 | [3] 0.52\%, [ə] 10.74\% | 11.26 |  |
| 1 |  | 2.06 |  |
| Total all vowels: $39.21 \%$ of all text | $39.21 \%$ of all text |  |  |

Table 4 Text Frequencies of vowels in comparison with Czech
The research suggests that the similarity coefficient of vowels between RP and Czech is $8.47 \%$ out of $39.21 \%$.

### 4.2 Consonants

Melen in his book Výslovnost angličtiny na pozadí češtiny (2010, p.28) explains that the nature of consonants is based on interferences of different kinds and qualities. It means either lips or other articulatory organs create a barrier that is in the way of exhaled air, blocking or narrowing it enough for the interference to be heard. There are many variables that need to be taken into consideration concerning consonants. These differences have little or no value for the purpose of this theses as it aims to apply phonemic similarities of Czech and English in practice. Should you be more interested in the differences and similarities of Czech and English, see Hudec's Czech interpretation of distinctive features of selected spoken English dialects.

### 4.2.1 Consonants in RP and Czech

| Czech | Full correspondence | Articulatory shift | Combination | Hesitation noises | Unique phonemes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English <br> Consonants | $\begin{aligned} & \hline \mathrm{fz}][\mathrm{v}][\mathrm{b}][\mathrm{m}] \\ & {[\mathrm{z}][\mathrm{n}][\mathrm{s}][\mathrm{f}][\mathrm{S}]} \\ & {[\mathrm{l}]} \end{aligned}$ | $\left.\begin{array}{lll}{[\mathrm{p}]} & {[\mathrm{t}]} & {[\mathrm{d}]} \\ {[\mathrm{ds}]} & {[\mathrm{t}]} & {[\mathrm{j}]} \\ {[\mathrm{k}]} & {[\mathrm{g}]} & {[\mathrm{h}]} \\ {[\mathrm{y}]}\end{array}\right]$$[\mathrm{x}]$  |  |  | [w] [ө] [ $¢$ ] |

Table 5 Czech and English consonants

There are 21 consonants in English 'abc' but in total 24 are pronounced by an RP speaker. This is caused by the historical development of English that eliminated correlation of written and spoken letters. For example, the phoneme / $/ /$ is embodied by 2 letters 'TH.'

### 4.2.2 Full correspondence

Due to a large number of phonemes under this group it is convenient to split them into 2 subgroups that is voiced and unvoiced consonants.

## Voiced

Also known as fortis consonants, are pronounced with a significant participation of vocal cords. For instance $[z]$ or $[\mathrm{v}]$. The voiced consonants are $[\mathrm{b}],[\mathrm{m}],[\mathrm{v}]$ and $[\mathrm{z}]$ with
the place of articulation as well as the realization itself identical with their Czech version. As next there are [3] and [n] that are slightly different in English but still within the range of similarity needed to be marked under full correspondence group (Skaličková, 1974).

## Unvoiced

Or also voiceless or lenis consonants are pronounced without using vocal cords such as [s] or [f]. Melen (2010, p.36) says Czech and English [1] are identical but appear only if preceded by a vowel. He points out the existence of a so-called dark $L-[t]$ which articulation is created by leaning the blade of a tongue against the gum behind the upper incisors. The back of the tongue descends and lets the air flow around the sides rather than above the tongue. This phoneme is not on the list of consonants and is rather a variation that is recognized by a Czech English learner as [1], therefore it remains in full correspondence. As for identical unvoiced consonants that Czech and English have in common, there are [f], [s] and [ $\left.\int\right]$ with an insignificant difference in pronunciation that should not prevent understanding if subjected to a Czech English learner.

### 4.2.3 Articulatory shift

The first two representatives of this group are [ t ] and [d]. In my bachelor thesis I generalized the problematics of most of the alveolar and post-alveolar consonants, claiming the differences in pronunciation were of a minute character, therefore playing no important role. It is necessary to rephrase this statement as both Skaličková (1974) as well as Melen (2010, p.33) agree that English [ $t$ ] has a different, not only the place, but also the manner of articulation. The same applies to its voiced counterpart [d] because English and Czech share, in this case, only the occlusive ${ }^{3}$ characteristics with a changed manner of articulation. Skaličková (1979, p.110) describes the difference between English [ t$]$ ], [ d ] and Czech [č], [dž] as follows: the tongue in English, in both consonants [ t ] and [d $\mathrm{c}_{\text {] }}$, is arched higher towards the hard palate than in the Czech realization of these phonemes. For this reason, these phonemes were placed within the articulatory shift group. Melen (2010, p. 36) explains that English [h] is considered an unvoiced consonant on the contrary to its Czech equivalent that is always voiced. In RP [h] sometimes blends as a mere exhalatory beginning of the following vowel, thus gaining its quality. Compare English half with Czech háv or hope - houp. Due to above mentioned reasons, [h] is placed in

[^2]articulatory shift group as the quality differs, but it still exists in both RP and Czech. The key difference between the English and Czech [p] is its aspiration ${ }^{4}$ in English. This phenomenon never occurs in Czech and it might cause a minor problem with understanding for an untrained Czech English learner's ear. The same holds for two other phonemes in this group [ t$]$ and $[\mathrm{k}]$. On the top of the previously mentioned differences, these phonemes get aspirated with [ $k$ ] being the easiest to do so (Melen, 2010, p.30). Apart from the aspiration English [k] is pronounced with the tip of the tongue hanging freely in the mouth, whereas the tongue in the Czech version is touching the bottom of the mouth. The difference in articulation of Czech and English [g] is according to Skaličková (1974, p. 106) the same as in the case of [k]. She also adds that [g] in Czech is a foreign element that occurs only in borrowed texts from other languages as in words like guma, gól, etc. or in assimilated positions where the letter ' $k$ ' is followed by another voiced consonant as in kdo [gdo] or $k$ domu [g domu]. Since the book was written in 1974, the Czech language has developed, with [g] no longer being perceived as a foreign sound by young people and should not cause major problems in understanding. Phonemes [j] and [w] are considered by modern linguists as so-called semi-vowels. English accents \& dialects define these as: '...though semi-vowels are vowel-like, they are treated as consonants because they function more like consonants, in the sense they occupy syllable margins rather than acting as syllable nuclei (Hughes, Trudgill and Watt, 2013, p. 47).' These are consonants that share qualities of both vowels and consonants thanks to their place of articulation, merging the sound into [i] in the case of $[j]$ and $[\mho]$ in the case of $[w]^{5}$. The main difference is in audible friction of consonants (Melen, 2010, p. 27). There is no significant contrast between Czech and English [j] apart from its function and placement in words (Skaličková, 1974). Although the phoneme [ $\mathfrak{y}$ ] exists in both languages, it is essential to mention the dissimilarity in articulation. In Czech the tip of the tongue is in contact with the bottom of the mouth, whereas in the English version the tip of the tongue hangs loosely in one's mouth. Apart from the different articulation, in Czech [ y ] appears only in assimilated position as in srnka [sryka] or banka [bajka] (Melen, 2010, p.36).

Because RP was chosen to be the reference language in this thesis, there are certain difficulties that arose from this decision with one of them being the distribution and use of [r]. In RP they are slightly more complicated and need to be explained in detail. Hughes, Trudgill and Watt (2013) state that RP is a non-rhotic accent in which [r] has a number of allophones such as [r], $[\mathrm{I}],\left[\begin{array}{rl}{[\mathrm{I}}\end{array}\right],\left[{ }_{\mathrm{I}}^{2}\right]$. The first two are the most common ones and the remaining two reach out of the span

[^3]of this thesis and are mere varieties contained in [r] therefore splitting [r] allophones into [r] and [ I ] is sufficient. English [ I ] appears only in positions preceding vowels or before dark [ 1 ]. Melen (2010, p. 38) describes the articulation of an English [.I] this way: The tip and the blade of the tongue create a strait at the back side of the gum (with the tongue bent slightly backwards). On the contrary, the Czech [r] is pronounced more at the front of the mouth with the tip of the tongue vibrating 2-3 times and the place of articulation of an English [r] is, in fact, closer to that of the Czech [ř] (Skaličková, 1979, p. 142). In favor of Czech English learners speak Hughes, Trudgill and Watt (2013, p. 46): ‘In very conservative RP spoken by some elderly people, the alveolar tap [r] (known in North America as the alveolar flap) may occur intervocalically (between vowels) when the first vowel is stressed, as in very, or following a dental fricative, as in three.' The place of articulation is very similar to Czech [r] and differs only in the number of taps (vibrations). For the purposes of the thesis it is necessary to subordinate to the majority of RP speakers and exclude this option in the analysis, but it still remains essential when analyzing other varieties of English. The reason for which [r] was placed in articulatory shift is that despite the massive difference in articulation, a Czech English Speaker would still recognize it as a variety of $/ \mathrm{r} /$.

### 4.2.4 Unique phonemes

As it was mentioned above $[\mathrm{w}]$ is a semi-vowel ${ }^{6}$ that lacks a proper equivalent in Czech. Its articulation is with the tongue in a back close-mid position and rounded lips. Looking for similarities the starting position of [w] could be compared to the one of Czech [u:]. The most common mistake by Czech English learners is using [v] instead that has a distinctive bite to the bottom lip when pronounced (Melen, 2010, p. 35).

Another two unique phonemes are voiced [ $\Theta$ ] and voiceless [ $ð$ ]. Skaličková (1979) admits there is a dispute among linguists about how to classify these two phonemes. For the purpose of this thesis I chose Melen's (2010) explanation who confirms Skaličková's claims but stays with one of the definitions of $[\Theta]$ and $[ð]$ being addental. This means the tip of the tongue touches the edge of the bottom incisors and the blade of the tongue points against the back side of the upper incisors, which makes the air escape through a slit. Gimson and Cruttenden (1994) point out

[^4]that many languages, including Czech, may be lacking these phonemes and thus allowing dentalized quality resulting in lisping which is considered socially undesirable.

### 4.2.5 Text frequencies of consonants in RP

As in the case of vowels, the following table of consonants text frequencies provides the base for the calculation of relatability of Czech and English.

|  | $\%$ |  | $\%$ |
| :--- | :--- | :--- | :--- |
| n | 7.58 | B | 1.97 |
| t | 6.42 | F | 1.79 |
| d | 5.14 | P | 1.78 |
| s | 4.81 | H | 1.46 |
| l | 3.66 | D | 1.15 |
| d | 3.56 | G | 1.05 |
| r | 3.51 | J | 0.96 |
| m | 3.22 | J | 0.88 |
| k | 3.09 | d | 0.60 |
| w | 2.81 | t | 0.41 |
| z | 2.46 | e | 0.37 |
| v | 2.00 | 3 | 0.10 |
| Total all consonants: $60.78 \%$ |  |  |  |

Table 6 from Gimson's Pronunciation of English (Gimson and Cruttenden, p. 196, 1994)

### 4.2.6 Text Frequencies of consonants in comparison with Czech

The first group of consonants is, as in the case of vowels, once again called Full correspondence and split into voiced x unvoiced. The text frequency of voiced consonants is following: [z] $2.46 \%,[\mathrm{v}] 2.00 \%,[\mathrm{~b}] 1.97 \%,[\mathrm{~m}] 3.22 \%,[3] 0.10 \%,[\mathrm{n}] 7.58 \%$. The percentages of unvoiced consonants are [s] $4.81 \%$, [f] $1.79 \%$, [ $] 0.96 \%$ and [l] 3.66\%. These consonants share nearly the same quality in English and in Czech, therefore having the highest value for a Czech English learner, 5.

