

Západočeská univerzita v Plzni

**Fakulta pedagogická
Katedra anglického jazyka**

Bakalářská práce

**PROBLÉMY ČESKÝCH STUDENTŮ S ANGLICKOU
VÝSLOVNOSTÍ**

Adam Lávička

Vedoucí: PhDr. Naděžda Stašková Ph.D.

Plzeň 2021

University of West Bohemia

**Faculty of Education
Department of English**

Bachelor Thesis

**DIFFICULTIES OF CZECH STUDENTS WITH
ENGLISH PRONUNCIATION**

Adam Lávička

Supervisor: PhDr. Naděžda Stašková Ph.D.

Plzeň 2021

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

.....

Adam Lávička

Prohlašuji, že jsem práci vypracoval samostatně s použitím uvedené literatury a zdrojů informací.

.....
Adam Lávička

ACKNOWLEDGEMENTS

I would like to express my utmost gratitude to my supervisor PhDr. Naděžda Stašková Ph.D. for her invaluable counsel and kind guidance which she has provided me with throughout writing this thesis. Thank you with all my heart.

I am also deeply indebted to Mgr. Silvie Volfová for allowing me to conduct the research during her classes. Lastly, a special thanks is due to all the students and friends that have taken part in this research.

ABSTRACT

Lávička, Adam. University of West Bohemia. March, 2021. Difficulties of Czech Students with English Pronunciation.

Supervisor: PhDr. Naděžda Stašková, Ph.D.

Czech learners of English commonly face many difficulties in course of their English pronunciation acquisition. Correct, or at least intelligible, pronunciation of a language is vital for understanding other people. This study aims to investigate seven problematic areas of English pronunciation on segmental level determined by the author as well as their potential causes.

Because the hypothesis needed to be verified, a research among Czech speakers of English has been conducted via voice recordings of the participants, and their subsequent evaluation of pronunciation of the targeted phonemes was performed. Further, a questionnaire was distributed to the research subjects and analysed thoroughly. The respondents were divided into two groups based on their age and studies. The results confirmed the hypothesis in six out of seven problematic areas of pronunciation.

The results suggest that the main causes of pronunciation difficulties are the differences between Czech and English phonetic systems, the absence of certain phonemes in Czech, and lastly the unfamiliarity with theoretical as well as practical foundations of English phonemes from phonetic and phonological point of view.

Key words: phonetics, phonology, pronunciation, BBC English, segmental elements

TABLE OF CONTENTS

1 Introduction	1
2 General Terminology	4
2.1 BBC pronunciation	4
2.2 English Phonemes	4
2.3 Phonemic Transcription.....	5
3 Theoretical Part	8
3.1 Segmental Elements	8
3.2 English Vowels.....	8
3.2.1 Short Front Vowel /æ/	10
3.2.2 Short Central Vowel /ə/	11
3.3 English Consonants	12
3.3.1 Plosives.....	14
3.3.1.1 Aspirated Plosives /p/, /t/, /k/.....	14
3.3.2 Nasals	15
3.3.2.1 Velar Nasal /ŋ/	15
3.3.3 Fricatives	16
3.3.3.1 Dental Fricatives /θ/ and /ð/.....	16
3.3.4 Approximants	17
3.3.4.1 Bilabial Approximant /w/	18
3.3.4.2 Post-alveolar Approximant /r/	18
4 Practical Part	20
4.1 Hypothesis	20
4.2 Methodology.....	22
4.2.1 Methods of Research	22
4.2.2 Assessees	24
4.3 Analysis of the Questionnaires	25
4.3.1 General Observations	27
4.4 Analysis of the Recordings.....	31
4.4.1 Pronunciation of /æ/	31
4.4.2 Pronunciation of /ə/	33
4.4.3 Pronunciation of /p/, /t/, and /k/	36
4.4.4 Pronunciation of /ŋ/	38
4.4.5 Pronunciation of /θ/ and /ð/	40
4.4.6 Pronunciation of /w/	42

4.4.7 Pronunciation of /r/	44
5 Conclusion	47
References.....	49
Appendices	50
Appendix A – List of Words	50
Appendix B – Questionnaire	52
Appendix C – Evaluation Paper	55
Summary in Czech	57

LIST OF TABLES

Table 1 Long and short English vowels	10
Table 2 Explanations of abbreviations	25
Table 2 Analysis of the questionnaire of Group A	26
Table 4 Analysis of the questionnaire of Group B	27
Table 5 Pronunciation of /æ/ by Group A	32
Table 6 Pronunciation of /æ/ by Group B	33
Table 7 Pronunciation of /ə/ by Group A	35
Table 8 Pronunciation of /ə/ by Group B	35
Table 9 Pronunciation of /p/, /t/ and /k/ by Group A	37
Table 10 Pronunciation of /p/, /t/ and /k/ by Group B	37
Table 11 Pronunciation of /ŋ/ by Group A	39
Table 12 Pronunciation of /ŋ/ by Group B	39
Table 13 Pronunciation of /θ/ and /ð/ by Group A	41
Table 14 Pronunciation of /θ/ and /ð/ by Group B	42
Table 15 Pronunciation of /w/ by Group A	43
Table 16 Pronunciation of /w/ by Group B	44
Table 17 Pronunciation of /r/ by Group A	45
Table 18 Pronunciation of /r/ by Group B	46

LIST OF FIGURES

Figure 1 IPA chart	6
Figure 2 Gimson's transcription	7
Figure 3 English vowels	9
Figure 4 English vowels with IPA symbols	9
Figure 5 English Consonants	12
Figure 6 Chart of English consonant phonemes	13

1 Introduction

English, the lingua franca of the day and age, has spread throughout the entire world in a fashion that had never before been experienced. Now millions, nearly billions, of people can communicate with individuals from the far side of the world and understand them quite effectively. It is therefore of no surprise that approximately 2/3 of all English speakers speak it as a second language. As a result, English is no longer owned exclusively by the British, but rather, by us all – the peoples of the 21st century. The knowledge of English and the ability to speak it well, or at least sufficiently, is slowly becoming to be considered one of the fundamental abilities of an educated citizen, correspondingly, an educated Czech.

A major part of being able to speak English intelligibly is undoubtedly pronunciation, and as such, it surely should not be underestimated. However, it has become quite clear that pronunciation in the vast majority of Czech schools is not exactly in the spotlight. This thesis focuses on Received Pronunciation or General British pronunciation, also known as Southern England Standard Pronunciation (SESP), which is the predominant model of English in Europe.

When I was in grammar school, I became, one could say, obsessed with English. Regularly, day by day, I watched YouTube videos on English (lectures about grammar, pronunciation etc.) and I did my best to immerse myself in English as much as I could. I watched British TV shows of all sorts, comedians, documentaries etc. This experience allowed me to gain a certain understanding of English pronunciation not only from school but also from native English speakers themselves, just as (of course, not quite as) if I lived in the United Kingdom, and thus I acquired it naturally. My knowledge was then further enhanced at university during courses of phonetics and phonology which allowed me to see the matter from an entirely new – academic – perspective.

When I teach, I always try to explain pronunciation of individual words thoroughly. Well-established foundations are needed to be laid for successful and effective pronunciation teaching, and I have yet to lay those. In aid of this, a downright knowledge of the theoretical background and analysis of English pronunciation mistakes is necessary; and that is why I have decided to conduct this research.

