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# CZECH INTERPRETATION OF DISTINCTIVE FEATURES OF SELECTED SPOKEN ENGLISH DIALECTS

(Bakalářská práce)

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


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**Acknowledgments**

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# 1   INTRODUCTION

This thesis deals with the problems a Czech English learner might come across when talking to someone with a strong accent different to the Received Pronunciation, which I have chosen to represent the standard variety in this work. Apart from a broad overview the thesis provides more detailed analysis of the reason for not understanding the spoken form of the given dialect. The thesis also points out when the Czech phonemic inventory is advantageous in encountering specific English dialects and summarizes not only the phonetic differences but also the similarities between the dialect and the Czech language. The lexical part of the dialects is put aside as the work is interested in the phonological nuances and differences to a Czech English pronunciation. The thesis is split into theoretical and practical part.

As first, the theoretical part is focused on an analysis of the literature used and provides more information on the topic of comparing the languages. The analysis also includes evaluation of what was used in the thesis as well as what is considered less important along with the explanation why.

Secondly, the practical part of the work shows an outline of the phonemic inventories of both Czech and English languages and compares RP and the Czech pronunciation to find similarities. It places each Czech phoneme next to its English counterpart and elaborates on it. The analysis of RP makes a Czech reader familiar with the topic and is necessary for understanding the dialect part of the thesis.

The practical part continues with the dialects itself, analyzes them, underlines the possible problematic areas and shows the repeating patterns, which should help the reader to understand not only the selected dialects, but also the spoken English in general. The approach of comparing the dialect itself is by placing the phonemic inventories of RP, Czech and the selected dialect next to each other and pointing out similarities, differences as well as the problematic areas.

The work focuses mainly on phonemes and individual words. The comparison of pronunciation is simplified as long as the meaning remains unchanged. The thesis does not deny the necessity of learning the correct pronunciation, its aim is to compare and point out the possible advantage of the Czech phonemic inventory when encountering a certain accent.          .

## 2      HYPOTHESIS

The aim is to find similarities which might help the Czech English learners with understanding. By comparing two specific phonemic systems at the time, the differences as well as the similarities can be found. Comparing Received Pronunciation with Czech has been done by Skaličková (1974) and Melen (2010) but neither of them pointed the similarities out or when the Czech speaker has advantage in understanding thanks to the Czech phonemic inventory. The same can be done with a selected dialect. The thesis considers *allophones[1]* as important part of the research as it searches for similarities. To confirm the validity as well as the credibility of this research it is necessary to choose from the various works written on this particular topic. The logical approach is to conduct the research by using works and authors concerning phonetics and phonology. However, the problematics of comparing Czech and English is not widely popular among linguists and despite many books concerning phonetics and phonology, only a few of them were written in the manner that they could support the purposes of this thesis and I had to exclude some of them due to their irrelevancy to the Czech and English language comparison. The practical part deals with the dialects itself, analyzes them, underlines the possible problematic areas and shows the repeating patterns, which should help the reader to understand not only the selected dialects, but also the spoken English in general. As the main source of information served *Srovnávací fonetika Angličtiny a Češtiny* which is a unique book written by Skaličková in 1974 and not being reworked since. Other books could be used to either support Skaličková's (1974) claims, disapprove them or add more facts and relevant information about the topic. An example of such literature is Melen's *Český jazyk na pozadí angličtiny* written in 2010 which is the only successor of comparative phonetics focused on the Czech and English phonetic system. To understand the phonemes properly it was necessary to find sources focused primarily on phonetic and phonology in both of the languages. *Longman Pronunciation Dictionary* and *Fonetika a fonologie českého jazyka* were used to compare the statements in the main sources and to find more detailed information about the topic. For the definition of the given dialects and general information about varieties of English, *INTERNATIONAL ENGLISH a guide to the varieties of standard English* by Petr Trudgill and Jean Hannah was used. The key sources concerning the spoken form of a given dialect were *English Accents & Dialects* by Arthur Hughes, Peter Trudgill and Dominic Watt and *Accents of English volume 1 & 2* by J. C. Wells. The thesis is based on books by renowned author

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[1] Allophones are the linguistically non-significant variants of each phoneme. In other words a phoneme may be realised by more than one speech sound and the selection of each variant is usually conditioned by the phonetic environment of the phoneme. Occasionally allophone selection is not conditioned but may vary from person to person and occasion to occasion (article "PHONETICS AND PHONOLOGY Phoneme and Allophone", Robert Mannell, Macquarie University, 2008, online)

but I also use 1ˢᵗ person to express my opinion on the problematics. I am aware of the process of understanding being very complex but it needs to be simplified in order to be comprehensible and to give a Czech English learner a partial insight to this complexity.

# 3 EVALUATION OF THE LITERATURE USED

This part of the thesis is dedicated to the resources used for the research. It deals with the contribution of the literature to the purposes of this thesis by pointing out and clarifying important issues a Czech Learner might come across.

## 3.1 Srovnávací fonetika angličtiny a češtiny

The most valuable source written in 1974 is a comprehensive book that compares English and Czech phonemic inventories. The work itself is supposed to be the first comparative book written about this problematics. It suggests the complexity of the task and denies the possibility of absolute conformity of the languages in terms of phonology. When comparing two language it is relevant to compare a foreign language to a mother tongue the researcher is the most familiar with.

Skaličková (1974) asserts the speech sounds, allophones, differ not only in the way they are articulated but also in their function, the possible combinations and the distribution in the given language system. The functional features influence the behavior of the allophones in context and stand in reciprocal relationship, therefore the functional features affect one another forming the complexity of the system.

The book deals with the differences of both languages. The hypothesis can be supported by defining the differences first, in order to find similarities. Skaličková (1974) writes about the detailed and complex structure of both languages and the pronunciation differences. It is a valuable source of information to compare Czech and English but the hypothesis is based on finding similar allophones. If a similarity is present the level of understanding rises. Skaličková (1974) also suggests the languages are constantly developing therefore what was considered valid ten years ago does not have to be valid nowadays. This is the major problem of the book as it was written in 1974 and some information had to be verified as they appeared to be outdated. The book offered insights and analyses of many linguists concerning the vowels giving their opinions on number of them in English which proved to be pointless for this thesis. To support the hypothesis one system had to be chosen and elaborated on.

The information provided in the book was very voluminous but among the articles the division of the quantity vs. quality stood out. The research had to understand the essence of the differences between the languages, on which the ground for future investigation of the vowel systems was established. Same vowels can have the same quantity but different quality (timbre) which is the

main dissimilarity between Czech and English vowels. Skaličková (1974) points out that the method of assessing opposite vowel pairs in English is their quality which is why the chart *(Figure 2)* splits the English phonemes into groups according to their timbre and Czech according to their quantity. The timbre groups are the following A, E, I, O, U-sounds each containing a specific number of phonemes. The division in Czech is based on the length of the vowels creating A-Á, E-É, I-Í, O-Ó, U-Ú – minimal pair sounds differentiating in their quantity.