Articulatory shift group, with the assigned value of 2, comprises of the following phonemes with their text frequencies due to the mentioned above reasons.: [p] $1.78 \%$, [t] $6.42 \%$, [d] $5.14 \%,[\mathrm{~d}] \quad 0.60 \%,[\mathrm{t}]] 0.41 \%,[\mathrm{j}] 0.88 \%,[\mathrm{k}] 3.09 \%,[\mathrm{~g}] 1.05 \%,[\mathrm{~h}] 1.46 \%$ and $[\mathrm{g}] 1.15 \%$. This fairly big division leaves the remaining two groups empty, which suggests the level of similarity is higher than in the case of vowels with only 3 phonemes left. The most questionable phoneme
[r] $3.51 \%$ was also placed in this group. RP is a non-rhotic accent and there is a great difference between Czech and English articulation. Despite this fact, the phoneme would still be recognized as a variety of [r] by Czechs.

The unique phonemes usually cause major problems to Czech English learners having no point of reference in Czech. Phonemes with the set value of 1 are [w] $2.81 \%$, [ $\Theta$ ] $0.37 \%$, [ $\varnothing] 3.56 \%$.

| Value | Frequency of use of the phonemes | Total percentage | Weighted average |
| :---: | :---: | :---: | :---: |
| 5 | [z] 2.46\%, [v] 2.00\%, [b] $1.97 \%$, [m] 3.22\%, [3] $0.10 \%,[n] 7.58 \%$. <br> [s] 4.81\%, [f] 1.79\%, <br> [J] 0.96\%, [1] 3.66\% | 28.55 | 25,14\% |
| 4 | [p] 1.78\%, [t] 6.42\%, <br> [d] $5.14 \%$, [d孔] $0.60 \%$, <br> [t]] $0.41 \%$, [j] 0.88\%, <br> [k] 3.09\%, [g] 1.05\%, <br> [h] 1.46\%, [y] 1.15\% <br> [I] $3.51 \%$ | 25.49 |  |
| 3 | - | - |  |
| á2 | - | - |  |
| 1 | [w] $2.81 \%$, [ө] $0.37 \%$, <br> [ð] 3.56\% | 6,74 |  |
| Total all vowels: | 60.78\% of all text |  |  |

Table 7 Text Frequencies of consonants in comparison with Czech

The research suggests that the similarity coefficient of consonants between RP and Czech is $25,14 \%$ out of $60.78 \%$.

### 4.3 Similarity of RP and Czech expressed as percentage

The theoretical part shows the similarity of RP and Czech is $8.47 \%$ in vowels and $25,14 \%$ in consonants out of $99.99 \%$ of all text making it from $32.56 \%$ comparable with Czech. The method used to deal with RP takes frequency of individual phonemes in the given accent into account and provides valuable data that if examined any further, could serve as foundation for a PhD thesis. When attempting to apply the identical method to other accents it is necessary to select the most distinctive ones and run a thorough analysis on not only the pronunciation, but also the overall frequency of individual phonemes in the language. The way of doing this, is by collecting English corpora. Some of them are available, free of charge, online such as British National Corpus (BNC) or Adam Kilgarriff's word list order according to their frequency (http://www.kilgarriff.co.uk/bnc-readme.html). Another option is to use UniSyn lexicon created by The Centre for Speech Technology Research of The University of Edinburgh available from http://www.cstr.ed.ac.uk/projects/unisyn/. It offers variety of English accents including several from the UK and general accent of the US, Australia and NZ. After obtaining the needed corpus, a set of rules has to be devised and applied. The formula could be borrowed or derived from G.U. Yule (1924) who was first to write an equation that was later used by Yuri Tambovtsev and Colin Martindale in their paper Phoneme Frequencies Follow a Yule Distribution (2007). This way the necessary data could be gathered and applied to the chart I created with far more accurate results that would be beneficial for Czech linguists.

## 5 Description of the method

As this thesis is aimed at didactics and is meant to serve as an inspiration for linguists and even more for teachers, it is necessary to simplify the research on a restricted number of only the most important and influential phonemes. I also believe that some of the differences play no difference in understanding individual phonemes as they are negligible to such extent ( $f x$.: Articulatory shift) that the Czech English learners do not, in fact, hear the difference. For this reason, I will be dealing with 7 phonemes that are the most distinctive in the selected accent and try to determine their value in regard to Czech and the chart I created based on my bachelor thesis. I will place the differences under following categories: (5) Full correspondence, (4) Articulatory shift, (3) Combination, (2) Hesitation noise, (1) Unique phonemes. I use the chart to move phonemes from and to different columns and deal with them according to the following formula: the sum of all the columns (number of phonemes $x$ their value) divided by the total number of phonemes in the given accent. The number represents the potential similarity coefficient of Czech and the accent out of 5. May the RP chart serve as an example. The total number of the phonemes in the Full correspondence group is 12. Their value is 5, therefore 12 x 5 (60). There are 17 phonemes (not including [r]) in Articulatory shift group that has the value of 4 , thus $17 \times 4$ (68). In the Combination column there are 5 phonemes, times their value $/ 3 /$, making it the total of 15 . Under Hesitation noises there are 2 phonemes, therefore $2 \times 2$ (4). Unique phonemes have the lowest value $/ 1 /$ and since there are 7 of them, their total is $7 \times 1$ (7). As next, the worth of individual columns add up to $154(60+68+15+4+7)$ and is divided by the total number of the phonemes used -43 . The estimated similarity coefficient of RP and Czech is 3.58 out of 5 which is $71.6 \%$.

| Czech | Full correspondence | Articulatory shift | Combination | Hesitation noise | Unique phonemes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RP <br> Vowels | [ $\Lambda$ ] [ $\varepsilon$ ] | $\begin{aligned} & \text { [a] [i:] [r] [o] } \\ & {[\mathrm{v}][\mathrm{u}:][\mathrm{p}]} \end{aligned}$ | $\begin{aligned} & {\left[a^{i}\right]} \end{aligned}\left[e^{i}\right] \quad\left[0^{i}\right]$ | [3] [ə] | $\begin{aligned} & {\left[\mathrm{r}^{ }\right][\mathfrak{X}]\left[\mho^{ }\right]} \\ & {\left[\mathrm{e}^{\mathrm{e}}\right]} \end{aligned}$ |
| RP <br> Consonants | $\begin{aligned} & {[\mathrm{z}][\mathrm{v}][\mathrm{b}][\mathrm{m}]} \\ & {[3][\mathrm{n}][\mathrm{s}][\mathrm{f}][\mathrm{S}]} \\ & {[1]} \end{aligned}$ | [p] [t] [d] [ds] <br> [tf] [j] [k] [g] <br> [h] [y] ([I]) |  |  | [w] [ө] [ð] |

Table 8 Czech and English vowels and consonants

## 6 Selected dialects

There are many accents and dialects around the British Isles, with some of them being quite similar to each other. In this thesis I will focus on a few of the most distinctive ones to either find common or different phonemic features between the selected English dialect and Czech.

### 6.1 Cockney

Jonathon Green, in Oxford University Press (2012, online), allies Cockney with London as a former working-class accent. A true Cockney is born within the sound of Saint Mary le Bow church bells, Cheapside, in the city of London. Looking at Cockney as a slang it has some characteristic features with the most profound one being the Rhyming slang. The same source provides the following definition: 'The original rhyming slang, which was a conscious attempt to mystify the uninitiated, depended on the omission of the rhyming element, for example: 'Barnet fair' / 'hair' (1857) to barnet (1931); 'china plate' / 'mate' (1880) to china (1925); 'Hampstead Heath'/ 'teeth' (1887) to Hampsteads (1932); and 'Sweeney Todd'/ 'flying squad' (1938) to Sweeney (1967). However this was by no means a rule, and there exist a number of terms in which the entire compound is pronounced - hence Adam-and-Eve / 'believe’ (1925), cocoa / 'say so’ (1936), or tea-leaf / 'thief' (1903). Rhyming slang persists today, though how 'Cockney' such artificial constructs as 'Posh and Becks: sex' or 'Germaine Greer: beer' may be is at best debatable. Like Routemaster buses and black cabs, it is an essential part of London's tourist-orientated image.' As for accent, Cockney is non-rhotic (Rogaliński, 2011, online) and often partially compared with Estuary English which is an accent connected with the southeast England and spoken along the estuary of the river Thames (J.C. Wells, 2007, online)

The most distinctive features of Cockney are glottal stop - [?] - Even though it is not recognized as an individual phoneme, it has long been a part of not only Cockney, but also RP. Hughes, Trudgill and Watt (2013, p.43) provide a scientific definition: 'The glottal stop [?] is a form of plosive in which the closure is made by bringing the vocal folds together, as when holding one's breath (the glottis is not a speech organ, but the space between the vocal folds).' In Cockney [ t ] changes to [?] when in between vowels as in butter[b^? 3 ]. It also appears as a glottal replacement of [ $\mathrm{p}, \mathrm{t}, \mathrm{k}$ ] if they are followed by another consonant as in soapbox [scuipbpks] or technical [tePnikzl] (Gimson and Cruttenden, p. 85, 1994). Czechs use glottal stop in a different
way as it marks the divide between two words see: s Puchem - suchem, $k$ Puličce - kuličce. An interesting fact is that whereas in English the use of glottal stop is on the rise, in Czech it is on the slight decline ex.: v útery' would be pronounced as [fútery'] (Melen, 2010, p. 34). As for classification, [?] was placed among hesitation noises, despite not being a hesitation noise, its function in speech is similar to that of schwa. Although it is not recognized as a phoneme, it still has a distinctive function in Czech.

What makes it even harder for Czech English learners, is nearly a complete absence of [h] in Cockney, unless in stressed syllables as in happened (Hughes, Trudgill and Watt, 2013, p.75). In the chart, $[\mathrm{h}]$ is left out because the aim of this thesis is to deal with the accents in their purest form. The advantage for Czech English learners is the replacement of $[\theta, \delta]$ by [ $\mathrm{f}, \mathrm{v}]$. If in initial position, [ $\mathrm{\chi}]$ is more likely to be realized as [d]. These unique phonemes change their quality to phonemes that are quite common in the Czech language. Hughes, Trudgill and Watt (2013, p. 75 ) call this phenomenon (th)-fronting it means there is no distinction between labio-dental [ $\mathrm{f}, \mathrm{v}$ ] and dental fricatives [ $\theta$, ð], e.g. think [fink] or father [favz]. For the above-mentioned reasons $[\theta]$ and $[\varnothing]$ were removed from the chart as their pronunciation merges with [ $f],[v]$ or [d], which also appear in Czech. 'English Accents' by Universitat de València, licensed under CC BY 3.0, describes certain differences in vowels between Cockney and RP. One of them is [ $\Lambda$ ] in Cockney it is more open and changes to [æ]. The overall pronunciation of the accent is wider changing some of the diphthongs from [əv] to [av] in goat and [eI] to [cer] in face. Some of the diphthongs were changed but most of them remain within combination category apart from [er] that became [æı]. The phoneme [ $\wedge$ ], being replaced by [æ] and above mentioned [er], were moved to the unique phoneme group. The phoneme [l] could be changed to [ $\sigma$ ] when it appears in the final position and is preceded by a vowel (e.g. Paul), when before a consonant in the same syllable (e.g. milk), or when it forms a syllable on its own (e.g. table). When [1] follows [ $0:]$ it is absent completely. These features could be found in many other accents around the UK and it is a so called [1] vocalization Hughes, Trudgill and Watt (2013). As [1] has restricted use in Cockney it is important to drop its value in the chart by 0.5 . The same authors deal with another significant difference, at least from the Czech English learner's point of view, which is the pronunciation of -ing, which is pronounced as [In] in RP but as [ink], or even [in], omitting the ' $g$ ' completely e.g. something - [scemfink]. Similarly, as in the case of [1] the phoneme [ y$]$ changes quite often to [n] or [nk]. For this reason, its value in my research is lowered to 0.5 . To find out the similarity or difference, I will modify the chart and either add phonemes to particular columns or change their classification completely, if applicable. When a phoneme
takes on the quality of a different one only under certain circumstances, or is less likely to appear, its value in the research will be 0.5 .

| Czech | Full correspondence | Articulatory shift | Combination | Hesitation noise | Unique phonemes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cockney <br> Vowels | [ $\varepsilon$ ] | [a] [i:] [r] [0] <br> [v] [u:] [p] | $\begin{aligned} & {\left[a^{\top}\right]\left[v^{\prime}\right][\Lambda \cup]} \\ & {\left[a^{*}\right]} \end{aligned}$ | [3] [ə] |  |
| Cockney <br> Consonants | $\begin{aligned} & \hline \text { [z] [v] [b] [m] } \\ & {[3][\mathrm{n}][\mathrm{s}][\mathrm{f}][\mathrm{S}]} \\ & 0.5[\mathrm{l}] \end{aligned}$ | $\begin{aligned} & \text { [p] [t] [d] [d }] \\ & {[\mathrm{t}][\mathrm{j}][\mathrm{k}][\mathrm{g}]} \\ & 0.5[\mathrm{y}] \end{aligned}$ |  | [?] | [w] |

Table 9 Czech and Cockney vowels and Consonants

The similarity coefficient of Cockney and Czech is 3.40 out of 5 (68\%).