In the course of my English teaching experience, I have been able to deduce the most frequent and recurring pronunciation errors made by the Czech learners of English; these mispronunciations embody the hypothesis of this thesis. It deals with segmental elements of English: short front vowel /æ/, short central vowel /ə/, aspirated plosives /p/, /t/, and /k/, velar nasal /ŋ/, dental fricatives /θ/ and /ð/, bilabial approximant /w/ and post-alveolar approximant /r/.

As far as the thesis is concerned, it deals with segmental elements (individual sounds). I am well aware of the fact that segmental elements are only one part of the whole problem. The other part is, obviously, supra-segmental elements (phenomena such as tone, intonation, rhythm etc.). The latter are not to be discussed in this thesis for they are quite an advanced problematic and a great deal more demanding to execute in terms of observation in the practical part, or as Roach (2009) puts it: "...objective study of supra-segmental aspects of real speech is difficult to carry out, and much research remains to be done." (p. 110).

I have concentrated my effort on two groups of students of English: the first group comprises grammar school students on B1-B2 level – based on CEFR standard (Common European Framework of Reference for Languages) – and the second group are university students whose object of study is not English. Neither of the two groups of students of interest have undergone any phonetic or phonological training whatsoever. With this in mind, they have provided ‘raw’ data as to the mistakes made on the segmental level of English, which can be also applicable to a large number of other Czech students of English.

What are the difficulties of Czech B1 speakers of English with its pronunciation on segmental level, and what is the cause of frequent mispronunciations of individual sounds in English? The research is aimed not only at verification of the hypothesis but also at revelation of other possible pronunciation mistakes that were not included in the hypothesis. Further, we may be possibly able to observe what pronunciation variants are mainly favoured by the participants.

The thesis comprises three parts: general terminology, theoretical part and practical part. Because some of the fundamental terms required explanation prior to the actual body of the thesis, the chapter of general terminology was established. Terms such as BBC

pronunciation, phonemes and phonemic transcription are explained, and readers can also get acquainted with the symbols used for transcription throughout this work.

In the theoretical part, the basic theoretical foundations of English phonemes – particularly those deemed problematic for Czech speakers of English by the author – are addressed. The chapter is divided into two larger subchapters: vowels and consonants. Both of these have their own introduction where divisions within the category are discussed more closely. Further, the peculiarities of each individual phoneme in question are investigated and described with numerous suitable examples.

Further, the practical part introduces the research conducted in order to verify my own hypothesis of the most recurring errors in pronunciation of Czech speakers of English. The analysis was done in a form of voice recordings which were evaluated and errors made were analysed. Additionally, the practical part also investigates a questionnaire that the speakers filled out prior to their recording.

The thesis is concluded in the last chapter where the main findings are summarized.

2 General Terminology

The primary function of the use of any language by speakers is to be able to communicate with other people and understand one another. Intelligibility is of crucial importance. In *English Phonetics and Phonology* (Roach, 2009) Roach cites Jones: “‘Good’ speech may be defined as a way of speaking which is clearly intelligible to all ordinary people. ‘Bad’ speech is a way of talking which is difficult for most people to understand” (p. 6).

In order to analyse whether the ‘good’ speech is utilized in Czech schools by students of English, we have to make our way past the fundamental terminology before we begin inspecting the finer qualities of segmental elements of English pronunciation.

2.1 BBC pronunciation

For the purpose of the research, I have chosen the ‘standard’ accent, or way of pronunciation, most often recommended for learners of English, which is considered to be **Received Pronunciation** (RP), otherwise known as **BBC pronunciation**. Roach (2009) states that the term RP is slightly out of date and can indeed be misleading, as the word ‘received’ meant as ‘approved’ may suggest that other accents would not be acceptable or equal. Then he goes on that this very same accent is most often used by BBC announcers and broadcasters, and therefore he suggests the term BBC pronunciation to be superior and preferable. For the stated reason, this term will be used throughout the thesis.

I do not suggest that BBC accent is the only one to be used and thus disregard the American accent – General American (GA) – or other standards of English pronunciation. They are equally as suitable and intelligible. Nonetheless, BBC pronunciation is often accepted as the standard way of pronunciation of English in most countries of continental Europe.

2.2 English Phonemes

English, just as about every other language, has its own set of sounds that are used when trying to pronounce individual words and are commonly divided into vowels and consonants, which are further subdivided (more on that later in the thesis). Every respective sound is called a **phoneme**. Phonemes can, and they do indeed, distinguish one word from another. In spite of the fact that there are just 26 letters in the English alphabet, there are 44 phonemes (sounds). As a consequence, foreign learners of English often find it

problematic to infer the correct pronunciation of certain words. Therefore, Roach (2009) offers a rather handy piece of advice: “Because of the notoriously confusing nature of English spelling, it is particularly important to learn to think of English pronunciation in terms of phonemes rather than letters of the alphabet...” (p. 2).

It is also quite typical that learners think that the number of letters in a word matches the number of phonemes. It applies only to some words, such as: *man*, *busy*, and *print*, for example, as we would transcribe them respectively as /mæn/, /bɪzi/ and /prɪnt/ – the number of graphemes (letters) corresponds to the number of phonemes (sounds). However, frequently it is not the case. Let us now have a look at words like *car*, *father* and *knowledge*. Their respective transcription would be: /kɑː/, /fɑːðə/ and /nɒlɪdʒ/. As we can see, the number of graphemes and phonemes does not correspond in any of the cases mentioned. Such violations may be due to **silent letters**¹, a very common phenomenon occurring in English, or one sound that is represented by more letters (Yavas, 2011).

2.3 Phonemic Transcription

Phonemic transcription, sometimes referred to as ‘broad transcription,’ uses unique symbols for representing sounds (phonemes) of a language. The best-known set of symbols is the **IPA**, which stands for International Phonetic Alphabet (see Figure 1. below). When transcribing phonemically, forward slanting brackets are to be used. For the purpose of this thesis, we are going to be using the **Gimson transcription**, named after its inventor A. C. Gimson (see Figure 2. below). His transcription also uses the IPA symbols.

The other way of transcription is **phonetic transcription**, sometimes called “narrow transcription,” which involves further details of pronunciation. For phonetic transcription square brackets are used. Phonetic transcription will not be used throughout the thesis.

When trying to find the correct pronunciation of words, most people would consider looking into a dictionary, where transcription of words is found. The headwords are most frequently transcribed using the phonemic transcription.

¹ A silent letter is a letter in certain words that is not pronounced, i.e. “b” in *debt*.