Skaličková's (1974) research was based on the possibilities of pronunciation supported by sonograph images and potential different ways of articulation. Furthermore it deals with suprasegmental features along with black and white images of two subjects pronouncing English and Czech sounds. This served no purpose to the hypothesis because it focused mainly on the sounds – the resulting allophones pronounced by the speaker, not the ways how the articulation of the phoneme was achieved. The thorough analysis of each sound placed next to one another was used in a simplified form fitting the aims of this thesis. If any aspect matched with the Czech counterpart of the phoneme, it was marked as similar or non-problematic. On the other hand some of the sounds which were lacking any Czech equivalent had to be explained in detail and on suitable examples provided in the book.

The usage and the number of phonemes in both languages is different and Skaličková's (1974) explanation of this particular topic proved to be irrelevant to the hypothesis as it is concerned purely with the individual sounds and similarities to any extend. The book also deals with diphthongs which are not discussed in the thesis directly but are an important part of the Czech phonemic inventory and can be of great help with understanding. For this reason they were compared and looked at in the relevant chapter of the timbre group they fall into. The consonants were shown in a well arranged chart *(Figure 3)* organized according to the place and the manner of articulation. The chart was taken and used in the thesis as it offers a quick and simple overview of the differences found in both systems.

According to Skaličková (1974) there are 24 consonants in English and 26 consonants in Czech including Czech [dž]. These numbers are used also by Peter Trudgill in *INTERNATION ENGLISH a guide to the varieties of Standard English* and Krčmová in *Fonetika a fonologie českého jazyka.* The book focused on the position of every phoneme in the word explaining their behavior and

effect on the words. The thesis deals with a few of the aspects provided they influence understanding and define minimal pairs such as *assimilation* and *aspiration*[2].

*Srovnávací fonetika Angličtiny a Češtiny* was used as one of the main sources of this work thanks to its structure where the both languages stand next to one another and individual phonemes are compared, therefore providing solid foundations for this thesis.

## 3.2   Výslovnost češtiny na pozadí angličtiny

Melen (2010) is the only successor of Skaličková (1974) to compare Czech and English pronunciation. This thesis shares Melen's (2010) ideas written in his book as it builds its ideology around the process of understanding through comparison of the Czech and English language and finding logic in unknown through something familiar. There is nothing more familiar to Czech English learners than their mother tongue.

The book teaches the student how to pronounce words in RP properly, which is secondary in this thesis as it searches for similarities and the closest variation of a phoneme allowed in English to understand and express a word without changing its meaning. Melen (2010, p.9) says *"There is no point in having perfect grammar and a vast vocabulary if no one can understand what you are saying".* Melen (2010) aims to improve Czech English learners' pronunciation as schools do not pay enough attention to this matter and students, apart from other mistakes pointed out in the book, tend to mix RP with American English and they rely on the teacher whose appropriate qualification is not always guaranteed in the Czech educational system.

The book tries to simplify the problematic so that it is comprehensible and easy to understand by an average student of English. The reasons and a brief history of RP is explained in the book as it used to be the language of higher classes and the term itself is being rejected due to its pejorative perception and is sometimes substituted by more neutral BBC English which is, in fact, a mixture of different accents and dialects and therefore hard to define in its general aspect.

Melen (2010) also describes the IPA *(International Phonetic Alphabet)* and emphasizes its importance in understanding the written form of speech. However, knowing the symbols does not teach the student how to pronounce each phoneme as they are different in each language ex.: *Czech*

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[2] See the description under Bilabials (6.1)

*[r] vs. English [r]*. The same symbol but different realization. If the sound is a part of a certain allophone, thus not changing the meaning of the word, it is in compliance with the hypothesis.

Melen (2010), in a similar way as Skaličková (1974), suggests that the key difference between Czech and English vowel systems is the Czech quantity and English quality of the vowels, with the quantity in English being secondary.

The first part of the book is ended by an overview of different consonants in English as well as in Czech. The unique Czech phonemes were described in the practical part of this work to support the hypothesis and give a chance to use the Czech phonemic inventory to its full potential when compared to a certain dialect. The second part deals with advanced aspects of the speech such as melody, rhythm, word stress or linking. These are very important for understanding a whole sentence as one big unit but remain beyond the scope of this thesis. Therefore they were of little use in this work.

Melen (2010) wrote the book for students including exercise and examples to each and every topic discussed. The examples were used in the thesis as a supporting material to the individual phonemes.

## 3.3   Longman Pronunciation Dictionary

A secondary source written by J.C. Wells in 1990 is mainly a dictionary but certain parts were valuable to the research, mainly in the preface that contains introduction to phonetics and phonology along with a brief overview of different types of pronunciation.

It divides the standard varieties of English learned by foreigners into AmE and BrE models with RP being a specific type of BrE. Wells offers a large list of phonetic symbols used in the dictionary along with the description of the place and manner of their articulation. Only the relevant symbols of this plethora were chosen to suit the needs of this thesis.

The book is interspersed with phonological terms in alphabetical order assigned to individual letters in the dictionary part.

Despite being phonologically oriented, the book remains a dictionary with most of the parts formed out of lexical entries which are not of a big significance to the hypothesis.

## 3.4 Fonetika a fonologie českého jazyka

Written by Krčmová (1984), offers a thorough analysis of the Czech language system along with the division of individual phonemes in Czech. It was primarily used to confirm the primary sources such as the definition of a phoneme or the overview of Czech vowels and their manner and place of articulation.

## 3.5 International English, a guide to the varieties of Standard English

P. Trudgill and J. Hannah's (1994) offer a short introduction to Standard English varieties as it focuses on the *general dialects.*[3] Brief history of the spread of English is described at the beginning of the book followed by the analysis of individual varieties.

The particular dialect is introduced shortly and put beside RP for comparison from the grammatical as well as lexical point of view.

The vowels and consonants are described in a readable manner without any detailed scientific information making the book less valuable for the research.

The lexical part, included at the end of each dialect, proves also of no use to the hypothesis which is more interested in phonological differences of the given dialect.

## 3.6 English Accents & Dialects

A key source to support the hypothesis written by Arthur Hughes, Peter Trudgill and Dominic Watt in 2013 offers a vast variety of accents found along the British Isles, along with their detailed analysis and regional classification.