### 6.2 Bristol

This accent is among east south-west accents and relates to the city of Bristol. The most the most distinctive features of the Bristolian accent are the following. Similarly, like in the case of Cockney, Bristolians make no distinction between [ $\Lambda$ ]-[ə]. Many might argue that schwa [ə] appears in English in unstressed syllables only, but Hughes, Trudgill and Watt (2013, p. 60) point out that in many accents the quality of [ $\Lambda$ ] is neutralized, thus shifted closer to the center of the vowel chart ${ }^{7}$ and realized as [ə]. For this reson [ $\Lambda$ ] was moved to hesitation noises in the Bristolian chart. Hughes, Trudgill and Watt (2013) also state that the accent is rhotic, unlike RP. The rhoticity appears in post-vocalic positions, when a vowel is followed by 'r.' The [ I ] is quite retroflex, realized by the tip of the tongue bending backwards towards the hard palate. It
 difficulty for Czech English learners remains unchanged concerning diphthongs, but [r] phoneme was added to the articulatory shift group. In Bristol [1] tends to take on the form of [1] which is heavily palatalized by retracting the back of the tongue towards the hard palate. Due to this shift [1] was replaced by [ 1 ] and moved up to articulatory shift group. J. C. Wells (1992, p. 344) lists one more feature connected with Bristol accent and that is an intrusive $/ l /$. Here is Well's description of this famous characteristics: '...addition of $/ l /$ to words which would otherwise end in [ə] (e.g. banana, tomorrow: i.e. words belonging to the standard lexical set commA, or those ending in RP unstressed/วo/; but those belonging to lettER, of course, have /- ar/)... It has given rise to many jokes. Bristol is 'the only city in Britain to be able to turn ideas into ideals, areas into aerials, and Monicas into monocles', ... 'Hughes, Trudgill and Watt (2013), in their more recent publication, claim that intrusive $/ / /$ in Bristol is often stigmatized and although not unique to Bristolians, its use, however, is not very common. Hughes, Trudgill and Watt (2013, p. 87) note that similarly as in Cockney, (th)-fronting is present in Bristol, although not as common as in the case of the London accent, thus making [ $\theta$ ] become [ f$]$. Because the tendency is not as strong, [ $\Theta$ ] was removed and [ f ] took its place, but [ $\varnothing$ ] stayed intact. In Bristolian English the speakers glottalize intervocalic (in between vowels) and final /t/ as in better [be?a] or lots [lp?s]. This holds true even for /k/. The overall glottalization is more frequent than in RP but appears to a lesser extent than in Cockney, therefore having the value decreased to 0.5 in the research. The same authors claim that certain diphthongs, [ $\mathrm{e}^{i}$ ] and $\left[\partial^{v}\right]$, are pronounced rather wide, changing their pronunciation to $\left[\varepsilon^{i}\right]$ and $[\rho u]$. While the first

[^5]phoneme stays within the combination category, the second one should raise interest of a Czech English learner. Melen (2010, p. 24) says [ $\partial^{u}$ ] in RP differs from Czech [ou] in the employment of the lips. In English they begin in a neutral position, whereas in Czech the lips are rounded from the initial phase of the articulation and the final [u] is very well-marked. In Bristol, on the other hand, thanks to the wider pronunciation the diphthong [ $\mathrm{\rho u}$ ] is substantially closer to the Czech only true diphthong - [ou]. There is still a slight difference between Bristolian and Czech [ou], but the diphthong certainly fulfills the requirements of articulatory shift group. According to J. C. Wells (1992) H-dropping, deleting of /h/ from speech, is variable as it is in most parts of west England. Thanks to the variability the value of [h] was halved to 0.5 in the research. Lastly, as in the case of Cockney, pronunciation of -ing endings is mostly [-in] unlike in RP where the usual realization of -ing is [-II]. Another common feature of Bristol and the London (Cockney) speech is pronunciation of words such as something or anything. The ending gets devoiced, which results in [-Iyk]. Hughes, Trudgill and Watt (2013, p. 87) Reduced use of [ y ] might or might not provide a slight advantage in understanding for a Czech English learner, therefore its value was lowered to 0.5 .

| Czech | Full correspondence | Articulatory shift | Combination | Hesitation noise | Unique phonemes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bristol Vowels | [ $\varepsilon$ ] | $\begin{aligned} & \text { [a] [i:] [r] [o] } \\ & {[\mathrm{v}][\mathrm{u}] \quad[\mathrm{p}]} \\ & {[\mathrm{ou}]} \end{aligned}$ | $\begin{aligned} & {\left[a^{i}\right]\left[\varepsilon^{i}\right]\left[0^{i}\right]} \\ & {\left[a^{v}\right]} \end{aligned}$ | [3] [ə] [ $\wedge$ ] | $\begin{array}{ll} \hline[\mathrm{II}] \quad[\mathfrak{X}] \\ {[\mathrm{OI}][\mathrm{ex}]} \end{array}$ |
| Bristol <br> Consonants | $\begin{aligned} & \hline \text { [z] [v] [b] [m] } \\ & {[3][\mathrm{n}][\mathrm{s}][\mathrm{f}][\mathrm{f}]} \end{aligned}$ | $\begin{aligned} & \hline[\mathrm{p}][\mathrm{t}][\mathrm{d}][\mathrm{d}] \\ & {[\mathrm{t}][\mathrm{j}][\mathrm{k}][\mathrm{g}]} \\ & {[\mathrm{f}] \quad 0,5[\mathrm{~h}]} \\ & 0,5[\mathrm{y}],[\mathrm{r}] \end{aligned}$ |  | 0,5[?] | [w] [ð] [x] |

Table 10 Czech and Bristolian vowels and consonants

The similarity coefficient of Bristolian English and Czech is 3.37 out of 5 (67.55\%).

### 6.3 Liverpool

A Liverpudlian accent and dialect, also known as Scouse, is another accent in this thesis chosen for its very distinctive features. A Scouser is immediately recognized by natives around the British Isles in the same way a Geordie or Cockney speaker is. The accent itself developed quite recently, around mid-19 ${ }^{\text {th }}$ century the majority of people from Liverpool spoke the same as their neighbors from Lancashire. Thanks to role of Liverpool serving as an important port, it became a big melting pot that brought together people from many different places. The main influence is attached to Irish and Welsh along with sailors who brought not only various accents but also new words that stuck becoming part of the language (P. Cosslet, 2007, online). Hughes, Trudgill and Watt (2013, p. 112) say the accent is limited to the city of Liverpool itself, adjoining areas and towns across the river Mersey. The characteristic features of scouse are rather norther than southern beacuse it differs in a number of ways from other northern English varieties. Before dealing with individual phonemes, there is one characteristic feature of Scouse which is a so called velarization. Knowles (1978, as cited in Kortmann, Upton, p.141) describes it as: '...the centre of gravity of the tongue is brought backwards and upwards, the pillars of the fauces are narrowed, the pharynx is tightened, and the larynx is displaced upwards. 'Hughes, Trudgill and Watt (2013, p. 114) give maybe more lay definition by comparing velarization to the production of [ 1 ] when the back of the tongue is raised towards the soft palate. This gives the speech in Liverpool its distinctive quality. This feature does not speak in favor of Czech English learners as it is rather unique even among other varieties of English. For this reason, it was placed under Unique phonemes to show its significant role throughout the whole Liverpudlian speech, which is by no means negligible. As in the previous two accents, Scouse switches [ $\Lambda$ ] phonemes for [ $\cup$ ] making words such as put, and putt sound the same with both of them being pronounced as [pot] (Hughes, Trudgill and Watt, 2013, p. 112). Therefore, [ $\Lambda$ ] was moved to articulatory shift in the Scouse chart. Due to $[p],[t],[k]$ being heavily aspirated, Scouse has a few unique phonemes that may be unique to native English speakers, but are quite often used by Czechs, thus providing certain advantage towards this accent. These phonemes are $[\phi]$ and $[\mathrm{x}]$ that appear only in certain syllable-final environments. It occurs when voiceless stops lack complete closure, letting the aspiration come out, audible mainly in [k]. This results in snake [snerx], can't [kxa:nt], back [bakx], neck [nex] or clock [klox]. In the case of [t] in the final position the aspiration produces additional [s] phoneme as in short [fo:ts] or straight [strests] (J. C. Wells, 1992, p.372). This phenomenon adds 0.5 [ x$]$ into the chart which, although not completely
replacing [ $k$ ], is still valuable and used relatively frequently in Scouse. Therefore, the value of [k] was reduced by 0.5 and the remaining [ p ] and [ t ], even though their phoneme frequency changed in comparison with RP, stay unchanged. Hughes, Trudgill and Watt (2013, p. 113) claim that due to the heavy aspiration of this accent, glottal stops are less frequent than in the previously mentioned varieties. Despite this fact, [?] still does occur sometimes, having its value, as in the case of Bristolian accent, set to 0.5. Watson (2007, online), in his paper Journal of the International Phonetic Association: Liverpool English, says that Liverpool English is non-rhotic as there is no post-vocalic /r/ in words like car or park. Nonetheless it appears in intervocalic positions and is most often realized as [r] e.g. very [veri]. Skaličková, (1979, p.120) describes [ r ] an alveolar tap that is quite similar to Czech alveolar thrill [r] differentiating only in the number of taps or vibration, where in Czech it is usually 2-3 taps and only a single tap in the case of [r] in scouse. What adds to the rhoticity of the accent is a $T$-to- $R$ rule described by J. C. Wells (1992, p. 370) as 'A widespread but stigmatized connected-speech process in the middle and far north involves the use of $/ r /$ instead of $/ t / \ldots$ '. This only occurs in certain phrases such as get off [ger 'pf] when '...tt/ is in the environment of a preceding short vowel and a following boundary plus vowel... ' It means /t/ changes to /r/ when /t/ is preceded by a short vowel and the first letter of the subsequent word is a vowel followed by a consonant. Despite Scouse being recognized as a non-rhotic accent, the above-mentioned reasons prove that [r] occurs quite often in spoken Liverpudlian English, thus its placement among articulatory shift phonemes in this thesis is well-founded. Hughes, Trudgill and Watt (2013, p. 113) note that [h] is usually absent but present in some cases as in him and her. Its value is set to 0.5 as in Bristolian English. Similarly, like in the case of Cockney, Watson (2007) says that dental fricatives $[\Theta]$, $[\mathrm{\chi}]$ are pronounced as $[\mathrm{t}],[\mathrm{d}]$ or $[\mathrm{f}],[\mathrm{v}]$ due to th-fronting ${ }^{8}$ but their usage is quite infrequent, and speakers tend to use both in different situations. J. C. Wells (1992, p.371) considers this to be due to Irish influence. These two unique phonemes $[\Theta]$ and $[\varnothing]$ are still being used in Scouse and their value is set to 0.5 in this research. In Scouse the suffix -ing is usually pronounced as [in] (Hughes, Trudgill and Watt, 2013, p. 114). Watson (2007) claims the pronunciation of -ing is rather [ən] than [m]. The difference depends on individual speakers as well as the situation they find themselves in. For the purpose of this thesis only one possible realization, [in], suffices. The same author points out another very important feature of scouse, which is the full articulation of [ng] clusters ${ }^{9}$ as in along [alpyg] or thing [trigg]. A Czech