THE INTERNATIONAL PHONETIC ALPHABET (revised to 2005)

CONSONANTS (PULMONIC)

© 2005 IPA

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

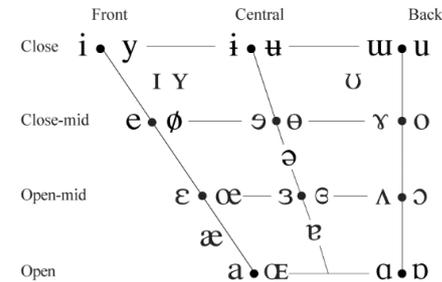
CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
ʘ Bilabial	ɓ Bilabial	ʼ Examples:
ǀ Dental	ɗ Dental/alveolar	ɓ' Bilabial
ǃ (Post)alveolar	ɟ Palatal	t' Dental/alveolar
ǁ Palatoalveolar	ɡ Velar	k' Velar
ǁ Alveolar lateral	ɠ Uvular	s' Alveolar fricative

OTHER SYMBOLS

ɱ Voiceless labial-velar fricative	ɕ ʑ Alveolo-palatal fricatives
ʋ Voiced labial-velar approximant	ɺ Voiced alveolar lateral flap
ɥ Voiced labial-palatal approximant	ɥ Simultaneous ʃ and x
ħ Voiceless epiglottal fricative	
ʕ Voiced epiglottal fricative	Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.
ʡ Epiglottal plosive	

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

SUPRASEGMENTALS

- ˈ Primary stress
- ˌ Secondary stress
- ː Long eɪ
- ˑ Half-long e'
- ◌̥ Extra-short ɛ̥
- ◌̥ Minor (foot) group
- ◌̥ Major (intonation) group
- ◌̥ Syllable break .i.ækt
- ◌̥ Linking (absence of a break)

TONES AND WORD ACCENTS LEVEL CONTOUR

- ẽ or ˥ Extra high
- é or ˥ Rising
- é High
- ê or ˥ Falling
- ē Mid
- ē High rising
- è Low
- è Low rising
- è Extra low
- è Rising-falling
- ↓ Downstep
- ↑ Global rise
- ↑ Upstep
- ↘ Global fall

DIACRITICS Diacritics may be placed above a symbol with a descender, e.g. ɲ̃

◌̥ Voiceless	◌̥ n̥ d̥	◌̥ Breathy voiced	◌̥ b̤ a̤	◌̥ Dental	◌̥ t̪ d̪
◌̥ Voiced	◌̥ ɲ̥ ɟ̥	◌̥ Creaky voiced	◌̥ ɓ̤ ɗ̤	◌̥ Apical	◌̥ t̪̺ d̪̺
◌̥ Aspirated	◌̥ tʰ dʰ	◌̥ Linguolabial	◌̥ ɬ̺ ɮ̺	◌̥ Laminal	◌̥ t̪̺ d̪̺
◌̥ More rounded	◌̥ ɔ̞	◌̥ Labialized	◌̥ tʷ dʷ	◌̥ Nasalized	◌̥ ẽ̃
◌̥ Less rounded	◌̥ ɔ̟	◌̥ Palatalized	◌̥ tʲ dʲ	◌̥ Nasal release	◌̥ d̪ⁿ
◌̥ Advanced	◌̥ ɯ̟	◌̥ Velarized	◌̥ tʷ dʷ	◌̥ Lateral release	◌̥ d̪ˡ
◌̥ Retracted	◌̥ ɯ̠	◌̥ Pharyngealized	◌̥ tˤ dˤ	◌̥ No audible release	◌̥ d̪ˠ
◌̥ Centralized	◌̥ ẽ̞	◌̥ Velarized or pharyngealized	◌̥ ɮ̤		
◌̥ Mid-centralized	◌̥ ẽ̞̞	◌̥ Raised	◌̥ ɛ̥ (ɹ̥ = voiced alveolar fricative)		
◌̥ Syllabic	◌̥ ɲ̩	◌̥ Lowered	◌̥ ɛ̥ (β̥ = voiced bilabial approximant)		
◌̥ Non-syllabic	◌̥ ɲ̥	◌̥ Advanced Tongue Root	◌̥ ɛ̥		
◌̥ Rhoticity	◌̥ ɚ̥ ɚ̥	◌̥ Retracted Tongue Root	◌̥ ɛ̥		

Figure 1 IPA chart. Digital image. internationalphoneticassociation.org. Retrieved from: <https://www.internationalphoneticassociation.org/content/full-ipa-chart#ipachartpng>

vowels		consonants	
IPA	examples	IPA	examples
ʌ	c <u>u</u> p, l <u>u</u> ck	b	<u>b</u> ad, l <u>a</u> b
a:	<u>a</u> rm, f <u>a</u> ther	d	<u>d</u> id, l <u>a</u> dy
æ	<u>c</u> at, bl <u>a</u> ck	f	<u>f</u> ind, <u>i</u> f
ə	<u>a</u> way, cin <u>e</u> ma	g	<u>g</u> ive, fl <u>a</u> g
e	<u>m</u> et, <u>b</u> ed	h	<u>h</u> ow, <u>h</u> ello
ɜ:	<u>t</u> urn, <u>l</u> earn	j	<u>y</u> es, <u>y</u> ellow
ɪ	<u>h</u> it, <u>s</u> itting	k	<u>c</u> at, <u>b</u> ack
i:	<u>s</u> ee, <u>h</u> eat	l	<u>l</u> eg, <u>l</u> ittle
ɒ	<u>h</u> ot, <u>r</u> ock	m	<u>m</u> an, <u>l</u> emon
ɔ:	<u>c</u> all, <u>f</u> our	n	<u>n</u> o, <u>t</u> en
ʊ	<u>p</u> ut, <u>c</u> ould	ŋ	<u>s</u> ing, <u>f</u> inger
u:	<u>b</u> lue, <u>f</u> ood	p	<u>p</u> et, <u>m</u> ap
aɪ	<u>f</u> ive, <u>e</u> ye	r	<u>r</u> ed, <u>t</u> ry
aʊ	<u>n</u> ow, <u>o</u> ut	s	<u>s</u> un, <u>m</u> iss
əʊ	<u>g</u> o, <u>h</u> ome	ʃ	<u>s</u> he, <u>c</u> rash
eə	<u>w</u> here, <u>a</u> ir	t	<u>t</u> ea, <u>g</u> etting
eɪ	<u>s</u> ay, <u>e</u> ight	tʃ	<u>c</u> heck, <u>ch</u> urch
ɪə	<u>n</u> ear, <u>h</u> ere	θ	<u>th</u> ink, <u>bo</u> th
ɔɪ	<u>b</u> oy, <u>j</u> oin	ð	<u>th</u> is, <u>m</u> other
ʊə	<u>p</u> ure, <u>t</u> ourist	v	<u>v</u> oice, <u>f</u> ive
		w	<u>w</u> et, <u>w</u> indow
		z	<u>z</u> oo, <u>l</u> azy
		ʒ	<u>p</u> leasure, <u>v</u> ision
		dʒ	<u>j</u> ust, <u>l</u> arge

Figure 2 Gimson's transcription. Digital image. tkacmaz.wordpress.com.

Retrieved from: <https://tkacmaz.wordpress.com/pron1/>

3 Theoretical Part

In this part, we are going to deal with basic theoretical foundations of English phonemes, more particularly those which prove to be troublesome for many Czech speakers of English. The subchapters dedicated to our desired phonemes will contain a brief description of the phonemes in question, how they are produced, their similarities and (or) differences to their Czech counterparts, examples of occurrence and possible or likely explanations of why it may be difficult for Czech speakers of English to pronounce them correctly.

3.1 Segmental Elements

To put this term another way, segmental elements are essentially the individual phonemes of the English language or the smallest elements in a language that make one word different from another. They are typically divided into **vowels** and **consonants**, which will be dealt with in detail in the following subchapters.