The book suggests how dismayed the foreigners can be when visiting the UK and encountering a native speaker for the first time. The language they hear is faster and very different to what they are used to from schools. This is mainly due to the dialect and accent. Both terms are described in the book with dialect being a difference in sentence structures as well as lexis and accent being a difference in pronunciation. This proves to be partially in accordance with the hypothesis as it tries

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[3] General dialects are the varieties of English such as Scottish, Irish, New Zealand or Welsh English which can be further divided into regional dialects.

to find similarities between Czech and English phonemic inventory. However, almost no attention is paid to the dialect in this thesis as the main focus is on accent of an English speaker of the Standard English.

Furthermore the English correctness is discussed as it varies and some of the English learners might find the English they had learned incorrect. The reason for this is that the RP model taught around the world is, in fact, just one of the dialects.
The book also deals with the issue of understanding and speaking suggesting the English learners always make themselves understood but the natives may lack the ability to express their minds in a simplified way. The hypothesis does not take this inability into account.

RP is thoroughly described in the book along with its history and special attention is paid to its social class status which is connected mainly with people who were educated in public schools. According to the book RP is not connected to any specific region and despite being biasedly judged by the majority of the people as a posh accent of higher society, it still remains one of the standard varieties taught worldwide. The general knowledge of RP and the fact that it is the most widely understood accent by people in the UK, made it a framework on which the other pronunciation varieties are evaluated in this thesis.

The problematics of defining an accent is dealt with under the chapter of *Regional variations*. The broader the term the broader the accent as there is not only one Irish, Scottish or Welsh accent. Each variety mentioned has further regional subdivisions, usually defined by a city, valley or a social class having certain features in common with the superordinate variety. The subdivision of accents into cities and areas around them in the book was used in this thesis as it narrows or nearly eliminates exceptions within the compared language systems. The fact that needs to be taken in consideration by the Czech English learners is that the higher on the social scale the speaker is the weaker the regional accent he has. People from the lower working classes tend to speak with the broadest regional accents. As stated in the book, native speakers might shift the classes throughout their lives but the tendency to do so is weaker than it used to be in the past, thus making the accents more distinctive. This theory supports the validity of the hypothesis as well as the importance of this thesis.

As next the book deals with the correctness of certain dialects and the non-standard grammatical and lexical structures along with different types of negation used throughout the regions. Despite its undeniable value in the process of understanding, it reaches beyond the span of this thesis.

The first part of the dialects comparison is dedicated to RP and the possible realization of individual phonemes allowed. To simplify the problematic this fact is not taken in consideration in the thesis.

The book contains a clear overview of the division and subdivision of the accents according to the regions they are spoken in. This division was used in the thesis to show the location of the compared dialects and as a framework for a further research of this problematics. The dialects in this piece of work are divided into 23 different areas around the British Isles. Each of the dialects is supported by a recording available free of charge on the internet. Specific features of each dialect are described in the final chapters along with the differences to RP thus making it a valuable source for this thesis as it compares the dialect firstly with RP and then with the Czech phonemic inventory to find similarities.

The very last chapter of the book is dedicated to exercises and suggestions on how to work with it. Regardless of the educational and logical purpose, the chapter does not further develop the hypothesis and is of no use. The book is very well written with plenty of examples on a scientific background along with modern layout which makes it important for this thesis.

## 3.7 Accents of English volume 1 & 2

The volumes were written by J. C. Wells and are split into 3 parts from which only 2 are relevant for this thesis.

The first introductory volume deals with many topics from which only a few were used to support the hypothesis. It was necessary to point out the differences between an accent and a dialect. An accent is described as the use of the Standard English with a nonstandard form of pronunciation whereas a dialect is a whole set of grammatical, syntactical and lexical differences of the Standard English, thus a dialect speaker is often bilingual speaking both the Standard English and the dialect.

The hypothesis deals with the phonological form of the Standard English spoken by a speaker of a certain dialect. An important topic described in the book is the possibility of a native dialect speaker having "…*two parallel phonological specifications for this item in their mental lexicon…*" (Wells, 1982, p. 5). The main focus of the hypothesis is on the native speakers following the rules

of their dialect and a sudden change in pronunciation might cause a Czech English learner problems with understanding.

Wells (1982) deals with topics such as distinctive rising tones among accents where most of the accents have falling ones. Under the chapter of geographical variations of an accent it is pointed out that one's speech features might tell a lot about the person such as their origins, their regional placement as well as their social class. For a Czech English learner it is important to know the basic specifics of the most common varieties and differentiate among them. Mere knowing of the native person's regional origins can help the Czech English learners to get prepared for the unusual phonemes and embrace the ones they know.

Methods of comparing different accents is described in the introduction to the chapter *"How accents differ."* The book suggests two possible approaches with the first one being a historical and the other one a synchronic one. The historical approach deals with the development and changes that occurred throughout the history. This thesis, however, is based on the synchronic approach comparing phonemic inventories of two accents at their present state and suggesting the phonological differences. This method's comparing unit is the function of a particular phoneme in a word or a morpheme.

Like many other authors, Wells (1989) describes the RP in detail which served only as a secondary source for this thesis in the matter of RP description. The second volume with the subtitle *"The British Isles"* deals with the dialects and accents among the British Isles. Apart from dividing the accents to North and South the book also gives regional division to England and the Celtic countries (Wales, Scotland and Ireland) with further subdivision into smaller regional units such as Merseyside in this thesis. Both books are very detailed and will be used in the further research of this problematics.

# 4   CZECH AND ENGLISH PHONEMIC INVENTORIES

According to Trudgill and Hannah (1994) it would be nearly impossible to provide a complete list of the variations of sounds pronounced by native speakers as approximately only 3.5% of them speak RP with the clear sounds found in the chart below. The following tables *(Figure 2 and Figure 3)* show the general sounds in English and serves as an overview for the Czech English learners as well as establishing a framework for this research.

Due to the complexity and differences in the varieties of phonemes in both inventories it is necessary to choose allophones as minimal comparison units. In addition it is almost impossible to find two fully identical phonemes in two languages, which would follow the same patterns in pronunciation as well as in their usage (Skaličková, 1974).

Skaličková (1974) also goes into details about the slightest differences in pronunciation of similar vowels and consonants which are is less important in this work. In order to set clear basis it is crucial to simplify and consider them equal as long as they do not influence the whole meaning. The differences are shown in the chart comparing both systems next to each other.