[^6]English learner finds nor advantage or disadvantage in understanding as these phonemes are in both languages.

| Czech | Full correspondence | Articulatory shift | Combination | Hesitation noise | Unique phonemes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Scouse Vowels | [ $\varepsilon$ ] | $\begin{aligned} & \hline \text { [a] [i:] [r] [o] } \\ & {[\mathrm{v}]} \end{aligned} \quad[\mathrm{u}] \quad[\mathrm{p}]$ | $\begin{aligned} & {\left[a^{i}\right]\left[e^{i}\right]\left[0^{i}\right]} \\ & {\left[\partial^{v i}\right]} \\ & {\left[a^{v}\right]} \end{aligned}$ | [3] [ə] | $\begin{aligned} & {\left[r^{\mathrm{p}}\right][æ]\left[\mathrm{U}^{\mathrm{o}}\right]} \\ & {\left[\mathrm{e}^{\mathrm{e}}\right]} \end{aligned}$ |
| Scouse <br> Consonants | $\begin{aligned} & {[\mathrm{z}][\mathrm{v}][\mathrm{b}][\mathrm{m}]} \\ & {[3][\mathrm{n}][\mathrm{s}][\mathrm{f}][\mathrm{S}]} \\ & {[\mathrm{l}]} \\ & 0,5[\mathrm{x}] \end{aligned}$ | $[\mathrm{p}]$ $[\mathrm{t}]$ $[\mathrm{d}]$ <br> $[\mathrm{d}]$ $[\mathrm{t}]$ $[\mathrm{j}]$ <br> $[\mathrm{g}]$ $[\mathrm{r}]$ $[\mathrm{y}]$ <br> $0,5[\mathrm{k}]$ $0,5[\mathrm{~h}]$  |  | 0,5[?] | [w] <br> 0,5[日] <br> 0,5[ð] <br> velarization |

Table 11 Czech and Liverpudlian vowels and consonants

The similarity coefficient of Scouse and Czech is 3,44 out of 5 (68.8\%).

### 6.4 Wales

The last accent in this thesis is the Welsh English accent which has a very distinctive sing-song intonation. It is also colored by Welsh, a language that approximately $20 \%$ of people speak as their mother tongue and many others have at least some knowledge of it. Needless to say, there is a noticeable difference between the North and the South of Wales (J. C. Wells, 2013, online). Jonnie Robinson (2019) writing for The British Library board describes the difference in the following manner: 'This marked division is also reflected in the nature of the English spoken in Wales. The accent and dialect of South Wales is strongly influenced by the English spoken in neighbouring areas, such as Bristol and the West Country; the English spoken in Mid-Wales bears some comparison with that spoken in places like Shrewsbury and other Midlands border areas, and the English spoken in North Wales has a strong resemblance to the variety spoken on Merseyside.' I will be dealing with only one variety, South Wales in particular. J. C. Wells (1992, p. 379) splits the Welsh accents into 3 groups, mostly geographical areas, where the rhoticity differs. These areas in themselves play no important part in this thesis and won't be discussed in detail but what is considered a vital piece of information is that Welsh, in its self, is fully rhotic and those who have it as their first language tend to pronounce $/ \mathrm{r} /$ in all positions. These results either in alveolar roll [r], which is another name for alveolar trill mentioned above in the Scouse accent, or as Hughes, Trudgill and Watt (2013, p. 95) say an alveolar tap [r]. The same author admits that there is no post-vocalic (immediately after a vowel) /a/ but if present it is very similar to the Czech alveolar trill. Therefore $/ \mathrm{I} /$ in Welsh accent was moved to the full correspondence group with reduced value of 0.5 . Even though Hughes, Trudgill and Watt (2013, p. 95) compares the absence of $[\Lambda]^{10}$ to that of Bristolian accent. OED (online, 2018) refers to Penhallurick's Welsh English: phonology (2008) where he states that the quality in letter for $/ \Lambda /$ may not be quite as central as it is in other accents around British Isles. Despite this fact, the quality is closer to that of schwa [ə] when a large untidy room and a large and tidy room are usually homophonous (J. C. Wells, 1992, p. 381). In this thesis [ $\Lambda$ ] was moved to hesitation noises group for Welsh accent. In Welsh accent initial [h] is usually dropped and similarly as in the Bristolian accent, appears in stressed positions only (Hughes, Trudgill and Watt, 2013, p. 95). Therefore, its value was lowered to 0.5 . As next diphthong [ $\mathrm{e}^{i}$ ] is narrowed and becomes [e:] fx.: [fers] changes to [f $\varepsilon: s$ ], making it supposedly significantly easier for a Czech English learner to understand (J. C. Wells, 2013, online). For this reason [e ${ }^{i}$ ] was moved

[^7]to the full correspondence group. According to Hughes, Trudgill and Watt (2013, p. 95) the same applies to the [ $\partial^{\sigma}$ ] diphthong that is narrowed resulting in [ 0 :] pronunciation. This makes words such as so [s $\left.z^{\sigma}\right]$ and soar [ss:] homophones. [ $\partial^{v}$ ] was placed to the articulatory shift group next to [0]. OED (online, 2018) describes the scarce appearance of [1] being due to the influence of Welsh language that is denoted by ' $l l$ ' in spelling. Even though dark ' L ' might appear in certain parts of Wales, Hughes, Trudgill and Watt (2013, p. 94) state that [1] in South Wales is clear in all environments, therefore [l] remains unchanged in the chart. 'Another distinctive consonantal feature is the gemination (doubling) of consonants $p, b, t, d, k, g, v, \theta$, $s, f, t, m, n, \eta, l /$ in word-medial position after a stressed vowel (e.g. jetty /'dנst:i::). Although widely acknowledged between vowels, Penhallurick describes how it also occurs with postvocalic word medial consonants before a consonant (e.g. thimble /' $\theta$ Im:bl/). OED indicates such lengthening in both circumstances (OED, online 2018). ' This is of a very unusual character for Czech English learners, but it would not prevent them from understanding, if explained beforehand. This feature was assigned into the unique phonemes group. Podhovik (2010) in her paper AGE AND ACCENT - CHANGES IN A SOUTHERN WELSH ENGLISH ACCENT deals with the different pronunciation of certain phonemes based on the speaker's age. One of such affected features, similarly as in other varieties in this thesis, is the -ing where the pronunciation is reduced to [m]n by $61.4 \%$ of people age $16-20$ and by $72.5 \%$ of people age $25-40$. This is not mentioned in any other books and it highlights the constant inevitable change not only Welsh English, but any other language in the world is undergoing. The value of [ y ] was reduced to 0.5 .

| Czech | Full correspondence | Articulatory shift | Combination | Hesitation noise | Unique phonemes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Welsh Vowels | [ $\varepsilon$ ] [ ${ }^{\text {i }}$ ] | $\begin{aligned} & {[\mathrm{a}][\mathrm{i}:][\mathrm{I}][\mathrm{o}]} \\ & {\left[\mathrm{z}^{u}\right][\mathrm{v}] \quad[\mathrm{u}:]} \\ & {[\mathrm{p}]} \end{aligned}$ | [ $\left.a^{i}\right]\left[0^{i}\right]\left[a^{*}\right]$ | [3] [ə] [ $\Lambda$ ] | $\begin{aligned} & {\left[r^{\mathrm{r}}\right][æ]\left[\mathrm{U}^{\mathrm{o}}\right]} \\ & {\left[\mathrm{e}^{\mathrm{e}}\right]} \end{aligned}$ |
| Welsh <br> Consonants | $\begin{aligned} & {[\mathrm{z}][\mathrm{v}][\mathrm{b}][\mathrm{m}][\mathrm{3}]} \\ & {[\mathrm{n}][\mathrm{s}][\mathrm{f}][\mathrm{f}][\mathrm{l}]} \\ & 0.5[\mathrm{x}] \end{aligned}$ | $\begin{aligned} & \hline[\mathrm{p}][\mathrm{t}][\mathrm{d}][\mathrm{d}] \\ & {[\mathrm{t}][\mathrm{j}][\mathrm{k}][\mathrm{g}]} \\ & 0.5[\mathrm{~h}] 0.5[\mathrm{y}] \end{aligned}$ |  |  | [ w ] [ e ] [ $\mathrm{\delta}]$ <br> Gemination |

Table 12 Czech and Welsh vowels and consonants

The similarity coefficient of Welsh English is 3.41 out of 5 (68.2\%)

## 7 Research - introduction

The research will reveal pupils' sensitivity to recognize certain accents. It will also prove or disprove the hypothetical percentage in the theoretical part and reveal whether the division of individual phonemes into their corresponding categories, based on their similarity with the Czech phonemic inventory, is in compliance with the actual knowledge of pupils of different age. If the theory is to be confirmed, accents with the higher percentage should rank above those with the lower one. In the first part of the activity the pupils will listen to 4 speakers of different accents who are reding the same text. I will briefly explain what the listening is about along with vocabulary I consider difficult in regard to their age, simply to minimalize or eliminate the factor concerning their knowledge and let them focus purely on what they hear. Their task is to listen and decide which of the accents they understand the most. They will grade the accents with numbers $1-4$ afterwards, with one being the best. In this stage they will have no knowledge of what the individual accents are, therefore, their decision will be based purely on their personal feelings. As next I will explain the basic characteristics of two of the accents described in this thesis, along with the similarities with Czech. The total number of accents, not including RP, in this thesis is 4 , therefore every class will get 2 that are distinct from each other. The reason for this division is that the pupils would not be able to absorb more than two definitions in one lesson. After they are aware of the differences and similarities, I will play 1 audio to them. The recording will be played twice, and their task is to decide which accent it is out of the two definitions that I wrote on the board. There is also a box for those who 'do not know' as a last option in order not to distort the results by a $50 \%$ guess. Lastly, I included their personal opinion on how good they are at English compared with the rest of the class. This will show us if there is a direct link between understanding English accents and their perception of being good at English.

### 7.1 Implementation in the lesson

The research took place in May 2019 at ZŠ Slatiňany. English at this school is in the curriculum from $2^{\text {nd }}$ grade and the tested groups were pupils in $6^{\text {th }}$ and $9^{\text {th }}$ grade. The total number of pupils due to a few absences 61 and they are expected to have a basic knowledge about English pronunciation (RP standard). The process itself was that I went to a class, explained the details of the research. To eliminate the lack of vocabulary I introduced difficult words from the recording. After the first recordings I described the differences and similarities using a simplified chart for each accent that was derived from the theoretical part of this thesis. The age and the knowledge of the pupils had to be taken in consideration as well. The whole process was led in Czech to ensure the pupils understood the instructions properly.