3.2 English Vowels

According to Yavas (2011), the number of consonant sounds does not change with various types of English; it remains the same (24) for all varieties. And also, depending on the dialect, the alterations are fairly limited. On the other hand, English vowels are, in that regard, somewhat peculiar. Their number varies by a large margin depending on the variety of English. However, this thesis deals with the BBC pronunciation, hence we are going to be focusing on the vowels of this variety only.

To define the term vowel, a quotation from Roach's *Phonetics and Phonology* (2009) will be used: "... vowels are sounds in which there are no obstructions to the flow of air as it passes from the larynx to the lips" (p. 10). To put it in another way, when producing vowel sounds, we let the air out of the vocal tract without 'building' any 'obstacles'. Conversely, when producing consonant sounds, we use two articulators (tongue, teeth, lips etc.) to create an obstruction to the air flow.

The English language has 20 vowel phonemes in total. There are 12 **monophthongs**, which are sounds made by only one vowel sound (/i:/ as in *meet* or /u:/ as in *food* for instance), and 8 **diphthongs**. Alan Cruttenden describes in his *Gimson's Pronunciation of English* (2014) diphthongs as vocalic elements which form a glide within

one syllable. This inherently means that a diphthong is a combination of two vowel sounds (i.e. /aɪ/ as in *pipe* or /eɪ/ as in *claim*). In English, **triphthongs** (/aɪə/ as in *liar* or /aʊə/ as in *tower*) also exist. According to Skaličková (1982) however, the majority of English authors judges those respectively as /aɪ/ + /ə/ and /aʊ/ + /ə/. As a result, they are considered to be a diphthong plus a monophthong, hence triphthongs are not regarded as individual vowel phonemes.

VOWELS	monophthongs				diphthongs		
	i:	ɪ	ʊ	u:	ɪə	eɪ	
sheep	ship	good	shoot	here	wait		
e	ə	ɜ:	ɔ:	ʊə	ɔɪ	əʊ	
bed	teacher	bird	door	tourist	boy	show	
æ	ʌ	ɑ:	ɒ	eə	aɪ	aʊ	

Figure 3 English vowels: monophthongs and diphthongs. Digital image. englishclub.com.

Retrieved from <https://www.englishclub.com/pronunciation/phonemic-chart.htm>

English vowels are divided into a few categories.

- Depending on the proximity of the tongue and the roof of the mouth (palate), vowels can be **close**, **mid** and **open** (see Figure 4. below – vertical dimension). Terms **high**, **mid** and **low** are sometimes used to replace the terms stated above. These might be more understandable as they indicate the position of the tongue in the mouth with respect to the palate.
- And then vowels can be categorized depending on the place, where the tongue is in the highest point – these vowels are **front**, **central** and **back** (see Figure 4. below – horizontal dimension).

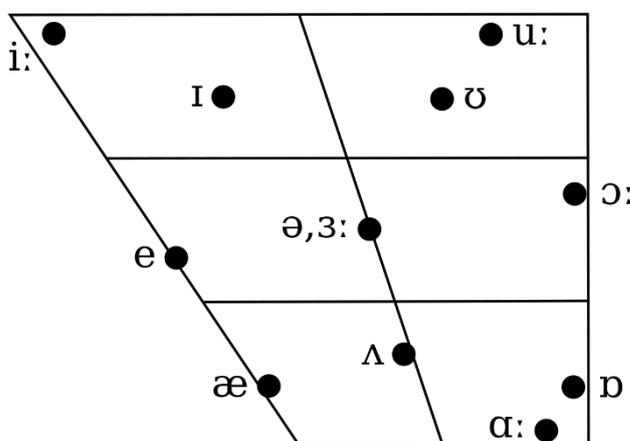


Figure 4 English vowels with IPA symbols. Digital image.wikipedia.org. Retrieved from https://commons.wikimedia.org/wiki/File:RP_English_monophthongs_chart.svg

Another distinction of English vowels can be whether they are **short** or **long**. When transcribing phonemically, the symbol of a colon ‘:’ behind the particular phoneme is added if we want to express the greater length of the phoneme. But note that not every vowel phoneme has its respective long counterpart. A small table introducing this division is provided below.

<u>Short vowels</u>	<u>Long vowels</u>
/ɪ/ l <u>ī</u> p, f <u>ī</u> sh, t <u>ī</u> p	/i:/ m <u>ee</u> t, s <u>ee</u> , p <u>ea</u> ce
/e/ p <u>e</u> t, b <u>e</u> t, l <u>e</u> t	
/æ/ m <u>a</u> n, t <u>a</u> p, m <u>a</u> t	
/ʌ/ b <u>u</u> t, c <u>u</u> t, l <u>u</u> st	/ɑ:/ l <u>a</u> ugh, f <u>a</u> rt, g <u>r</u> asp
/ɒ/ c <u>o</u> d, l <u>o</u> t, h <u>o</u> p	/ɔ:/ b <u>o</u> ard, h <u>o</u> ard, h <u>o</u> rse
/ʊ/ p <u>u</u> t, w <u>oo</u> d, l <u>oo</u> k	/u:/ r <u>oo</u> m, f <u>oo</u> d, l <u>oo</u> se
/ə/ <u>a</u> mong, t <u>e</u> ach <u>e</u> r, p <u>o</u> l <u>i</u> ce	/ɜ:/ b <u>ir</u> d, p <u>ur</u> se, im <u>er</u> se

Table 1 Long and short English vowels

Cruttenden (2014) writes that the English system of vowels is not the most common but rather, it is on the more complex side and that problems in acquisition are therefore expected. For Czechs, there are not too many precarious vowel sounds in the English language, although a few of them do not occur in Czech at all and thus must be learned. Following subchapters concerning vowel sounds are dedicated to these very problems. Firstly, we are going to deal with the short front vowel phoneme /æ/ which does not occur in Czech whatsoever and secondly, we have the short central vowel phoneme /ə/ – schwa; as Skaličková (1982) suggests, Czechs may find it rather problematic to understand its phonological nature as no such phenomena as weak syllables exist in Czech. The rest of the English vowel phonemes do not pose any problems for Czech speakers of English; hence they are not included in the thesis.

3.2.1 Short Front Vowel /æ/

From my personal experience, this vowel sound is definitely the most challenging vowel phoneme both to learn and to teach. This is mainly because there is no such a vowel sound in our native language as well as among a plethora of other languages. I have found many approaches to acquiring this sound. Ann Baker in her *Ship or Sheep* (2006) proposes that the learners first practice the sound /e/ and then try opening the mouth more and making the desired sound.

This vowel has always been considered a short vowel (Skaličková, 1982). Although this may be true in certain cases, several examples can be found where this sound resembles more of a long vowel rather than short. If /æ/ appears before voiced (lenis) consonant, we can clearly observe the lengthening, i.e. if we compare *cab* /kæb/ (/b/ is a voiced consonant) with *cap* /kæp/ (/p/ is an unvoiced – or fortis – consonant), we can clearly see that the length of this vowel is not the same (Skaličková, 1982). Similar differences can be observed in a plethora of other examples: *mad* x *map*, *bad* x *bat*, *bag* x *back*, *sad* x *sat*.

The English /æ/ appears in initial (*apple*, *amber*, *alphabet*, *ant* ...) or medial positions (*bat*, *land*, *marry*, *badge*...) but never in the final position.