# 5 Vowels

First of all it is essential to introduce the key differences to each of the vowels found in RP and the Czech phonemic inventory. The primary dissimilarity lies in the nature of the languages itself. The English vowel system is focused mainly on the quality of the spoken content, whereas the Czech system is much simpler differentiating less variations but stresses the quantity (Skaličková, 1974). Thus the main distinguishing feature among English vowels is their timbre, or tone color in contrary to the length in Czech
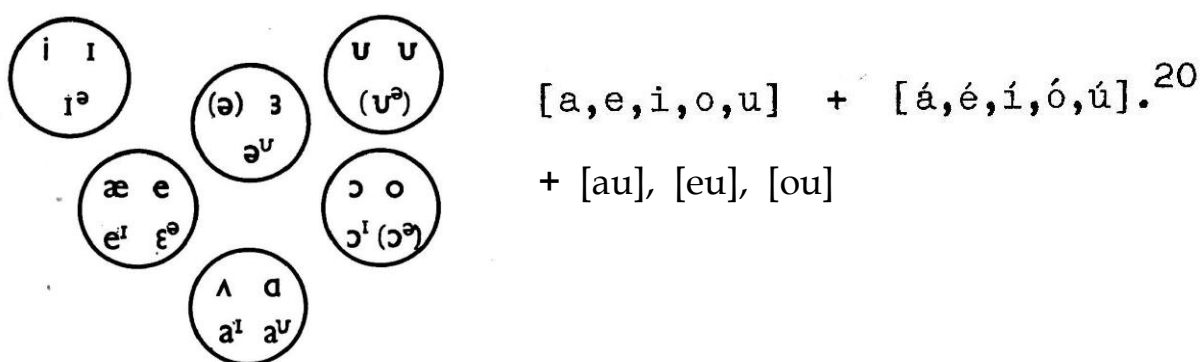


$$[a,e,i,o,u] \ + \ [á,é,í,ó,ú].^{20}$$

$$+ \ [au], \ [eu], \ [ou]$$

*Figure 1 and 2 from Srovnávací fonetika angličtiny a češtiny (Skaličková, 1974)*

## 5.1 /a/ phonemes

As suggested in the chart *(Figure 1 and Figure 2),* there are only two variations of the Czech phoneme [a] – the long and the short form which are on average in 1:2 ratio just like any other Czech vowels *(ex. dal – dál).* Another form of expressing the "a" sound in Czech is the diphthong [au] that also exists in English *(see Figure 1).* On the other hand RP has 2 different ways of dealing with this phoneme and one extra diphthong – [ʌ, ɑ, ɑɪ]. The closest to the Czech equivalent of [a] is the English [ʌ], in the words like *up*, *tuck*, or *lump* therefore Czech speakers might find these words easier to understand. Wells (1990, p. 1) points out the letter "a" is never pronounced as [ʌ]. The sound [ɑ] is relatively close to the Czech [á] and although the English pronunciation is articulated more at the back of the mouth, the words such as *half – háv, mark – mák* and *smart – smát* suggest that the difference does not affect understanding. The English sound [ɑ ⁱ], even though it does not officially exist in Czech as an independent diphthong, corresponds with the Czech combination of vowel and consonant [á + j]. For instance in *high – háj* (Skaličková, 1974).

## 5.2   /e/ phonemes

English [e] phoneme is, apart from the minute differences, in compliance with its Czech [e] version, for example: *let – let, lead – led.* The same cannot be said about [æ] whose closest counterpart in Czech might be [é] and in some of the cases also [e]. The pronunciation is performed in the similar manner with the mouth more open. The place of articulation is between the Czech [e] and [a] sound. Therefore it is necessary for this phoneme to be learned by Czech English learners properly in order to prevent misunderstandings. Ex. *badly – bedly, mad – med, sad, bad.* [eᶦ] is a similar case as the previously mentioned [ɑᶦ], because the closest sound in Czech is created by joining [e] and [j] together [e + j] which can found in words like *aim, eight, obey.* The last phoneme of the "e" group is [ɛᵊ] does not have any equivalent in Czech but as we can notice from these examples: *where, air, bear,* it can be partially substituted with the Czech [é] which would also be usually heard by the Czech English learners (Skaličková, 1974).

## 5.3   /i/ phonemes

According to Skaličková (1974) the English phoneme [i] can be compared to the Czech [í] which, in terms of pronunciation, is lower pitched than English [i] and words like *meat* or *beat* might appear problematic as the length of the [i] sound is shorter than in words like *team* or *dream* hence it sounds unfamiliar to ears of the Czech English learners. They are used to the strict 1:2 length ratio. Comparing the English [ɪ] and the Czech [i] brings us to the following conclusion: there are 2 ways of possible pronunciation of [i] in Czech, the choppy and the relaxed one when the relaxed [i] corresponds better with the English [ɪ], in *inn* or *bit – byt.* Skaličková (1974, p. 57) also states the Czech phonemic inventory does not have any equivalent to the [ɪᵊ] phoneme, in *hear* or *idea.* Absence of this particular sound seems to be very crucial in not understanding as well as the right pronunciation as the closest sound in Czech is [í] or English [i]. Let's compare: *fierce [fɪᵊs]* would be, using the Czech closest phoneme, understood by a native RP speaker as *fees [fi:s]* the same pattern applies to *pierce* x *peace* and a little bit less in *real* x *reel.*

## 5.4   /o/ phonemes

The "o" group starts with the English [ɔ] – *on, not, sausage,* and the Czech [o] these two phonemes are, despite their different articulation, very similar, with [ɔ] being slightly more open which does not play a major role in understanding. This fact is supported by Skaličková (1974) who claims young Czech speakers tend to pronounce vowels more openly. The phoneme [o] is more rounded in English than its counterpart [ó] in Czech. Although it is not used very often in the Czech language the similarity is up to such extent that both parties would understand each other. The

phonemes [ɔ ⁱ] and [ɔ˞] fall under the same category with [ɔ˞] being, in fact, a modified version of the previously mentioned [ɔ ⁱ]. The closest we can get in the Czech phoneme inventory is a [oj] combination where there the difference lies in "j" not being fully pronounced (Skaličková, 1974, s. 55). Comparing examples such as *voice, noise, boy,* it is clear that a full articulation of [j] is nearly impossible when the diphthong is followed by a consonant. It also does not play a major role in understanding if placed in the final position thus making this sound uncomplicated for Czech English learners in both, speaking and hearing.

## 5.5  /u/ phonemes

The most specific feature of English [ʊ] is its frontal pronunciation which makes the pitch sound higher than at the Czech [u]. The difference is noticeable for a native speaker but does not affect understanding radically – *put, woman, pull*. Although Czech English learners should pay attention to the last of the 3 previously mentioned examples *(pull)* not to lengthen the vowel sound and make it sound like English [u / u:] as the meaning would change from *pull [pʊl]* to *pool [pu:l]*. According to Skaličková (1974) a problem with understanding might emerge when distinguishing short and long vowels in word pairs like *root – rude, proof – prove* with the vowel in the first word of the pair being pronounced shorter than the one in the second. However, the up to date CMUdict (2014) does not make any differences in the length of the vowels, thus eliminating the possible misinterpretations of the words that differ only in the voiced or unvoiced consonant at the end.