The charts were as follows:
Cockney (London)

| Feature | Examples |
| :--- | :--- |
| Glottal stop [?] | Stop, bu $\downarrow$ er (butter), k $\downarrow$ uličce |
| Absent [h] | Slovní spojení - could (h)ave, (h)appy |
| 'Th' | Think [tink,fink], this [dis], 'th' - [fft,t,d,v] |
| $[\Lambda] \gg[æ]$ | Up >> happy |
| $[1]$ na konci slov >> [ $\mathrm{\sigma}]$ | Milk [mivk] |
| -ing >> [in] or [nk] | V češtině banka >> [n] - boring [bórin] |

Table 13 Simplified chart Cockney

## Liverpool

| Feature | Examples |
| :--- | :--- |
| Glottal stop [?] | Stop, bu $\downarrow$ er (butter), k $\downarrow$ uličce |
| Absent [h] | Slovní spojení - could (h)ave, (h)appy |
| Jazyk dozadu | - |
| $[\Lambda] \gg[\mho]$ | Up >> book |
| České ‘CH' | Snake [sneich], neck [nech] |
| -ing >> [in] | V češtině banka >> [n] - boring [bórin] |
| České ‘R‘ | Very |

Table 14 Simplified chart Liverpool

## Bristol

| Feature | Examples |
| :---: | :---: |
| Glottal stop [?] | Stop, bu $\downarrow$ er (butter), $\mathrm{k} \downarrow$ uličce |
| Absent [h] | Slovní spojení - could (h)ave, (h)appy |
| 'Th' | Think [tink,fink], this [dis], 'th' - [f,t,d,v] |
| [ $\Lambda$ ] >> [ 2 ] | Up >> česká slovní vata - 'eee' |
| [ $\left.\mathrm{e}^{i}\right],\left[\partial^{i}\right]$ - [ $\left.\varepsilon^{\mathrm{i}}\right]$, [ ou$]$ | Bližší čekému 'ej' a 'ou' |
| -ing >> [nk] | V češtině banka >> [nk] - boring [bórink] |
| Rhotic | 'R' jsou vice slyšet - better [betr] |

Table 15 Simplified chart Bristol

## Wales

| Feature | Examples |
| :---: | :---: |
| Absent [h] | Slovní spojení - could (h)ave, (h)appy |
| [ 1 ] >> [ 2 ] | Up >> česká slovní vata - 'eee' |
| [ $\mathrm{e}^{\text {] }}$ >> [ e :] | Face [fés] |
| [ $2^{\circ}$ ] >> [ 0 :] | So [só], low [ló] |
| Zdvojení samohlásek | Money [man.ny] |
| -ing >> [in] | V češtině banka >> [n] - boring [bórin] |
| České 'R' | Very |

Table 16 Simplified chart Wales

These charts were explained and drawn on the board so that the pupils could write down what they hear, in just one word or a symbol they understand. The whole process took approximately one teaching lesson per class as a lot of time was dedicated to the charts and questions about them. The class was also acquainted with the infrequency of certain phonetic features due to the fact every speaker was influenced by the environment they live or used to live in.

### 7.2 Content of the research

Every pupil was given a task sheet in A4 form with the following content that varied in task 2 based on the rotation of the recordings played in each class.

### 7.2.1 Recording

As for the recording The British Library (online,2011) created a project called Evolving English VoiceBank between November 2010 and April 2011. It is a database of a single text pronounced by various people in many different accents. The text itself is a children story written by Roger Hargreaves (© 1971) and served as a unified example in this reasearch.

The passage was taken from the British Library website available online at: https://www.bl.uk/pdf/tickle.pdf
'Mr. Tickle It was a warm, sunny morning. In his small house at the other side of the wood Mr Tickle was asleep. You didn't know there was such a thing as a Tickle, did you? Well, there is! Tickles are small and round and have arms that stretch and stretch and stretch. Extraordinary long arms! Mr Tickle was fast asleep. He was having a dream. It must have been a very funny dream because it made him laugh out loud, and that woke him up. He sat up in bed, stretched his extraordinary long arms, and yawned an enormous yawn. Mr Tickle felt hungry, so do you know what he did? He reached out one of his extraordinary long arms, opened the bedroom door, reached down the stairs, opened the kitchen door, reached into the kitchen cupboard, opened the biscuit tin, took out a biscuit, brought it back upstairs, in through the bedroom door and back to Mr Tickle in bed. ${ }^{\text {'ll }}$

[^8]
### 7.2.2 Task sheet

1. Listen to the recording and grade them from 1-4 according to how well you understand them with 1 being the best.

Vocabulary:

1. Tickle
2. Yawn
3. Stretch
4. Enormous
5. Asleep
6. Feel
7. Such
8. Reach out
9. Round
10. Biscuit
11. Extraordinary
12. Brought
13. Dream
14. Through
15. Wake up
16. Useful

| Recording 1 |  |
| :--- | :--- |
| Recording 2 |  |
| Recording 3 |  |
| Recording 4 |  |

2. You will hear a recording. Based on what you know about accents, decide and tick ( $\checkmark$ ) the one you think it is.

Listen for examples of the distinctive phonemes and write them down.
a. Liverpool

b. Bristol

c. I do not know


Examples: $\qquad$
3. How good are you at English in comparison with your class? (1 - 5)

## 8 Evaluation of the results

To evaluate the results, I split the groups according to age and examined the results accordingly. To see if there is a link between the years spent learning English and their ability to listen for specific accentual features. The approach to do so, was firstly the accent they understood the most, followed by the specific features they heard after getting familiarized with the accents.

### 8.1 Top-rated accent - $6^{\text {th }}$ grade

The pupils listened to the same recording 4 times each time done with a different accent. Their task was to grade accents from the easiest to the hardest one based purely on their taste and perception. The results for the $6^{\text {th }}$ grade pupils are shown in the chart below.


Table 17 6th grade personal perception chart

The research was carried out on a group of 41 children age 12 - 13 all currently having been learning English for 4 years. The best results were scored by Cockney being first with 22 pupils giving this South London accent grade 1. Another 6 pupils chose marked this accent as the second easiest. Liverpool recorded the best grade 9 times and added 10 grades 2. Welsh accent was the least favorite with 4 pupils giving it the best grade and another 6 second best ones. The $3^{\text {rd }}$ accent with the highest score was Bristolian 6 times 1 st and 22 second places that is why it is important to take the $2^{\text {nd }}$ best grades into account as well.

### 8.1.1 Groups analysis - $6^{\text {th }}$ grade

Needless to say, the first tested class was presented with the BLWC rotation, where each letter stands for an accent as follows: $B$ - Bristol, $L$-Liverpool, $W$ - Wales and $C$ - Cockney. These letters will be used throughout the research to show the order of accents played in each class. Out of 26 pupils in the first tested group 21 rated Cockney as the best in BLWC rotation. This might suggest that the fourth time they listened to the recording was the easiest not because of the accent itself but because of them knowing the listening and the text already.

To get a better understanding of the situation as well as more accurate results we need to take the best two grades into consideration where Bristol and cockney ranked highest with the total of 28 entries out of 41 . This could be a more accurate number as the Bristolian accent was the first one played. To see if such claim has any credibility it is necessary to analyze results from the second class. The rotation chosen for this class was CWBL and Cockney was picked as the easiest accent only once, with Liverpool, being the last accent played, and scoring 6 top grades which is $66 \%$ of its total top picks. Liverpool added another 3 second grades totaling 9 entries. In this rotation Bristol, played as the $3^{\text {rd }}$ recording, received 12 entries out of 15 pupils that graded it as ' 1 ' six times and as ' 2 ' six times as well. Wales received grade 1 twice and the same amount of grade 2 . Cockney performed even worse with only 1 top pick (out of 22 in total!) and 3 second picks. With regard to these findings it is appropriate to take the first two grades into consideration to eliminate the factor of knowing the listening by multiple repetition. The purpose of this paragraph is to show how deceiving the results can be and how important the role of the rotation was when aiming for a valuable outcome.

### 8.2 Top-rated accent - 9 $^{\text {th }}$ grade

The research in the $9^{\text {th }}$ grade was led in a similar fashion as in the $6^{\text {th }}$ grade when the pupils listened to 4 identical recordings each done in a different accent and arranged them from the easiest to the hardest according to their personal feeling. The following chart shows the results.


Table 18 9th grade personal perception chart

The research was conducted on 20 pupils. The subjects tested have been learning English for 7 years and similarly as among the $6^{\text {th }}$ graders Cockney recorded the best results having been chosen as the easiest accent to understand 9 times in total. The second easiest accent was Liverpool with 4 votes closing with the Welsh accent having only 3 votes and Bristolian accent mere 2 votes. To get more accurate results $2^{\text {nd }}$ choices must be taken into account.

### 8.2.1 Groups analysis - ${ }^{\text {th }}$ grade

As in the case of the $6^{\text {th }}$ grade two rotations took place. The rotation played to the first group of pupils was BLCW (Bristol, Liverpool, Cockney, Wales). The top voted accent over all among the $9^{\text {th }}$ graders was Cockney that in this class, received 4 best ratings and 5 second best ones. Liverpudlian accent scored 2 first and the same amount of second places. Welsh was chosen 3 times as $2^{\text {nd }}$ easiest and once as the easiest accent. Bristol only received 1 second pick.

The second class was given the LBCW rotation with the following results. Cockney dominated the chart with similar results as in the previous class with 5 best and 4 second best ratings. Another 2 grades ' 1 ' were added by Liverpool. Welsh was rated ' 1 ' as well as ' 2 ' ' twice by this group. Bristolian accent was acknowledged in this class slightly better than in the other class with 4 second places and 2 top picks.

### 8.3 Top rated accent summary

The research showed that to find the most favored accent among secondary school students it is vital to take all the variables that might come into play, into account and treat the results accordingly. The detailed analysis helped to unravel these variables and uncovered that the most favored accent is in the $6^{\text {th }}$ grade is the one in Bristol rather than Cockney that received more top picks but 21 of them out of 22 were in the BLWC rotation. Without taking any value away from the Cockney accent it is suspicious to say the least and correcting measures had to be taken. The easiest accent to understand in the $9^{\text {th }}$ grade was Cockney being played as $3^{\text {rd }}$ in the rotation and receiving the total sum of 9 of both $1^{\text {st }}$ and $2^{\text {nd }}$ picks with 18 entries in total. With the Bristolian accent combining for 7 .

### 8.4 Sensitivity test

The sensitivity test was created to find out if Czech children are capable of distinguishing sounds that appear in a spoken text and pick them out correctly even though not having their ears trained for such sounds. The reason to do so is to find out if teaching phonetics and pronunciation at their level is a justifiable as well as a meaningful matter that needs to be given more attention to. The test is split into two parts. The pupils were introduced to two accents of which distinctive features were explained and written on a white board (See the 'box'chart). Their first, and a very basic task, was to listen to the recording of the text they were already familiar with from the first part of the research, and guess based purely on what they learned, which of the two accents I picked for them. They listened to the recording twice. The second, more difficult part, was to listen and hand-pick examples from the recording of the accent played, note them down, even in their own words, in order to justify their previous choice (See the examples in the chart attached). The second part of the sensitivity test should reveal what features were easy to understand for the pupils, whether it is all of them, the ones they found interesting or those that are ranked lower on my scale of correspondence (see Chapter 4 Division) and thus closer to the Czech phonemic inventory.

### 8.5 Sensitivity test - Part one

The accents were not placed against each other by accident. I tried to thoroughly pick accents that are dissimilar rather than similar for the students to have a better chance of distinguishing the one played. It would also be nearly impossible to cover all the phonetical features of the two accents; hence I personally picked the ones that differentiate the two from RP and the standard English the pupils are used to. The basic characteristic attributes of English in comparison with Czech were put aside as long as they would not be beneficial for the Czech students $f x$.: retroflex $/ r /$ changing to a tap $/ r /-[r]$, which is closer and more natural for Czechs (see the chart of individual accents for more details). Before evaluating the final results, it is important to explain the logical steps taken when creating the test. The following description of the distinctive features of the speech sounds in the 4 different dialects is based on the theoretical part of this thesis and my own observations.