3.2.2 Short Central Vowel /ə/

As Skaličková (1982) has it, a functional equivalent of this sound does not occur in Czech. Be that as it may, we cannot say that Czechs do not produce this sound when using their native language at all. However, it could be said that rather than consciously, they use it unconsciously when they find themselves not knowing what to say to fill the awkward silence. In fact, they do not use the /ə/ sound, as in *about* or *waiter*, but rather its longer counterpart /ɜ:/ as in *bird* or *lurk*. So as to achieve the /ə/ sound, the /ɜ:/ must be shortened.

The vowel /ə/, commonly known as ‘schwa,’ is the most common vowel sound in English (Kelly, 2001). In BBC English, which is **non-rhotic**², the schwa sound occurs firstly in word endings. For our type of pronunciation, there are in total 6 endings: -er (i.e. *teacher*, *slower*), -or (i.e. *actor*, *horror*), -ar (i.e. *vicar*, *calendar*), -our (i.e. *colour*, *neighbour*), -re (i.e. *centre*, *metre*) and -ure (i.e. *leisure*, *culture*). All of the above mentioned word endings are to be thus pronounced as /ə/.

Another example of occurrence of schwa is in diphthongs: /ɪə/ as in *hear* or *clear*, /eə/ as in *mayor* or *prayer*, /ʊə/ as in *lure* or *sure* and /əʊ/ as in *no* or *close*. And lastly, perhaps the most renowned example of occurrence of schwa: weak syllables, correspondingly weak forms. It is important to note that not all weak syllables contain /ə/ but most of them do. Some examples could be: *police* /pə'li:s/, *banana* /bə'nɑ:nə/ or

² In non-rhotic languages, the /r/ sound is pronounced only when occurring before a vowel sound or in a case of r-linking and intrusive r.

pyjamas /pə'dʒɑ:məz/. As we can see, weak syllables do not carry stress, it is instead shifted to a strong syllable.

The schwa occurs in all positions: initial (*about*, *among*, *aloft...*), medial (*settlement*, *opportunity*, *superman...*) and final (*stronger*, *thorough*, *labour...*).

3.3 English Consonants

To begin with a definition, a consonant sound is a sound created by making it difficult for the air to move through the mouth by producing obstructions to the airflow with two articulators (tongue, teeth, lips etc.) (Roach, 2009). McMahon (2002) claims: “To produce any consonant, an active articulator, usually located somewhere along the base of the vocal tract, moves towards a passive articulator, somewhere along the top” (p. 28). There are altogether 24 consonant phonemes in English (a complete list is provided below – Figure 5.), and they can be classified from three perspectives: voicing, place of articulation and manner of articulation.

CONSONANTS	p pea	b boat	t tea	d dog	tʃ cheese	dʒ June	k car	g go
	f fly	v video	θ think	ð this	s see	z zoo	ʃ shall	ʒ television
	m man	n now	ŋ sing	h hat	l love	r red	w wet	j yes

Figure 5 English consonants. Digital image. englishclub.com. Retrieved from <https://www.englishclub.com/pronunciation/phonemic-chart.htm>

Voicing – or phonation – essentially means the vibration of the vocal folds. McMahon (2002) asserts that such vibrations form sound waves which then continue to the hearer’s ears and vibrate in their inner ear. The hearer’s brain then proceeds to translate these vibrations into sounds. This also appears in case of vowels. Consonants may thus be either **voiced** or **voiceless**. Skaličková (1982) as well as Roach (2009) argue that these terms can be substituted for more accurate ones: **lenis** (voiced) and **fortis**³ (voiceless). There are also lenis and fortis pairs of consonants, i.e. /v/ (lenis) and /f/ (fortis) or /z/ (lenis) and /s/ (fortis) which are only distinguished from one another by means of voicing because the place and manner of their articulation (explained in paragraphs below) are

³ The term fortis, meaning ‘strong,’ is associated with unvoiced sounds as they require more force or muscular effort to be articulated, unlike lenis, meaning ‘weak’, whose articulation is voiced and does not depend on quite as much muscular effort (Collins and Mees, 2013).

identical. Voicing can be tested – all that is required is to put one’s fingers on the throat and feel the vibration of the vocal folds when producing lenis sounds; by contrast, when producing fortis sounds, no vibration will be felt.

Another classification of English consonants is from the viewpoint of **place of articulation**. Such arrangement is based on the position where the sound is actually articulated as well as it provides more information about the function of articulators (Kelly, 2001). As maintained by McMahon (2002), there are eight places of articulations for English consonants:

- | | |
|--|---|
| 1. Bilabial: /p, b, m, w/ | 5. Postalveolar: /ʃ, ʒ, tʃ, dʒ, r/ |
| 2. Labiodental: /f, v/ | 6. Palatal: /j/ |
| 3. Dental: /θ, ð/ | 7. Velar: /k, g, ŋ/ |
| 4. Alveolar: /t, d, s, z, n, l/ | 8. Glottal: /h/ |

Manner of articulation virtually describes the way the sound is produced. When producing consonant sounds, there always occurs a stricture; in some cases it is a complete closure, whereas in other cases only a narrowing. We can identify five distinctive groups of manner of articulation:

- | | |
|---|--------------------------------------|
| 1. Plosives: /p, t, k, b, d, g/ | 4. Nasals: /m, n, ŋ/ |
| 2. Affricates: /tʃ, dʒ/ | 5. Approximants: /l, r, j, w/ |
| 3. Fricatives: /f, v, θ, ð, s, z, ʃ, ʒ, h/ | |

For a complete overview of different classifications of English consonant phonemes, it is useful to see the overlaps with other categories as demonstrated on the table below.

		PLACE OF ARTICULATION							
		Bilabial	Labiodental	Dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
MANNER OF ARTICULATION	Plosive	p b			t d			k g	
	Fricative		f v	θ ð	s z	ʃ ʒ			h
	Affricate					tʃ dʒ			
	Nasal	m			n			ŋ	
	Lateral approximant				l				
	Approximant	w				r		j	

Figure 6 Chart of English consonant phonemes (Roach, 2009, p. 52)

When we were describing the English vowels, there were not too many problematic sounds for Czech speakers of English. Nonetheless, there are significant differences between English and Czech consonant phonemes. Most importantly, there exist quite a few phonemes in English for which there do not occur any equivalents in our mother tongue. We shall put our focus on those specific sounds that are deemed problematic for Czech speakers in the consecutive subchapters where a thorough analysis will be provided. The consonant phonemes omitted in the thesis are not considered problematic because there is a Czech counterpart which is very similar or the same.

3.3.1 Plosives

There are six plosives in the English language: /p, t, k, b, d, g/. Plosives – or stops – can only be articulated after a complete closure in various positions in the vocal tract has been made by articulators moving together. The compressed air is then released with explosion and thus the term plosive (Cruttenden, 2014).

3.3.1.1 Aspirated Plosives /p/, /t/, /k/

Each of the /p, t, k/ sounds are well familiar with all native Czech speakers. According to place of articulation, /p/ is made at the lips – it is a bilabial plosive - /t/ is an alveolar plosive which means it is made by forming a closure with the tongue against the alveolar ridge, and /k/ is a velar plosive – the middle section of the tongue forms a closure against the velum.