## 5.6  Schwa phonemes

The last group is situated in in the middle of the phonemic chart *(see Figure 1)*. It consists of [ɜ, ə, ə˞]. As Skaličková (1974) suggests this particular set of phonemes does not have any close equivalent in Czech, making it one of the hardest ones to learn, hear as well as pronounce correctly by Czech English learners. This might not be entirely true if we take Šulecová (2015) diploma thesis in consideration where she states that [ɜ / ɜ:] does exist as a so called parasitic word or a time filler in the Czech language. Because it serves no semantical purpose, Czech English speakers might find it difficult to identify in the middle of words and have to study the pronunciation as well as the usage thoroughly. The sound can be found in words like *shirt, earth* and *word.* Another sound from the group is so called schwa [ə]. Similarly, as with the case of [ɜ], Skaličková (1974) says there is no functional equivalent in Czech but also admits that the phoneme is not entirely new in the Czech language. This appears to be sufficient for the purposes of this thesis and it is necessary to mention at least one of the few occasions when the sound takes place in Czech: isolated spelling of the Czech consonants *(b, c, č, f, m,...)*. The result would sound like [bə, cə, čə,

fᵊ, mᵊ,…]. For Czech English learners, just like in the case of [ɜ] sound, it is important to realize the existence of this phoneme and practice its usage as it might complicate not only the pronunciation, but also understanding of a native RP speaker and vice versa. Examples of English words containing schwa – *wat<u>er</u>, ov<u>er</u>, or<u>al</u>.* The last element of the group, [ɜ, ə], is the [ɚ] phoneme that can be remotely compared to the Czech diphthong – [ou]. It is, as the transcription suggests, a combination of schwa and a [ʊ] phoneme in the final position. From the Czech English learners' point of view is the [ɚ] phoneme pronounced less rounded than Czech [ou] and for an untrained ear it is very difficult to understand and might not be audible when taken out of context. Therefore, it is necessary to be more attentive when practicing and using this phoneme. Examples: *sl<u>ow</u>er, no, soul* (Skaličková, 1974).

# 6  CONSONANTS

Similarly, to understand consonants and have a clear overview where the differences are, it is important to include a phonemic chart to show both systems compared next to one another

| PLACE / MANNER | LABIAL, (LABIO-VELAR) | LABIO-DENTAL | DENTAL | ALVEOLAR, POST-ALVEOLAR | PALATAL | VELAR | GLOTTAL |
|---|---|---|---|---|---|---|---|
| OCCLUSIVE | p  b | | | t  d | | k  g | |
| SEMI-OCCLUSIVE | | | | tʃ  dʒ | | | |
| CON-STRICTIVE | (ʍ) w | f  v | θ  ð | s  z / ʃ  ʒ | j | | h |
| SEMI-CON-STRICTIVE (NASAL) | m | | | n | | ŋ | |
| l- and r-SOUNDS | | | | l (ɫ) (ɹ) r | | | |

Obr. 21:  Tabulka anglických souhlásek.

| MÍSTO / ZPŮSOB | LABIÁLNÍ | LABIO-DENTÁLNÍ | ALVEOLÁRNÍ, POST-ALVEOLÁRNÍ | PALA-TÁLNÍ | VELÁRNÍ | GLOTÁLNÍ |
|---|---|---|---|---|---|---|
| OKLUZÍVY | p  b | | t  d | ť  ď | k  g | |
| SEMI-OKLUZÍVY | | | c (dz) / č  dž | | | |
| KONSTRIKTIVY | | f  v | s  z / š  ž | j | x | h |
| SEMI-KONSTRIKTIVY (NAZÁLY) | m | | n | ň | (ŋ) | |
| l-ové a r-ové HLÁSKY | | | l / r / (ř̩) ř | | | |

*Figure 3 from Srovnávací fonetika angličtiny a češtiny (Skaličková, 1974)*

Despite having almost an identical number of consonants totaling 24 in English according to Trudgill and Hannah (1994, p. XV) and as stated by Krčmová (1984, p.73) 25 – 26 in Czech, the both system differ greatly not only in a few phonemes the other one does not have but also in the frequency of usage of the ones which are the same or similar the least.

The English phonemes that lack any proper equivalent in Czech are [θ, ð, w] and the thesis elaborates on them later on as they play a crucial role in the process of speaking as well as understanding English. The Czech language takes pride in having five of the sounds which do not exist in English. They are [ř, ť, ď, ň] and [x].

The mere creation of the consonants as well as their forming, usage in a sentence, grouping and their features in general are of a great contrast when comparing both languages (Skaličková, 1974). Despite the complexity of the problem the thesis finds similarities among the differences, which might help Czech English learners with understanding.

Melen (2010) points out the problematics of linking consonants by Czech English learners. The Czech system requires full articulation of consonants whose final phase ends with an explosion *[p, b, t, d, k, g,…]* in words like *fa<u>ct</u>or* and *be<u>dt</u>ime, etc.* English, on the other hand, links the consonants together and forms one articulatory unit, which means gliding from the first plosive into the second one without explosion. The approach of comparing the consonants in this thesis is according the place of their articulation.

## 6.1  Bilabial consonants

The first group (labials) contains [p, b, m] in both languages and one extra phoneme in English [w]. Skaličková (1974) states that the [b] and [m] phonemes are identical from the articulatory point of view in both languages and divides [p] phonemes in English into categories. Despite this fact [p] remains voiceless bilabial occlusive in both languages differentiating in aspiration. "*Aspirated consonant is one that is accompanied by a brief [h] sound*" (Wells, 1990). This difference appears to be insignificant as aspiration plays important role only if its realization distinguishes between two different phonemes (Skaličková, 1974, p. 69). On the other hand Czech assimilation in the final position might cause difficulties with understanding an RP speaker. Assimilation is described by Wells (1990, p. 46) as "*…a type of COARTICULATION. It is the alteration of a speech sound to make it more similar to its neighbours.*" Czechs incline to assimilate the minimal pairs in the final position of words, whereas English distinguishes between voiced and voiceless consonants, in English *rope [rəᵘp]– robe [rəᵘb]* x Czech *roup [roup] – roub [roup]* (Skaličková, 1974). The classification of [w] according to Wells (1990) is voiced labial-velar semivowel and as the chart *(see Figure 3)* suggests, Czech lacks any close equivalent thus the Czech English learners must learn this phoneme. Melen (2010) describes the articulation of [w] as having the roundness quality of [u:] in its starting phase, followed by a specific final phase created by relaxation of the lips and transition to the following phoneme. Melen (2010) also states

that a Czech English learner should bear in mind the [w] sound is a bilabial (both lips are involved) in contrary to Czech labiodental (lower lip and upper teeth) [v].

## 6.2   Labiodental consonant

Labiodentals are represented by [f] and [v] phonemes that are identical in both languages and differ only in the amount of words containing them (Skaličková, 1974).