### 8.5.1 Cockney and Welsh accent

Cockney and Welsh accent were placed against each other. The simplified chart ${ }^{12}$ suggests there are a lot of similarities in the recordings. Despite being recorded by native speakers whose accents are not always the same with every distinctive phoneme pronounced exactly as suggested, the accents were purposely chosen to be very thick having as many described qualities as possible. In the case of Cockney, the Glottal stop [?] was chosen as one of the most prominent and typical features whereas in usually in Welsh accent it does not appear at all. Comparing the Cockney ${ }^{13}$ and Welsh ${ }^{14}$ charts, the London accent lacks $[\Theta]$ and $[\varnothing]$ and replaces it with [f], [v] or [d] while Welsh does not. Typical Cockney speaker would use [1] vocalization (replacing [l] with a vowel) as in Milk [mivk]. A phenomenon called Germination (doubling) of consonants appears in Welsh English which makes certain consonants sound longer and thus doubled. Welsh is considered to be fully rhotic with occasional use of [r] as an alveolar trill or an alveolar tap [r]. Cockney is non-rhotic following the rules of RP. ${ }^{15}$ Another typical Welsh feature is the diphthong [ $\mathrm{e}^{\mathrm{i}}$ ] that is narrowed and becomes [e:] fx.: face > [f $\varepsilon$ :s] and the same diphthong narrowing process holds true for [ $\partial^{v}$ ] that changes to [ $\left.0:\right]$ fx.: so > [so:]. These are the typical changes in phonemes for both of these accents based on which they can be recognized immediately by the children, but there are also a few features that are similar for both of the accents and therefore harder for the children to identify in the spoken text when matching these features with the appropriate accent. Both Cockney and Welsh accent drop [h] (absence of [h] in unstressed syllables) but in the recording dropping [h] occurs much more frequently in the case of the Cockney speaker. Even though the explanation on the board remained the same for both Wales and Cockney, I pointed out its infrequency in Welsh English. Another phoneme that changes its form in both of these accents is [ $\Lambda$ ] that tends to be more open in Cockney resulting in [æ]. In Welsh [ $\Lambda$ ] is more centered in neutral position ${ }^{16}$ and therefore pronounced as [ə]. The last feature explained to the pupils was the change in -ing pronunciation. In RP it is pronounced as [in] whereas in Welsh the tongue has the tendency of moving forward making -ing sound like [in]. Cockney acts in a similar way or even changes ing to [ink] as in [scemfink], where all the above-mentioned features occur. The reason for

[^9]including such little nuances in pronunciation was to test pupils' capability of distinguishing sounds that could potentially change the meaning of words.

### 8.5.2 Bristolian and Liverpudlian accent

These two very distinctive accents form the second group and the intentional choice of their features is as follows. As in the previous case with Cockney and Welsh I will deal with the differences first and move to similar and harder to understand characteristics afterwards. Liverpudlian English also known as Scouse is very specific in the position of the tongue as it moves rather backwards when speaking, giving it its unique sound. Heavy aspiration plays also an important role in Scouse changing $[\mathrm{p}]$, $[\mathrm{t}]$ and mainly $[\mathrm{k}]$ in certain environments to $[\phi]$ and [x], which are phonemes that do not exist in RP, but they do appear in Czech. Despite its uniqueness Liverpudlian lacks some of the characteristics of the Bristolian English. One of them is th-fronting that appears in a form, which is not as strong as in above mentioned Cockney, making [ $\theta$ ] become [ f$]$ or [ t$]$ fx.: [ffryk] with [ $\mathrm{\varnothing}]$ remaining unaffected. The diphthongs in Bristol tend to be pronounced wider which results in [ $\mathrm{e}^{i}$ ] shifting its sound to [ $\varepsilon^{i}$ ] which is similar to Czech combination of phonemes $[\mathrm{e}+\mathrm{j}]$ and [ $\left.\partial^{v}\right]$ being articulated as [ u$]$, which is nearly identical with Czech only true diphthong [ou]. ${ }^{17}$ Some of the features of Bristolian and Liverpudlian English are quite similar but yet not the same. When comparing these two accents a few seemingly identical traits stand out. One of them is the glottal stop [?] that is being used in both varieties of English, but its use is sparse. Bristolians tend to glottalize intervocalically and when final /t/ occurs as in better [be?a]. In the case of Scouse glottal stop [?] is partially eliminated due the heavy aspiration mentioned earlier. In many accents around the British Isles the phoneme [ $\Lambda$ ] changes and nor Bristol or Liverpool lag behind. A typical Scouser would pronounce $[\Lambda]$ as [ $\sigma$ ] which makes the words put and putt sound like [pvt], and hence homophones. In the case of Bristolian English [ $\Lambda$ ] is neutralized and pronounced as [ə] which should make understanding more complicated for Czech pupils, in comparison with the Liverpudlian accent. In most parts of west England omission of /h/, a so-called H-dropping, takes place, therefore its dropping or realization varies based on the environment. This applies to both of the described accents. As for the rhoticity, even though Liverpudlian speech is classified as non-rhotic there is still tap $/ r$ /, which is pronounced as [r], appears intervocalically

[^10]and thanks to $T-t o-R r^{\prime} e^{18}$ also in certain phrases such as get off [ger ' pf ]. Bristolian English, on the other hand, is placed among rhotic accents since it pronounces /r/ in post-vocalic positions, with its quality being fairly retroflex. Lastly, the slight difference in -ing suffix in these accents needs to be brought forward. Bristol tends to act in a similar way as Cockney does, changing -ing to [In] or even devoicing it to [-Imk] instead of [-Im] in RP. The most common pronunciation of this feature in Liverpool is [In].

[^11]
### 8.6 Sensitivity test - part 2

After the thorough explanation of the accents, the pupils listened to the recording twice, decided which in which accent it was done. During the second listening the pupils' task was to focus on the described features and write down as many they could identify as possible. The results were organized according to the accentual pairs described above (Cockney, Bristol, Liverpool, Wales). Some of the examples that the children picked were unrelated to the research. Nevertheless, I tried to decipher their meaning the best I could, but some only reflected random words they heard, thus deeming invalid for the research.

### 8.6.1 Cockney

The following chart shows the pupils' sensitivity to pick up aspects and differences from the listening. The two accents analyzed in this group were Cockney with Welsh and the test group was composed of 15 students out of which 7 chose Cockney, which was also the correct answer, 7 chose Wales and 1 pupil did not pick either of these options ${ }^{19}$.


Table 19 Cockney examples overview - 6th grade

The most recognized features of Cockney accent among $6^{\text {th }}$ graders were the glottal stop [?], dropped $/ h /$, -ing, and th-fronting. Analyzing the results glottal stop, followed by th-fronting, were two of the most essential features for the students to assign the recording to the appropriate

[^12]accent. What caused problems to the children was when they correctly spotted dropped $/ \mathrm{h} /$ and/or -ing that are similar in both accents, therefore choosing Welsh English instead of Cockney. A surprising fact is that České ' $R$ ' (alveolar trill or an alveolar tap), which is a typical feature of the Welsh accent, was given 4 votes along with Welsh [ $\Lambda$ ] changing to [ $\partial 0$ and $\left[\partial^{\sigma}\right.$ ] changing to [ $0:]$. One of the students even wrote that the recording sounded 'Czech-like.'

### 8.6.2 Wales

This accent was analyzed and presented to pupils in the $9^{\text {th }}$ grade along with Cockney and was by far the most difficult as only 3 pupils out of 10 correctly match this listening to the Welsh accent. The rest of the students (7) matched the recording with Cockney.


Table 20 Wales examples overview - 9th grade

A reoccurring aspect the pupils mentioned was 'swallowing,' which was identified as a glottal stop [?] after their short explanation when handing the research in. Even though germination did occur in the listening, one of the students claimed otherwise. This might suggest that even a thorough explanation does not compensate for Czech English learner insensitivity to these nuances.

### 8.7 Liverpool

The next group is formed by the Liverpudlian and Bristolian accent. The research was done on a sample of 26 children out of which 14 recognized the accent correctly, 4 pupils were incorrect and 8 unspecified.


Table 21 Liverpool examples overview - 6th grade

In this case over half of the children were able to identify České ' CH ' that is caused by heavy aspiration of the Liverpudlian accent. I believe it was thanks to aspiration as well as velarization, which 3 pupils mentioned in their answer sheets that the success rate of recognition of this accent reached over $50 \%$. Another 5 pupils noticed the changed in [ $\Lambda$ ] phoneme, which occurs in both Bristol and Liverpool English, but only 3 correctly recognized it as [ $\mathrm{\sigma}$ ] and two as [ə] that appear in Bristolian accent. This fact probably made them undecided about which accent to choose and they both left the column Accent picked empty. Surprisingly only one student noticed České ' $R$ ' in the word dream the rest of the words written by the children were only Czech transcriptions of what they heard. Another two examples that are from Bristolian accent but were heard by pupils during the Liverpudlian recording, were Th-fronting and $\left[\partial^{i}\right]$ that changes to [ $\rho u$ ]. Both of these only occurred once without other circumstances therefore are within tolerable range.

### 8.7.1 Bristol

The last researched group was supposed to recognize the Bristolian accent. The class was composed of 10 pupils out of which 6 matched the recording correctly 2 of them thought the accent played was Liverpudlian and 2 children remained undecided.


Table 22 Bristol examples overview - 9th grade

The most distinctive feature of Bristolian English compared with the one in Liverpool is rhoticity which none of the students noticed. Widening of diphthongs, typical for Bristol that results in $\left[\partial^{i}\right]$ being pronounced as [ $\left.\rho u\right]$, was only recognized by one student. Similarly, the same holds true for [ $\kappa$ ] that is neutralized and shifted to [ $\partial$ ]. Among features that both of the accents have in common were -ing [-Iŋk], which 2 children correctly mentioned and matched with Bristol, and glottal stop [?] remarked by one pupil.

### 8.8 Sensitivity test general overview - Accents

One of the factors that can show which accent was the easiest one to match with the recording and which one was the hardest it is necessary to look at the success rate among the pupils. There are many variables that come into play such as the environment, time of the day, the accent itself, different levels of English and even peace of mind of individual pupils. Since the number of the students in each tested group varied the most considerate approach is to express the final results of successful guesses in percentage. The chart below shows exact numbers.


Table 23 Accents picked by all pupils

The chart suggests that Liverpool was correctly guessed by $53.8 \%$ of the pupils, $15.4 \%$ were false answers and $30.8 \%$ remained undecided. As for Bristol on the other hand $60 \%$ of the picks were correct, $20 \%$ of the classes' choices were incorrect and $20 \%$ did not choose either option. As for Cockney $46.7 \%$ answers were right, $33.3 \%$ were wrong and $20 \%$ as in the case of Bristol, were unspecified. The hardest accent appears to be Welsh with $50 \%$ of incorrect answers, $20 \%$ unspecified and only $30 \%$ of the class was able to pick the correct accent based on my explanation. The results speak in favor of the Bristolian accent followed by Scouse and Cockney.

### 8.9 Sensitivity test general overview - Distinctive features

Lastly it is essential to look at all the distinctive features explained that pupils were able to hear and write down. The tested groups composed of overall 46 pupils and the number of presented features was 16 in total. The range of the selected features was a mixture the most distinctive ones throughout the table created in chapter 4 Division. It included phonemes form full correspondence, articulatory shift, combination, hesitation noises, and even unique phonemes groups.


Table 24 Distincitve phoneme changes heard by pupils

The first phoneme in the chart is glottal stop, distinctive mainly in Cockney, less in Bristol and Liverpool, was recognized by 4 pupils correctly with another 3 incorrect matches. Absent [h] and [ $\Lambda$ ] change to [ $v$ ] scored identically 3 right answers. Phoneme [ $\Lambda$ ] that changed to [ $\partial$ ] was noted down 4 times with 3 incorrect entries. Combination of phonemes such as changes in [e $\mathrm{e}^{\mathrm{i}}$, $\left[\partial^{v}\right]$ were recognized once or not at all even when the phoneme pronounced in the recording was closer to the Czech phonemic inventory. The same holds true for 'Th' fronting with mere 2 correct and 1 false entry. The features in Unique phonemes group did in a similar fashion with almost no success except for Velarization in Liverpudlian English that was spotted 3 times. Another change seemingly helpful to a Czech English learner was the Tap/r/ that appeared to be very similar to Czech trilled /r/, was only assigned 1 correctly and 4 times to Cockney that
is among non-rhotic accents. Along with Rhoticity (0), it should not be strange to Czech pupils. Some of these features only appeared in certain recordings only but change in -ing either to [In] or [nk] was part of all the described accents and only 5 pupils were able to hear it. Be it for its very distinctive and very Czech sound [x] was correctly identified by 6 students that were played the Scouse accent, which was group of only 26 pupils out of 51 meaning the success rate was the highest of any other explained phoneme.