When producing these sounds in English, aspiration, as it is called, must occur in certain cases. Roach (2009) describes aspiration as follows: “The release of *p, t, k* is followed by audible plosion – that is, a burst of noise. ... Then the air escapes through the vocal folds, making a sound like *h*” (p. 27). A few suitable examples of occurrence of aspiration in words are provided: *park* [p^hɑ:k], *tick* [t^hɪk] or *car* [k^hɑ:]⁴. Aspiration as such does not appear in Czech, and therefore, Czech speakers of English are likely to encounter problems when trying to acquire it.

There exist, however, particular rules as to where aspiration can occur. According to Skaličková (1982), aspiration is strongest when before a stressed vowel (i.e. *pan* [p^hæn], *top* [t^hɒp], *cod* [k^hɒd]), slightly weaker when before an unstressed vowel (i. e. *better*

⁴ These are the cases of **phonetic** rather than phonemic transcription, hence the square brackets, as in the case of phonemic transcription aspiration is not marked, whereas in the case of phonetic transcription it is – by the upper index h.

[bet^hə], *happy* [hæp^hi], *monarchy* [mɒnək^hi]) and absent when preceding consonants (i.e. *play* [pleɪ], *trick* [trɪk], *cry* [kraɪ]) and after /s/ (i.e. *stay* [steɪ], *scoundrel* [skaʊndrəl]).

Aspiration of /p, t, k/ must be taken seriously as a possible misunderstanding may easily happen. Common mistakes regularly occur when aspirated plosives appear in initial positions in accented syllables and are pronounced without aspiration; in that case, it is likely that an English listener – especially native – will hear them as their lenis counterparts, that is /b, d, g/. For example if we pronounce the word *pin* as [pɪn] – without aspiration – a listener may misunderstand and hear the word *bin* instead (Cruttenden, 2014).

Aspirated plosives can also occur in initial (*part*, *tick*, *can*), medial (*particularly*, *apart*, *occult*) and final positions (*got*, *park*).

3.3.2 Nasals

Nasals are produced by not allowing the air to leave the oral cavity through the mouth which is achieved by lowering the soft palate in order to release the airflow into the nasal cavity and subsequently out (Ladefoged, 2012). On the whole, there are three nasals in English: /m, n, ŋ/.

3.3.2.1 Velar Nasal /ŋ/

Velar nasal /ŋ/ is not considered a phoneme in Czech, but that does not necessarily imply that we do not make this sound in our mother tongue at all. Consider the Czech words *banka*, *srnka* or *Mongol*, for instance. Their respective Czech transcription would be /srŋka/, /baŋka/ and /moŋgol/. Here we can observe that we can indeed produce the velar nasal /ŋ/ but only when *n* precedes *k* or *g* in the middle of a word – in that case, the sounds /n/ and /k/ or /n/ and /g/ assimilate, and /ŋk/ or /ŋg/ is uttered (Skaličková, 1982). In essence, a claim that /ŋ/ does not appear in Czech as a phoneme but rather as an allophone⁵ of /n/ is valid.

As to the production of /ŋ/, a complete closure needs to occur. The back of the tongue is raised up towards the **lowered velum** (soft palate), and contact is made; the air then leaves through the nasal cavity (Kelly, 2001).

⁵ An allophone is another variant of pronunciation of a phoneme, i.e. the clear l /l/ and dark l /ɫ/.

The phoneme /ŋ/ is represented in spelling most frequently by *ng*, fewer times by *nk*. It never occurs in initial position. However, it commonly appears in medial position. Yavas (2011) argues that in some cases, *ng* in the middle of a word will be pronounced as /ŋ/ but as /ŋg/ in other cases. Let us now compare the words *finger* /fɪŋgə/ and *hunger* /hʌŋgə/ with *slinger* /slɪŋə/ and *hanger* /hæŋgə/. The former two examples are monomorphemic words⁶, hence the *ng* has to be pronounced as /ŋg/. On the other hand, the latter are polymorphemic words⁷ (*sling* + *er*, *hang* + *er*) and therefore *ng* must be pronounced as /ŋ/ (Yavas, 2011). The only exception to this ‘rule’ are comparatives and superlatives: *long* /lɒŋ/ but *longer* /lɒŋgə/ and *longest* /lɒŋgɪst/.

Many words in English have the *ng* ending, and it is always pronounced as /ŋ/ (Roach, 2009). It should never be accompanied with /g/. To illustrate the point, *ng* endings in words *hang* /hæŋ/, *playing* /pleɪŋ/ and *strong* /strɒŋ/ are thus to be pronounced as /ŋ/ rather than /ŋg/ which seems to be exemplary of the vast majority of Czech speakers of English. Nonetheless, Roach (2009) also asserts that in case of *nk* word ending, /k/ is always to be pronounced, e.g. *prank* /præŋk/ or *drink* /drɪŋk/.

3.3.3 Fricatives

Cruttenden (2014) argues that when producing a fricative sound, two articulators are brought to a near proximity and held in position to allow the airflow to create air turbulence. In BBC pronunciation, there are 9 fricative phonemes in total which include 4 fortis and lenis couples /f, v/, /θ, ð/, /s, z/, /ʃ, ʒ/ and /h/, which is a voiceless glottal fricative with a rarely occurring voiced equivalent (only in position between two vowels, e.g. *ahead*).

3.3.3.1 Dental Fricatives /θ/ and /ð/

Dental fricatives do not occur in Czech, and they must be learned. These two phonemes often prove to be the most problematic sounds when trying to acquire the correct English pronunciation. Literature has different opinions as to where and how to produce the two sounds. Roach (2009) as well as Kelly (2001) claim that the tongue should be put behind the front upper teeth, making a light contact, and allow the air to escape through the opening. In this manner, we produce the voiceless lenis /θ/; to produce /ð/, adding voice – creating vibration in our vocal folds – is needed. Although it is very common for these

⁶ Monomorphemic word is a word that consists of only one morpheme, i.e. *talk* or *go*.

⁷ Polymorphemic words are words consisting of two or more morphemes, e.g. *Talking* or *unreasonable*.

sounds to be taught with the tongue between the front upper and lower teeth, Skaličková (1982) cites Jones that it is not always necessary to teach the sounds with the tongue in interdental⁸ position, as such a technique should be utilized only when a learner produces a sound with little or no resemblance to the desired one at all.

Dental fricatives are quite clear as to where they should be produced. Generally speaking, when we see a word where there is *th* – *there*, *father*, *think* etc. – there should be an incentive to pronounce the *th* as either /θ/ or /ð/. But which one?

Let us start with the voiced lenis /ð/. As maintained by Yavas (2011), when /ð/ occurs in initial position, it is only in grammatical morphemes, or, in essence, function words⁹ (e.g. *the*, *this*, *that*, *they*, *than*, *though* etc.). Although not many English words begin with this phoneme, they are very frequent. The sound /ð/ also appears in medial positions in words of germanic origin, i.e. *father*, *mother*, *gather*, *other*, *feather*... (Skaličková, 1982). It can also occur in final positions if /ð/ is followed by a grapheme *e*, i.e. *bathe*, *breathe* or in exceptions such as *with*¹⁰, *smooth* (Skaličková, 1982).

On the other hand, /θ/ appears initially in lexical words¹¹ rather than function words, i.e. *think*, *throat*, *thick*, *thousand*... Medially, it occurs in words of non-germanic origin, e.g. *method*, *athlete*, *panther*, *something* etc. (Skaličková, 1982). In final positions, /θ/ is pronounced in all words where the *th* is not followed by *e* grapheme and apart from exceptions mentioned above, i.e. *earth*, *cloth*, *path*, *month* etc.