## 6.3   Dental consonants

A special set of phonemes found in English unlike in Czech is the dental group formed by voiceless [θ] and voiced [ð] usually represented by "th" in text. Melen (2010, p. 34) describes the articulation of the phoneme as positioning the tip of the tongue against the upper teeth and the tongue blade touching the back side of the incisors with the air flowing through a narrow channel between the blade and the incisors. If a student is unable to pronounce the "th" sound properly it is allowed, by some teachers, to change the place of articulation and let them place their tongue between their teeth to simplify the creation. Roach also confirms the commonality of the teachers' simplified methods in his *English Phonetics and Phonology (2005)* and Melen (2010) adds that sticking one's tongue out in British Standard English is considered as a display of uncultured behavior. The rules of pronouncing [θ] and [ð] according to Melen (2010) are the following: "th" at the beginning of the word is pronounced as [ð] if appearing in grammatical words - for instance *this, that, they, though, etc.* The other words are pronounced with [θ] – *thin, thick, thumb, etc.* "th" in the middle of a word – Germanic origin [ð] in words like *mother, father, etc.* Non-Germanic origin [θ] in words like *author, sympathy, etc.* "th" in the final position is pronounced as [ð] if it is followed by the letter "e" – *bathe, clothe* and  in words like *smooth, mouth* and *with.* The usage of [ð] in the final position is much more common.

## 6.4   Alveolar, Post-Alveolar consonants

The largest group, alveolar and postalveolars, is formed by [t, d, tʃ, dʒ, s, z, ʃ, ʒ, n, l, r] in English and [t, d, c, č, dž, s, z, š, ž, n, l, r, ř] *(see Figure 3).* Despite the size of the group the phonemes are comparable and the mere major issue for Czech English learner is the *Aspiration* and *Assimilation*[4] of minimal pairs in the final position in the Czech language system (Melen, 2010, p. 28). The only very unique postalveolar in Czech is the sound of [ř]. According to Skaličková (1974) it is, in fact,

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[4] See the description of *Aspiration* and *Asimilation* under Bilabials (chapter 5.1)

closer to English [r] due to its place of articulation as it is pronounced at the back of the mouth unlike Czech frontal [r]. RP is non-rhotic. Czech [r] is similar to [ɾ] that appears between vowels and has upper-class connotations among RP speakers. The phoneme is realized according to Hudges (2013, p. 46) *"…by the tip of the tongue tapping briefly against the alveolar ridge"*

## 6.5   Palatal consonants

The palatal group consists of [j] in English and another 3 extra phonemes [ť, ď, ň] in Czech. English [j] qualities are more of a vowel than a consonant with the tongue starting in [i:] position. The main difference between the English and Czech [j] is its function and placement in a word. Skaličková(1974). The [ť, ď, ň] sounds are created with the tongue more in front than at [j] articulation, simultaneously drawing and pressing back from postalveolar position [t, d, n]  against the hard palate (Krčmová, 1984).

## 6.6   Velar consonants

The velar group containing [k, g, ŋ] can be found in both languages with Czech having one extra phoneme - [x]. Skaličková (1974) suggests the differences between Czech and English [k, g] pronunciation are present and points out *aspiration* of [k] and *assimilation* of both phonemes in minimal pairs *(see Bilabials)* as important ones for Czech English learners, especially when distinguishing between *bag – back, dog – dock.* Skaličková (1974) also deals with the main differences between Czech and English [ŋ]. Despite the sound existing in both languages its usage in Czech is very restrictive, as it is found only in medial positions and serves as a possible variant of pronunciation only. The English [ŋ], on the other hand, forms a minimal pair with nasal [n], although not officially recognized as one. It distinguishes meaning in words like *sing – sink, thing – thin, etc.* Melen (2010) confirms the problematic usage of [ŋ] by Czech English learners and adds that the reason why Czech English speakers tend to interchange the velar [ŋ] for nasal [n], is that in the Czech language [ŋ] appears only in an assimilating position in front of [k] or [g]. Having [ŋg] or [ŋk] in the final position is highly unusual for the Czech language system and thus a common place for regularly occurring mistakes. Czech has a unique voiced sound [x], represented by "ch" letters, that cannot be found in the standard RP phonemic inventory. The place of articulation is similar to the one of [k, g] and the sound is created at the very back of the tongue that lies relaxed in the mouth or touches lower incisors (Krčmová, 1984). The phoneme [x] forms a minimal pair with glottal [h] in Czech or can be assimilated to its voiceless form [ɣ] (Skaličková, 1974). Melen (2010) points out a common mistake made by Czech English learners which is carrying the [x] sound over to English "ch" spelling as in *Christmas* or *character.* Czech [h] sound

differs from its English counterpart in voicing as the Czech [h] is always voiced and very intense unlike the English one that is almost unvoiced and pronounced lightly with its quality gained by the following vowel. Ex.: *hotel, hate, how, etc.* (Melen, 2010, p. 36).

# 7   DIALECT VS ACCENT

To begin the interpretation of the dialects themselves it is important to distinguish a *dialect* from an *accent*. According to Hudges (2013, p. 3) *"A dialect, in the strict sense of the word, is a language variety distinguished from other varieties by differences of grammar and vocabulary."* Wells (1982) claims an accent is purely a matter of pronunciation of an individual person speaking the general English without using words taken from a dialect. Everyone, including native speakers, has a specific accent reflecting their regional affiliation, sex or age group, etc., thus making regional accent the main focus of this research. Wells (1982) also states that foreign accents reflect the phonological and phonetic aspects of the speakers' mother tongue.

## 7.1   Accents around the British Isles

The following chart is used to show the regional position of the accent groups found around the UK and Ireland. Only a group of selected accents is compared and researched in this thesis. The accent is compared to English, specifically RP, as well as to Czech. Furthermore it is essential to define the accent to the smallest regional unit which is a city in this thesis to see its specific features.
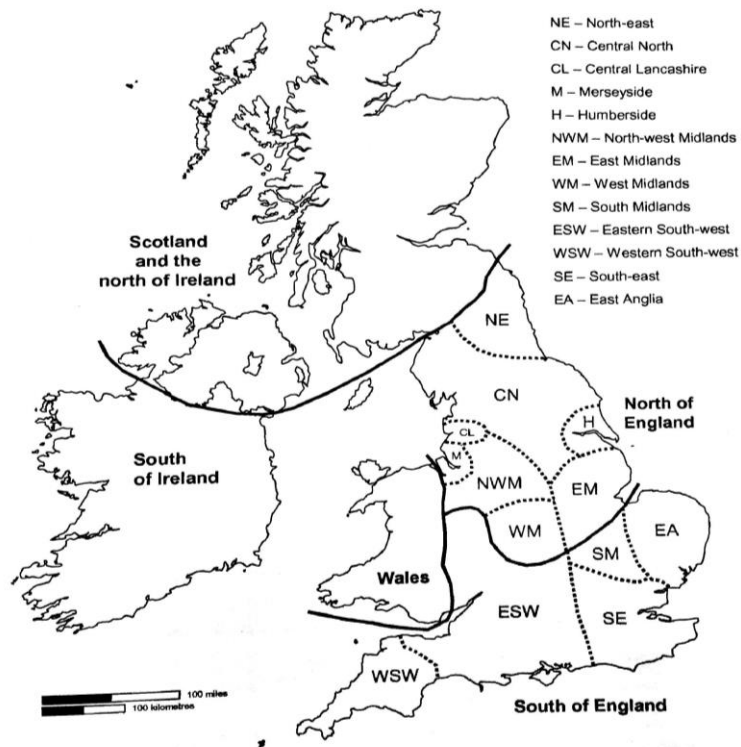
Regional accent variation