## 9 Conclusions

The thesis deals with the perception of selected English varieties by Czech students. It analyzes the varieties and tries to find similarities with Czech phonemic inventory in order to find suitable substitution for RP that is the standard English taught at Czech schools.

The first part of the thesis is an introduction to IPA, phonetics and Received pronunciation (RP) which is being used as a foundation step on which the analysis of individual accents is based on. Firstly, it was needed to compare Czech and English (RP) phonemic inventories thanks to which a chart was created according to the difficulty for Czech English learners. The individual phonemes were placed in a chart that composes of 5 categories graded from $1-5$ depending on the difficulty of the given phoneme or accentual feature for a Czech English learner in relation to the Czech phonemic inventory with 1 being the most similar and 5 being the most unique. These categories were called full correspondence, articulatory shift, phoneme combinations, hesitation noises, unique phonemes. As next all the phonemes in RP were assigned to their respective categories starting with vowels and followed up by consonants. To get the most reliable results it is essential to take frequency of each phoneme as it appears in the spoken text into consideration. As RP was done in this fashion, combining the newly created chart along with the phoneme frequency, its final similarity coefficient with Czech was $60.78 \%$.

As next 4 distinctive English accents from around the British Isles were selected and analyzed in the same manner. This was when the thesis faced its main problem which is the lack of phoneme frequencies for the selected dialects. In fact, there is no such research that would be dealing with the frequency of phonemes in an English variety the way Gimson and Cruttenden (1994), in their book Gimson's Pronunciation of English, deal with RP. This is when the final similarity coefficients of the selected accents become ambiguous as we do not know the exact frequency in which the phonemes appear in certain environments of speech. For this reason, the final similarity coefficients of Liverpudlian, Bristolian, Cockney and Welsh English varieties are rather indicative. Such research is beyond the span of this thesis, but any future study might stem from it based on the suggestions in chapter 5.

The formula used for placing the distinctive features of each accent into the above-mentioned categories was created using as much information about the features as possible.

A next the research was created to test pupil's sensitivity for individual phonemes and accentual features, based on the theoretical part of this thesis. The first task was to listen to 4 of the same
recordings done each in a distinctive accent and pick the one they could understand the most. As the accents were always played in different rotation, a problem arose from the $4^{\text {th }}$ recording always being put forward as the children were already familiar with the text. The most favored text among $6^{\text {th }}$ graders, when considering the $1^{\text {st }}$ as well as $2^{\text {nd }}$ choices, was Cockney with 28 entries with $211^{\text {st }}$ picks and $72^{\text {nd }}$ picks in, followed by Bristol with the same sum of the $1^{\text {st }}$ and $2^{\text {nd }}$ pick, in the first class. The results from the second class (CWBL rotation) speak, for Bristol as it scored both $1^{\text {st }}$ and $2^{\text {nd }}$ six times out of 15 pupils. Cockney had the sum of 4 . The easiest accent to understand among $6^{\text {th }}$ graders was Bristolian. The contrast between the $6^{\text {th }}$ and the $9^{\text {th }}$ grade were notable as the results in the $9^{\text {th }}$ grade speak for Cockney combining for 18 entries in total from both classes. Bristolian accent combined for mere 7 entries. It is safe to say that the easiest accent to understand for secondary level English students was Cockney. Here is where the similarity coefficient come into play and surprisingly the two accents that ranked the lowest Cockney (68\%) and Bristol (67.55\%) were the easiest ones to understand.

The sensitivity test was created to test pupil's ability to hear distinctive phonemes and recognize described accents based on their features. The Best results were scored by Bristol with $60 \%$ of correct answers and by Liverpool with $53.8 \%$ success rate. The ability to pick up examples of accentual features from a recording proved to be very hard for the pupils as the total number of all the described distinctive phonemes and features was 16 and the student could only guess 43 (including incorrect answers) when given the minimum of 7 features per accent for all 61 pupils. The children were only able to pick up Czech [x] in Scouse. The remaining accentual features would only be heard by a handful of students be it either the ones that were under the full correspondence group or those in unique phonemes group. The results showed pupils' poor perception of accent and ability to distinguish certain phonemes. This reflect the problems mentioned in the hypothesis when the teaching of the pronunciation is neglected, and the children struggle when exposed to a native speaker not on the level of vocabulary or grammar but on the level of not being able to understand the spoken language and different pronunciation, therefore not being able to understand neither the vocabulary nor the grammar.

Hughes, Trudgill and Watt (2013) write about RP and its change during the late $20^{\text {th }}$ century resulting in lowering and retracting of vowels such as [e], $[\mathrm{I}],[\mathfrak{~}]$ this process is called a chain shift showing the constant development of RP and English in general. The results of this thesis might be obsolete within a few decades of time.

## 10 Summary

The aim of the thesis was to prove or disprove the advantage a Czech English learner could have advantage when exposed to an English accent that shares similar phonemes or other features with the Czech phonemic inventory. It also strives to find an additional variety that could be easier for Czech students and potentially serve as a substitute for RP, the standard variety of English that is being taught at Czech school. The first part of the thesis serves as an introduction to the problematics and creates a new division of phonemes that is based on RP and Czech phonemic inventory. Thereafter the selected distinctive accents are analyzed, and their phonetic features applied into the chart, which is designed to express the similarity of the given accent with Czech. Having this strong foundation, a test was created to discover if Czech pupils are ready and also capable of adopting a new standard. The sensitivity of 61 pupils towards 4 different accents was tested. At first their task was to listen to 4 recordings of Bristolian, Liverpudlian, Welsh and Cockney accent and simply choose the easiest accent for them to understand. As next I explained the characteristic features of 2 selected accents and the pupils were to listen to a recording, pinpoint and write down the features they heard. The results reflect the need for teaching pronunciation from early age as the Czech children's ears were not very well trained for spoken English, let alone their varieties due to vocabulary and grammar still being a priority at Czech schools.

## 11 References

Accents and dialects: Evolving English VoiceBank [online]. England: British Library, 2011 [cit. 2019-12-10]. Dostupné z: https://sounds.bl.uk/Accents-and-dialects/Evolving-EnglishVoiceBank

ASHBY, Dr Michael. International Phonetic Association: IPA Home [online]. 2015 [cit. 2019-12-09]. Dostupné z: https://www.internationalphoneticassociation.org/
C. WELLS, John. Accents of English. SPEECH, HEARING \& PHONETIC SCIENCES UCL Division of Psychology \& Language Sciences: J. C. Wells: Accents of English [online]. 2013 [cit. 2019-12-09]. Dostupné z: https://www.phon.ucl.ac.uk/home/wells/accentsanddialects/
C. WELLS, John. Accents of English: Volume 2: The British Isles. 3rd ed. Cambridge: Cambridge University press, 1992. ISBN 9780521285407.

COSLETT, Paul. Local Dialect: The origins of Scouse. Bbc.co.uk: Liverpool [online].
Liverpool: BBC Liverpool, 2007 [cit. 2019-12-09]. Dostupné z:
http://www.bbc.co.uk/liverpool/content/articles/2005/01/11/voices_liverpoolaccent_feature.sh tml

CRUTTENDEN, Alan a A. C. GIMSON. Gimson's pronunciation of English. 5th ed. New York, 1994. ISBN 03-405-8265-0.

English Accents,Cockney, https://www.uv.es/anglotic/accents_of_english/01/vowels1.html, available under a Creative Commons Attribution-Sharealike 3.0 Unported License. Copyright © 2018 International Phonetic Association.

GREEN, Jonathon. Cockney. Oxford English Dictionary: The definite record of the English language [online]. Oxford University Press, 2012 [cit. 2019-12-09]. Dostupné z:
https://public.oed.com/blog/cockney/
HUDEC, Michal. Czech interpretation of distinctive features of selected spoken English dialects. Olomouc, 2017. Bakalářská práce. PdF UPOL. Vedoucí práce Doc. PhDr. Václav Reřicha, CSc.

IPA Chart, http://www.internationalphoneticassociation.org/content/ipa-chart, available under a Creative Commons Attribution-Sharealike 3.0 Unported License. Copyright © 2018 International Phonetic Association.

KILGARRIFF, Adam. BNC database and word frequency lists [online]. 1998 [cit. 2019-1209]. Dostupné z: http://www.kilgarriff.co.uk/bnc-readme.html

KOHOUTEK, Rudolf. ABZ slovník cizích slov: Pojem hezitační zvuky a pazvuky. Scs.abz.cz [online]. 2019 [cit. 2019-12-09]. Dostupné z: https://slovnik-cizich-slov.abz.cz/web.php/slovo/hezitacni-zvuky-a-pazvuky

KORTMANN, Bernd a Clive UPTON, ed. Varieties of English 1: The British Isles. Berlin: DE GRUYTER MOUTON, 2008. ISBN 978-3-11-020839-9.

MELEN, Dušan. Výslovnost angličtiny na pozadí čéštiny. V Praze: Big Ben Bookshop Prague, 2010. ISBN 978-809-0430-624.

OED Online, Oxford University Press. Pronunciation model: Welsh English. Oxford English Dictionary: The definite record of the English language [online]. [cit. 2019-12-09]. Dostupné z: https://public.oed.com/how-to-use-the-oed/key-to-pronunciation/pronunciations-for-world-englishes/pronunciation-model-welsh-english/

PALKOVÁ, Zdena. Fonetika a fonologie češtiny s obecným úvodem do problematiky oboru. Praha: Karolinum, 1994. ISBN 80-706-6843-1.

PODHOVNIK, Edith. Age and Accent - Changes in a Southern Welsh English
Accent. Research in Language [online]. 2010, 8, 1-18 [cit. 2019-12-10]. DOI: $10.2478 / \mathrm{v} 10015-010-0006-5$. ISSN 2083-4616. Dostupné z:
http://www.degruyter.com/view/j/rela.2010.8.issue-0/v10015-010-0006-5/v10015-010-00065.xml

ROBINSON, Jonnie. Diverse voices: varieties of English in the UK. British Accents and Dialects: Accents and dialects of Wales [online]. The British Library Board, 2019 [cit. 2019-12-09]. Dostupné z: https://www.bl.uk/british-accents-and-dialects/articles/accents-and-dialects-of-wales

ROGALIŃSKI, Paweł. British accents: Cockney and mockney. Journalistic Review [online]. 2011 [cit. 2019-12-09]. Dostupné z: http://journalisticreview.com/british-accents-cockney-and-mockney/
SKALIČKOVÁ, Alena. Srovnávací fonetika češtiny a angličtiny. Praha: Státní pedagogické nakladatelství, 1979.

SKASE Journal of Theoretical Linguistics [online]. 2007, vol. 4, no. 2 [cit. 2007-06-14]. Available on web page. ISSN 1339-782X.

TRUDGILL, Peter a Jean HANNAH. International English: a guide to varieties of standard English. 5th ed. London: Hodder Education, 2008. ISBN 9780340971611.
Unisyn Lexicon Release, version 1.3. The Centre for Speech Technology Research [online]. The University of Edinburgh [cit. 2019-12-09]. Dostupné z:
http://www.cstr.ed.ac.uk/projects/unisyn/
Watson, K. (2007). Liverpool English. Journal of the International Phonetic
Association, 37(3), 351-360. doi:10.1017/S0025100307003180
WELLS, J. C. Longman pronunciation dictionary. New York: Longman, c2000, xxvi, 869 s. ISBN 0582364671.