3.3.4 Approximants

Four out of the total twenty-four English consonant phonemes are considered approximants. Those are, namely, /l, r, w, j/. As asserted by Roach (2009), approximants are, in general, sounds produced by positioning the articulators in near proximity to each other without making contact. The lateral approximant /l/ is an exception as a full closure occurs when producing this sound. Approximants are sometimes referred to as semivowels due to their similarity in nature to vowels from the phonetical perspective – their production is based on shaping of the mouth rather than creating obstructions to the flow of air. With this in mind, they behave differently to vowels from phonological point of view,

⁸ Tongue is placed between the front upper and lower teeth.

⁹ Function words or grammatical words do not carry meaning ; their main function is to show grammatical relationships in a sentence, e.g. articles, auxiliary verbs etc.

¹⁰ Although according to Oxford Learner's Dictionaries, *with* can be pronounced as /wiθ/, too.

¹¹ Lexical words carry meaning, i.e. *cat*, *house*, *table*...

that is, they differ in their distribution in words which is typically consonantal (Roach, 2009).

3.3.4.1 Bilabial Approximant /w/

It is by all means clear that this sound does not occur in the Czech phonetic system. Because of this, /w/ is frequently replaced by /v/, which is a common sound in Czech, e.g. *weak* /wi:k/ pronounced as /vi:k/ or *win* /wɪn/ as /vɪn/. But this phenomenon also works vice versa once the speakers have already learned to produce the sound correctly – that is using /w/ where /v/ should be pronounced instead, e.g. *village* /vɪlɪdʒ/ is commonly mispronounced as /wɪlɪdʒ/ or *vein* /veɪn/ as /weɪn/.

It must be noted that when the letter *w* or letters *wh* appear in a word, it is pronounced as /w/ rather than /v/. For example the words *weak* and *where* are to be pronounced as /wi:k/ and /weə/ respectively. Although in some cases the *w* is silent, and thus is omitted in pronunciation completely, i.e. *sword* /sɔ:d/, *answer* /ɑ:nsə/ or *write* /raɪt/. Then there exist words with no letter *w* and yet the /w/ is realized, i.e. *one* /wʌn/, *suite* /swi:t/, *queen* /kwi:n/ etc. (Skaličková, 1982).

Cruttenden (2014) maintains that /w/ is a double articulation – narrowing occurs at the bilabial and velar places of articulation. To put it another way, in order to produce /w/, lips must be rounded closely and a narrow passage be formed at the back of the mouth with the tongue. Bilabial approximant /w/ is voiced, and vibration of vocal folds must take place for the sound to be created.

Roach (2009) argues that /w/ can only appear when preceding vowel phonemes. It can be found in initial position, i.e. *we*, *why*, *one*, *wind*, in medial position, e.g. *twice*, *dwindle*, *queen*, *choir* /kwaɪə/, but never in final positions.

3.3.4.2 Post-alveolar Approximant /r/

In Czech, there is an equivalent to the English post-alveolar approximant /r/; however, the sound is realized completely differently. In terms of place of articulation, the sounds are not so different – the English /r/ is post-alveolar, and the Czech /r/ is alveolar (Skaličková, 1982). The fundamental difference is in their manner of articulation as the

English /r/ is an approximant – the two articulators do not make contact at all – whereas the Czech /r/ is a **trill**¹², probably more commonly known as the rolled R.

According to Collins and Mees (2013), the tip of the tongue is moved towards the back of the alveolar ridge, and the sides of the tongue are in contact with the back upper teeth. Roach (2009) compares the movement of the tongue to the way /t/ or /d/ sounds are made but only without making any contact, at all. It is also important to note that the tip of the tongue should be curled backwards which actually places the tongue behind the alveolar position – hence the name post-alveolar (Roach, 2009).

The English /r/ is somehow similar to the /w/ sound in the manner that from phonetic point of view, the sound is not difficult to make but from the phonological perspective – that is its distribution – the sound may become somewhat of a problem. As it has been already stated before, the BBC English is a non-rhotic accent which means that /r/, as described above, occurs only when preceding a vowel phoneme but also in cases of **r-linking** or **intrusive r** (both shall be mentioned below).

To illustrate, let us have a look at a few words: *rich*, *branch* and *engineering*. The words are transcribed respectively as /rɪtʃ/, brɑːntʃ/ and /endʒɪˈnɪərɪŋ/ - we can clearly see that all the *r*'s are in a position before a vowel sound and therefore must be pronounced as /r/. However, there are many words where *r* appears before a consonant or at the end of a word: *part* /pɑːt/, *worse* /wɜːs/, *car* /kɑː/ and *clear* /klɪə/. In the first two examples, *r*'s are before a consonant sound so no /r/ is pronounced. As for the other two examples, *r*'s are at the end of the words so again, no /r/ is pronounced.

The phenomenon of r-linking occurs in English quite frequently and should be therefore understood. As we know, /r/ is not pronounced at the end of words; although that may be true, when a word ends in /r/ and the following word begins with a vowel sound, the /r/ is pronounced so as to achieve a connection between words, i.e. *teacher and lawyer* /tiːtʃərən lɔɪə/ or *more of* /mɔːrəv/. The intrusive r is used when a word ends in /ə/ and the following word begins with a vowel – /r/ is then inserted between the two sounds so as to preserve the flow of the sentence, e.g. *the idea is* /ði aɪˈdɪərɪz/, *India and China* /ɪndiərən tʃaɪnə/ (Yavas, 2011).

¹² A trill is a sound made by vibration(s) created between the active articulator (tongue) and passive articulator.

4 Practical Part

4.1 Hypothesis

Having spent over a year and a half as an English teacher and having studied English for some fourteen years now along with university training – all in the Czech environment - I believe I have some understanding of the difficulties Czech students of English have to experience when trying to acquire a level of pronunciation that is clear and comprehensible. Based on this experience I have established a hypothesis of the most recurring errors in pronunciation made by Czech speakers of English, and I have divided these errors into seven groups, each of those groups having their own ‘inner’ peculiarities that have been already dealt with in the theoretical part. As far as this thesis is concerned, it deals with segmental elements. The problematic phonemes are listed below:

Vowels

There is only a small number of English vowels that prove to be troublesome for Czech speakers of English, although those sounds are crucial for a clear English pronunciation.

1. Short front vowel /æ/

There is no /æ/ sound in Czech which often leads to replacing this sound with either of the two /e/ or /ɛ/ phonemes. There are also two variants of the /æ/ phoneme: the short one and the long one; the latter of which is not considered an individual phoneme but rather an allophone of /æ/. The long and short variants are also expected to cause problems in pronunciation.

2. Short central vowel /ə/

No schwa sound is to be found in Czech. In English however, it is the most frequently occurring vowel sound and it is typically used in unstressed weak syllables and weak forms – neither of which are present in Czech either. From a phonetic view the sound is not difficult to make but when we look at things phonologically, it poses a great challenge for Czech speakers of English. It is commonly replaced by the stressed /e/ phoneme.

Consonants

Some of the English consonants seem to be the trickiest sounds for Czechs to master. A great number of them is not used in Czech at all, and additionally, some of them can pose significant problems when trying to acquire their correct pronunciation.