*Figure 4 from English Accents & Dialects  (Hudges, 2013, p. 71)*

# 8   LIVERPOOL

Hudges (2013, p. 70) classifies Liverpool as *Merseyside (see "M" in Figure 4)*. Paul Coslett (2005) claims the accent varies even among the city inhabitants depending on their age or social position. The dialect is mostly determined by words and phrases brought by immigrants. Hudges, (2013, p. 112) place the accent within the city itself and to the adjoining urban areas as well as nearby towns along the river Mersey. Furthermore the book suggests the accent is rather Northern with some Southern features. Wells (1982, p. 91) writes about the tone of the Liverpool accent as a falling or as a high-low skipping one. Honeybone and Watson (2006) add the accent is spoken around the urban areas of Liverpool and might resemble the ones spoken in Manchester, Lancashire and Cheshire. Wells (1989, p.366) points out the ending [ŋg] as a distinctive feature, specifically the added [g] stop at the end typical for northern accents as well as the non-rhotic attribute. Another typical sound for this accent is the alveolar tap [ɾ][5] and heavy aspiration of [p, t, k].

## 8.1   History and Development

The Liverpool accent emerged first in mid 1950s' before then the accent had been almost the same as the one of neighboring Lancashire. The key role in its development was played by the position of the city as an important port. The unique mixture of traders and people coming mainly from Scotland and Ireland gave birth to the specific dialect called *scouse* (Coslett, 2005, online). Hudges (2013, p. 112) confirms Cosslet's theory adding that the accent was influenced by settlers from Ireland specifically from the south, and Northern Ireland in general.

## 8.2   Similarities and Differences with RP and Czech

Hudges (2013, p. 112) points out the following differences. The [ʌ] phoneme, which scouse is completely lacking, is replaced by [ʊ], making words like *put* and *putt* sound the same. For a Czech English learner this difference gives neither advantage nor disadvantage in understanding[6]. It must, however, be taken into account when speaking to a native speaker from Liverpool. In words such as *dance* and *daft* the phoneme [a] is used unlike [a:] in the RP. The quality of the "oo" sound in words like *book, look, cook* is rather [u:] than standard [ʊ], which corresponds better with the Czech phonemic system as its quality is fronted as in *úl.* It is suggested that the final vowel of words like *city* and *seedy* is pronounced more like [i] than [ɪ] in RP. As stated in the chapter comparing "i" sounds[7], Czech [í] appears to be the similar equivalent thus making the

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[5] See comparison of [r] and [ɾ]  under Alveolar, Post-Alveolar consonants (6.4)
[6] See comparison of [ʊ] and [u] under /u/ phonemes (5.5)
[7] See comparison of [i] and [í] under  /i/ phonemes (5.3)

understanding as well as pronunciation easier for a Czech English learner. The scouse does not differentiate between the pair of words such as *fair [fɜ³]* and *fir [fɜ:]* with the common realization of the phoneme being [ɜ:]. Therefore making the pronunciation sound the same - [fɜ:]. The Czech phonemic inventory does not have any similar sound except for the parasitic words mentioned in chapter 5 *(5.6)*. The most important feature of the accent in Liverpool, from the Czech English learner point of view, is the heavy aspiration of [p, t, k] phonemes. According to Wells (1989, p. 371) if a voiceless stop [p, t, k] appears in the final position, it lacks the complete stop in articulation and is realized through a fricative [ɸ, s, x][8] as in *snake [sneɪx]* or *short [ʃɔːts][9]*. Hudges (2013, p. 113) adds examples of the aspiration in words like *can't [kxaːnt], straight [streɪts]* and *back [bakx]*. Another cases of fully fricated consonants are described by Wells (1989, p.371): *"The /k/ fricative is sometimes uvular rather than velar, and may have a degree of uvular scrape[10]: [nɛx] neck, [klɒx] clock."* This amount of aspiration gives a Czech English an advantage thanks to the [x] phoneme that does not exist in RP. If the Czech English learner is aware of this variety characteristics, it should result in better understanding as well as reproduction, if attempted. The phoneme might be difficult to understand for an RP speaker. Hudges (2013, p.113) claim the "r" sound in Liverpool English is an alveolar tap [ɾ]. As stated in chapter 6 *(6.4)* using [ɾ] is connected with upper class and is not standardly used. Czech frontal [r] is an alveolar trill that usually vibrates 2-3 times when articulated (Skaličková, 1974, p. 120). The [ɾ] should be understood by a Czech English learner as the only difference is in the number of vibrations, when [ɾ] is being tapped only once in scouse. Another aspect of the accent is so called *h-dropping* when some of the speakers tend to omit the [h] phoneme (Honeybone, Watson, 2006). The Irish influence is noticeable with [θ, ð] phonemes as they are pronounced like alveolar stops [t, d]. Examples *three [trɪi], truth [truːt], that [dat]* (Wells, 1989, p.371). A Czech English learner might find this difference to the RP very convenient as the Czech phonemic system lacks [θ, ð] but includes [t, d] phonemes which are well known and widely used. The suffix *–ing* is pronounced as [-ɪn], although if preceding a vowel the pronunciation is [ŋg] (Hudges, 2013, p.114). The slight advantage for Czech English learners in understanding and pronouncing *–ing* suffix in scouse lies in the scarce use of [ŋ] in the Czech language system, whereas the use of [n] is abundant. The whole speech in Liverpool is velarized[11] giving it its distinctive quality Hudges (2013, p.114). The most important individual phonological differences from the RP might suggest the seeming simplicity of the accent for Czech English learners, but they must bear in mind that the thesis focuses purely on the accent and

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[8] See the description of [x] under Velar consonants (6.6)
[9] Wells (1982) uses the phoneme [ʈ] *(as in Pi<u>zz</u>a)*. Hudges (2013) use [ts] which is also used in this thesis.
[10] Scrape = vibration
[11] Velarisation is a movement of the tongue backwards and upwards. Holding the jaws together even for open vowels. Both of these giving scouse its adenoidal quality (Wells, 1989, p.373).

pronunciation of Standard English. The dialect is much more complex and the lexical differences *(breakfast – brekkie, hospital – ozzy)* might cause troubles with understanding.