WELLS, J.C. Estuary English. DEPARTMENT OF SPEECH, HEARING \& PHONETIC
SCIENCES UCL: Division of Psychology \& Language Sciences [online]. 2007 [cit. 2019-1209]. Dostupné z: https://www.phon.ucl.ac.uk/home/estuary/home.htm

## 12 List of tables

Table 1 from THE INTERNATIONAL PHONETIC ALPHABET (revised to 2015) ..... 8
Table 2 - Czech and English vowels ..... 10
Table 3 from Gimson's Pronunciation of English (Gimson and Cruttenden, p. 136, 1994) ..... 13
Table 4 Text Frequencies of vowels in comparison with Czech ..... 14
Table 5 Czech and English consonants ..... 15
Table 6 from Gimson's Pronunciation of English (Gimson and Cruttenden, p. 196, 1994) ..... 19
Table 7 Text Frequencies of consonants in comparison with Czech ..... 20
Table 8 Czech and English vowels and consonants ..... 22
Table 9 Czech and Cockney vowels and Consonants ..... 25
Table 10 Czech and Bristolian vowels and consonants ..... 27
Table 11 Czech and Liverpudlian vowels and consonants ..... 30
Table 12 Czech and Welsh vowels and consonants ..... 32
Table 13 Simplified chart Cockney ..... 34
Table 14 Simplified chart Liverpool ..... 34
Table 15 Simplified chart Bristol ..... 35
Table 16 Simplified chart Wales ..... 35
Table 17 6th grade personal perception chart ..... 38
Table 18 9th grade personal perception chart ..... 40
Table 19 Cockney examples overview - 6th grade ..... 46
Table 20 Wales examples overview - 9th grade ..... 47
Table 21 Liverpool examples overview - 6th grade ..... 48
Table 22 Bristol examples overview - 9th grade ..... 49
Table 23 Accents picked by all pupils ..... 50
Table 24 Distincitve phoneme changes heard by pupils ..... 51
Table 25 6th grade answer sheet group 1 ..... 60
Table 26 6th grade answer sheet group 2 ..... 61
Table 27 9th grade answer sheet group 1 ..... 62
Table 28 9th grade answer sheet group 2 ..... 63

## 13 Appendix

## Grade:6.B

Years of English: 4
Rotation: BLWC

## Accent played: L

| English Level | Bristol | Liverpool | Wales | Cockney | Examples | Accents Analyzed | Accent Picked |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 1 | Tickle [x], Wake [up] | L-B | L |
| 4 | 3 | 2 | 4 | 1 | They must [must], To be, Jazyk dozadu | L-B | L |
| 4 | 2 | 3 | 2 | 2 | Jazyk dozadu | L-B | - |
| 3 | 2 | 4 | 3 | 1 <br>  <br>  | Sleep, horse, kitchen, small, stretch, stop | L-B | ${ }^{-}$ |
| 3 | 2 | 3 | 3 | 1 | - | L-B | L |
| 5 | 3 | 1 | 4 | 2 | - | L-B | - |
| 2 | 2 | 3 | 3 | 1 | - | L-B | L |
| 3 | 4 | 1 | 2 | 3 | Cacho, creč, jó, štunc, slip, míst, kich | L-B | L |
| 5 | 4 | 2 | 1 | 3 | - | L-B | L |
| 2 | 2 | 3 | 1 | 1 | Back <br> CH <br> [snejch], <br> $\mathrm{A}>\mathrm{EEE}$$>$ | L-B | - |
| 2 | 2 | 3 | 4 | 1 | Ch, sleep, bed | L-B | L |
| 4 | 2 | 3 | 4 | 1 | Jazyk dozdadu | L-B | L |
| 2 | 3 | 2 | 4 | 1 | - | L- B | - |


| 3 | 4 | 2 | 3 | 1 | - | L - B | - |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 1 | Tichle, <br> dream, <br> wake [up] | L - B | L |
| 5 | 2 | 4 | 3 | 1 | Back >ch <br> - [snejch] | L - B | L |
| 3 | 2 | 3 | 4 | 1 | A - eee - B | - |  |
| 1 | 3 | 2 | 4 | 1 | Mr <br> Cechov, <br> Cechou | L - B | L |
| 5 | 2 | 4 | 3 | 1 | - | L - B | B |
| 3 | 2 | 4 | 3 | 1 | Back <br> [bach] | L - B | L |
| 5 | 3 | 2 | 4 | 1 | - | L - B | B |
| 4 | 4 | 1 | 2 | 3 | - | L - B | - |
| 2 | 3 | 4 | 2 | 1 | Th <br> [d,t,f] | L - B | B |
| 4 | 2 | 4 | 3 | 1 | - | L - B | L |
| 2 | 2 | 2 | 3 | 1 | - | L - B | L |
| 4 | 2 | 4 | 3 | 1 | O = ou | L - B | B |

Table 25 6th grade answer sheet group 1

Grade: 6.A
Years of English: 4

## Rotation: CWBL

Accent played: C

| English Level | Bristol | Liverpool | Wales | Cockney | Examples | Accents Analyzed | Accent Picked |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 3 | 4 | 1 | Furt je tam 's | C-W | W |
| 3 | 1 | 2 | 3 | 4 | Řekl money né monný Wales | C-W | C |
| 2 | 1 | 2 | 3 | 4 | $\begin{aligned} & \mathrm{Na} \text { konci } \\ & \text { 'ee'p } \\ & \hline \end{aligned}$ | C-W | W |
| 3 | 2 | 3 | 1 | 4 | Th, ing a stop | C-W | C |
| 2 | 1 | 4 | 3 | 2 | $\text { Stop } \downarrow$ | C-W | C |
| 2 | 2 | 1 | 4 | 3 | Kitchen | C-W | C |
| 3 | 3 | 1 | 2 | 4 | $\begin{aligned} & \mathrm{Ei}-\mathrm{ae}, \quad \text { be } \\ & \text { ter } \downarrow \end{aligned}$ | C-W | - |
| 3 | 2 | 4 | 1 | 3 | Wales bylo tam ing - in, must ev | C-W | - |
| 4 | 1 | 4 | 3 | 2 | - | C-W | C |
| 3 | 1 | 2 | 3 | 4 | Znělo to 'přičeštile', nap̌̌. $\quad$ - very, só...atd | C-W | W |
| 2 | 2 | 1 | 3 | 4 | Wales very, prodloužené O , chybělo h > angry | C-W | - |
| 2 | 4 | 1 | 2 | 3 | Very (čj) | C-W | W |
| 1 | 2 | 1 | 4 | 3 | Ing - in, th | C-W | C |
| 2 | 3 | 1 | 4 | 2 | $\begin{aligned} & \text { Very, chybí } \\ & \mathrm{H} \\ & \hline \end{aligned}$ | C-W | W |
| teacher | 1 | 4 | 3 | 2 | Th $\quad-\mathrm{t}$, záklopka - stop, tickle $-\quad$ small hungry $\quad$ smau, angry | C-W | C |

Table 26 6th grade answer sheet group 2

Grade: 9.A
Years of English: 7
Rotation: BLCW
Accent played: W

| English <br> Level | Bristol | Liverpool | Wales | Cockney | Examples | Accents <br> Analyzed | Accent <br> Picked |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | 2 | 4 | 3 | 1 | polknutí | C - W | W |
| 3 | 3 | 1 | 4 | 2 | Protože si to <br> myslím <br> (polykání) | C - W | C |
| 4 | 4 | 1 | 4 | 2 | polikání | C - W | C |
| 1 | 4 | 3 | 2 | 1 | Borka ve <br> slově door <br> nezdůraznila <br> R | C W | C |
| 3 | 4 | 3 | 1 | 2 | - | C - W | C |
| 4 | 3 | 3 | 2 | 2 | - | C - W | W |
| 4 | 4 | 4 | 2 | 1 | Nezdvojené <br> souhlásky | C - W | C |
| 2 | 3 | 2 | 3 | - | C - W | W |  |
| 3 | 3 | 2 | 4 | 1 | C - W | - |  |

Table 27 9th grade answer sheet group 1

Grade: 9.B
Years of English: 7
Rotation: LBCW
Accent played: B

| English <br> Level | Bristol | Liverpool | Wales | Cockney | Examples | Accents <br> Analyzed | Accent <br> Picked |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | 3 | 4 | 2 | 1 | stop | L - B | L |
| 2 | 2 | 3 | 4 | 1 | - | L - B | B |
| 2 | 3 | 1 | 1 | 2 | Čeké OU | L - B | B |
| 4 | 2 | 1 | 3 | 4 | - | L - B | L |
| 3 | 3 | 4 | 2 | 1 | Mornin | L - B | B |
| 3 | 4 | 3 | 1 | 2 | Řekla wake <br> 'eee'p | L - B | B |
| 2 | 1 | 3 | 4 | 1 | ink | L - B | B |
| 3 | 2 | 4 | 4 | 2 | - | L - B | - |
| 3 | 1 | 3 | 4 | 2 | - | L - B | B |

Table 28 9th grade answer sheet group 2

## 14 Annotation

| Jméno a př̌jmení: | Bc. Michal Hudec |
| :--- | :--- |
| Katedra nebo ústav: | Ústav cizích jazyků PdF UP |
| Vedoucí práce: | Doc. PhDr. Václav Řeřicha, CSc. |
| Rok obhajoby: | 2019 |


| Název práce: | Anglické dialekty a český fonologický systém pro druhý <br> stupen ZŠ |
| :--- | :--- |
| Název v angličtině: | English dialects and Czech phonological system for lower <br> secondary schools |
| Anotace práce: | Teoretická část diplomové práce se zabývá fonologí́, <br> akcenty, vybranými typy anglických dialektů a porovnáva je <br> s češtinou ve snaze najít vhodný typ jako doplněk nebo i jako <br> náhradu za RP, ktera je standardem na českých školách. <br> Další ćst teze je zaměřená na praktickou aplikaci <br> fonologických rysů vybraných anglických dialektů <br> v prostředí českých škol. |
| Klíčová slova: | angličtina, čeština, fonologie, výslovnost, akcent, dialekt, <br> srovnání, citlivost |
| Anotace v angličtině: | The theoretical part of the thesis deals with phonology, <br> accents, English varieties and compares their similarities <br> with Czech in order to find an additon or a substitute for the <br> standard English taught at Czech schools, which is RP. The <br> second part focuses on practical application of phonetical <br> features of selected English dialects in the environment of <br> Czech lower secondary schools. |
| Klíčová slova | English, Czech, phonology, pronunciation, accent, dialect, <br> comparison, sensitivity |
| vangličtině: | 4 |
| Přílohy vázané v práci: | Jazyk práce: |
| Angličtina |  |


[^0]:    ${ }^{1}$ Lack of localization - There is no city or region associated with the dialect

[^1]:    ${ }^{2}$ See the level of correspondence chart in chapter 4.1.2-RP and Czech

[^2]:    ${ }^{3}$ Occlusive - pressing together by biting

[^3]:    ${ }_{5}^{4}$ Aspiration is described by Wells (2000) as a consonant that is followed by a brief [ h ] sound
    ${ }^{5}$ More about [w] in chapter 4.2.4-Unique phonemes

[^4]:    ${ }^{6}$ More about Semi-vowels in chapter 4.2.3-Articulatory shift

[^5]:    ${ }^{7}$ See Table 1 in chapter 3.1 - IPA

[^6]:    ${ }^{8}$ See the description of th-fronting in chapter 6.1-Cockney
    ${ }^{9}$ Oxford online dictionary definition of linguistic clusters: 'A group of consonants pronounced in immediate succession, as str in strong. '

[^7]:    ${ }^{10}[\Lambda]$ is replaced by [ D ]

[^8]:    ${ }^{11}$ Mr. Men and Little Miss TM Copyright © 2010 THOIP (a Chorion Company). All Rights Reserved

[^9]:    ${ }^{12}$ See the simplified tables in chapter 7.1 - Implementation in lessons
    ${ }^{13}$ See Table 9 in chapter 6.1-Cockney
    ${ }^{14}$ See Table 12 in chapter 6.4 -Wales
    ${ }^{15}$ More on the use of $[r]$ in chapter 4.2.3 - Articulatory shift

[^10]:    ${ }^{17}$ See the describtion in chapter 6.2-Bristol

[^11]:    ${ }^{18}$ See $T$-to- $R$ rule in chapter 6.3-Liverpool

[^12]:    ${ }^{19}$ I urged the students to only pick an answer when anbsolutely certain, which of the two accents was played for them