# 9   Conclusion

The main idea of this thesis was to compare Czech and English and offer a different approach of dealing with a new accent with the focus on similarities and advantages of the Czech phonemic inventory.

The introduction to the topic was an analysis of the literature used, showing a large number of aspects that form a language. Therefore, suggesting the necessity of narrowing the problem to phonetical level. The evaluation of the literature also proved that a clear distinction between a dialect and an accent had to be made.

The practical part dealt with the comparison of RP and Czech phonetic systems. It suggested the key differences between the languages and tried to compare them next to one another.  It pointed out not only the phonemes that are easy to learn by a Czech English speaker, but also the hard and problematic ones that need to be practiced attentively. Each phoneme was compared to its English counterpart and the research tried to find a matching or the closest phoneme in Czech along with examples and explanations.

The part concerning the selected dialect compared RP, Czech and the dialect's phonemic inventory to point out differences to RP and suggest possible parallels to the Czech phonemic inventory. It dealt with the unique aspects of the dialect, therefore the similarities to RP were put aside.

The thesis is intended for Czech English teachers as well as for Czech students of English providing an unconventional perspective on understanding the spoken language that is usually different to RP as it is spoken by a restricted number of people. Other varieties of English are much more common. The didactical value of this thesis lies also in the necessity of preparing pupils/students to encounter a native speaker and quicken the process of getting accustomed to their accent as well as dialect. This is achieved by knowing the basic phonemic differences and similarities. Teachers can encourage their students by pointing out phonemes that are similar in Czech but unusual or missing in RP and also enrich their lessons with different accents, which is profitable for students to understand the complex core of the language.

This thesis serves as an introduction to the problematics and will be elaborated further on in my diploma dissertation.

# 10  ANNOTATION

*Author:* Michal Hudec

*Faculty and Department:* Faculty of Education, Institute of Foreign Languages

*Title:* Czech interpretation of distinctive features of selected spoken English dialects

*Supervisor:* Doc. PhDr. Václav Řeřicha, CSc.

Number of characters: 53 173

*Key words:* comparing Czech and English, phonemic inventory, English accents, English dialects understanding of Czech English learners, advantage of Czech phonemes

*Language:* English

*Description:* The main goal of the thesis is to find similarities in phonemic inventories of selected spoken English dialects and Czech. Firstly, the thesis evaluates the literature and points out the essential issues when comparing languages. Secondly, RP, which was chosen as a representative of a Standard English accent in this work, is compared with Czech phonemic system. As next, a dialect was selected and compared to both RP as well as Czech. The thesis pointed out similarities and possible advantages of a Czech English learner in understanding the dialect thanks to the Czech phonemic inventory.

## Anotace v češtině

*Autor:* Michal Hudec

*Název fakulty a katedry:* Pedagogická fakulta, Ústav cizích jazyků

*Název práce:* České hodnocení fonetických distinktivních rysů vybraných anglických dialektů

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

*Počet znaků:* 53 173

*Klíčová slova:* porovnání angličtiny a češtiny, fonetický inventář, anglické akcenty, anglické dialekty, porozumění českých studentů angličtiny, výhody českých fonémů

*Jazyk:* angličtina

*Charakteristika:* Hlavním cílem práce je najít podobnosti ve fonetických inventářích vybraných anglických dialektů a češtiny. Práce se nejprve věnuje rozboru použité literatury a vyzdvihuje klíčové problémy při porovnávání jazyků. Druhá část se věnuje RP, která byla vybrána jako zástupce akcentu standardní angličtiny v této práci a porovnává ji s fonetickým systémem češtiny. Dále byl vybrán jeden dialekt, s kterým se porovnala RP a čeština. Tato práce se snaží najít možné výhody českého fonetického systému, které pomohou českým studentům angličtiny s porozuměním onoho dialektu.

# 11 BIBLIOGRAPHY

KRČMOVÁ, Marie. *Fonetika a fonologie českého jazyka*. Praha: Státní pedagogické nakladatelství, 1984.

TRUDGILL, Peter. a Jean. HANNAH. *International English: a guide to varieties of standard English*. 3rd ed. New York: E. Arnold, 1994. ISBN 9780340586457.

SKALIČKOVÁ, Alena. *Srovnávací fonetika angličtiny a češtiny*. Praha: Academia, 1974. Studie ČSAV, č. 10, 1974.

MELEN, Dušan. *Výslovnost angličtiny na pozadí češtiny*. V Praze: Big Ben Bookshop Prague, 2010. ISBN 978-80-904-3062-4.

WELLS, J. C. *Longman pronunciation dictionary*. London: Longman, 1990. ISBN 0582053838.

WELLS, J. C. *Accents of English*. Cambridge: Cambridge University Press, 1982. ISBN 0-521-29719-2.

J.C. WELLS. *Accents of English 2: The British Isles*. Reprinted. Cambridge [u.a.]: Univ. Press, 1989. ISBN 05-212-8540-2.

HUGHES, Arthur, Peter TRUDGILL a Dominic James Landon WATT. English accents & dialects: [an introduction to social and regional varieties of English in the British Isles]. 5th ed. London: Routledge, 2013. ISBN 9781444121384.

COSLETT, Paul. *Local Dialect: The origins of Scouse* [online]. BBC Liverpool, 2005 [cit. 2017-04-19]. Dostupné z:
http://www.bbc.co.uk/liverpool/content/articles/2005/01/11/voices_liverpoolaccent_feature.shtml

HONEYBONE, Patrick a Kevin WATSON. *Phonemes, graphemes and phonics for Liverpool English* [online]. 2006, , 15 [cit. 2017-04-19]. Dostupné z: ftp://ftp.phon.ucl.ac.uk/pub/Word-Grammar/ec/liverpool.pdf

MANNELL, Robert. *PHONETICS AND PHONOLOGY Phoneme and Allophone* [online].
Macquarie University, 2008 [cit. 2017-04-19]. Dostupné z:
http://clas.mq.edu.au/speech/phonetics/phonology/phoneme/

LENZO, Kevin *The CMU Pronouncing Dictionary* [online]. 2014 [cit. 2017-04-19]. Dostupné z:
http://www.speech.cs.cmu.edu/cgi-bin/cmudict?in=C+M+U+Dictionary#lookup

ŠULECOVÁ, Darina. *K parazitickým slovům v české slovní zásobě*. Č. Budějovice, 2015.
diplomová práce (Mgr.). JIHOČESKÁ UNIVERZITA V ČESKÝCH BUDĚJOVICÍCH.
Pedagogická fakulta