3. Aspirated plosives /p/, /t/, and /k/

Aspiration as such does not exist in the Czech phonetic system and therefore can make for a difficult aspect of the English language to comprehend and master.

4. Velar nasal /ŋ/

Although /ŋ/ does occur in Czech, it is not a Czech phoneme (only an allophone of /n/) where it is used in a position of assimilation (/ŋg/ and /ŋk/) and only a few Czech speakers are aware of it. In English however, /ŋ/ also occurs separately, typically in -ing word endings where only /ŋ/ is pronounced.

5. Dental fricatives /θ/ and /ð/

These sounds do not occur in Czech language and are commonly replaced; /d/ or /dz/ is used for replacing lenis (voiced) /ð/, and /f/ or /s/ is used as a replacement for fortis (unvoiced) /θ/. This is supposed to be the most precarious area of the research and most errors in pronunciation are expected here.

6. Bilabial approximant /w/

There is no equivalent of this sound in Czech, which commonly leads to replacing this sound with /v/ phoneme. In other cases, however, /w/ overuse sometimes occurs even when the word is spelled with a 'v' grapheme.

7. Post-alveolar approximant /r/

Czechs often tend to roll the English /r/ just like they do in their native language (in Czech, the /r/ sound is a trill) or they pronounce it in all positions (rhotic accent). However, BBC English is a **non-rhotic** accent and thus, /r/ is only pronounced when occurring before vowels or in specific examples of r-linking and r-intrusion, neither of which were tested in the research. The presupposition is that the majority of students are to pronounce the /r/ everywhere because of the nowadays predominant General American English standard.

4.2 Methodology

The aim of the research is to assess the pronunciation on segmental level of Czech grammar school students and university students neither of whom have undergone any phonetic or phonological training whatsoever. Students have been tested only on certain phonemes, more precisely on those suggested by the hypothesis as problematic for Czech speakers of English. The research has been conducted on twenty students in total, twelve of whom are grammar school students and eight are university students. For the purpose of the analysis, the students have been divided into two groups: **Group A** – grammar school students – and **Group B** – university students. Students have been recorded pronouncing specifically chosen words containing problematic phonemes – those suggested by the hypothesis – in order to reveal the most precarious areas of English pronunciation.

4.2.1 Methods of Research

1. **A list of words** has been designed so as to verify the hypothesis of the research. For that purpose, the list has been divided into seven sections labelled from 1 to 7, each of those sections being an area of challenging phonemes suggested in the hypothesis: short front vowel /æ/, short central vowel /ə/, aspirated plosives /p/, /t/, and /k/, velar nasal /ŋ/, dental fricatives /θ/ and /ð/, bilabial approximant /w/ and post-alveolar approximant /r/. The list of words for recording comprises 65 words in total. Every section has been dedicated to one phoneme and has tested it in several positions (initial, medial, final). It has also tested the individual qualities of the phonemes or other areas where they occur in reference to the individual phoneme's peculiarities (i.e. the difference between short frontal vowel /æ/ and its longer allophone /æ:/, the /r/ phoneme before vowels and consonants etc...). Detailed description of the sections will follow in the analysis of the research later on in the thesis.
2. The participants have been asked to fill in a **questionnaire** prior to the recording, its main purpose being to provide a basic degree of understanding of students' attitude to English and English pronunciation. Such information needed to be taken into account in terms of the analysis. The time allocated to each participant for filling in the questionnaire was approximately 10 minutes.

The questionnaire's main aims were:

- a) to ascertain students' level of English in their classes according to CEFR - some of the students in universities no longer took English classes; in such instances,

they were instructed to answer with the level of English of the class they had last been part of.

- b) to determine students' attitude towards English, to find out whether they had previously been to an English speaking country and to ascertain how often they use English.
 - c) to reveal more about the students' opinions of their pronunciation, the way they study pronunciation and the situation of English pronunciation in schools.
 - d) to let the students make a self-assessment after the recording where they could indicate words and areas which they deemed challenging.
3. For the purpose of the **recording**, the students were asked to read all 65 words in their own time; the time necessary for completing the recording in both groups was approximately 3 or 4 minutes. The objective was to let the assessees to pronounce the given words with their natural and accustomed pronunciation. The recording has been done in two stages; the first being the recording of grammar school students, and the second being the recording of university students. The former took place in a quiet room where the assessees were called in individually in order to ensure privacy and silent background. The latter could not have been done at one given time and place as it had been in case of grammar school students, due to the fact that universities were closed at the time and gathering all the volunteers together proved to be impossible. Consequently, all university students were tested at different times and in different locations that were available to us at the time, rendering the recordings considerably disparate in their quality and uniformity.
4. Once the recordings have been completed, they were thoroughly analysed. In order to examine the assessees' pronunciation of individual words – the problematic phonemes in particular – an **evaluation paper** (EP) was devised where all relevant information is included. Such a template allowed for a quick, accurate and transparent evaluation tool based on which further analysis was performed. The EP includes all 65 words along with their phonemic transcription with the targeted phonemes in bold. Further, for every word there are suggested options as to the possible or likely pronunciation of the phonemes in question, the correct option always being the first mentioned.

The list of words for recording, the questionnaire and the evaluation paper can be found in the appendices (see Appendix A, B and C).

4.2.2 Assesseees

In order to achieve desirable results of the research, as many volunteers as possible needed to be found despite the complicated situation. In the final analysis, 20 partakers or volunteers (from now on the term **assesseees** will be used) were found. The assesseees were of different age and education, rendering their examination as one group unsuitable considering their experience with English. With this in mind, two groups needed to be created whose recordings were analysed separately and contemporaneously, comparing the results of each group with the other and drawing conclusions from the comparison.

The two groups were named **group A** and **group B**. Group A was composed of 12 fourth-year grammar school students of Gymnázium Písek (Grammar school Písek), aged eighteen to nineteen with the level of English according to CEFR being B1-B2. The average time the assesseees of group A have studied English turned out to be roughly ten years. Group B was not as uniform as Group A due to larger age gaps between the assesseees (the age ranged from 20 to 25 with the average of 22), considerable differences in time spent studying English (the scale ranged from 10 to 17 years of experience) and stays abroad in English speaking countries. The level of English in class was chosen to be B1 by the vast majority of assesseees, only one having chosen B2 level according to CEFR.

4.3 Analysis of the Questionnaires

The questionnaire was devised in order to ascertain the assesseees' 'background information,' which needed to be taken into account in terms of the overall research analysis. The data extracted from the questionnaires are displayed in an organised table, from which some fundamental observations were made. Furthermore, the data were then used in the *Analysis of the Recordings* where conclusions were drawn as to the reason for certain mistakes in pronunciation.

To make the data clear and transparent, a table which contains all the data filled in by the respondents apart from question 15 (self-assessment after the recording which can be found at the end of each subchapter of 4.4 Analysis of the Recordings) was designed. However, in order to fit the table in this format, abbreviations needed to be introduced to make it more 'room economic.' Explanations of the abbreviations are provided in Table 2 below.

Ref. n.	Reference number
YSE	Years studying English
LEC	Level of English in class
SATT	Student's attitude towards English
SA	Stay abroad
UE	Use of English
SPC	Studying pronunciation in class
LP	Level of pronunciation
IPL	Individual pronunciation learning
SPL	School pronunciation learning
EPV	English pronunciation variety
IP	Influence on pronunciation
TP	Teacher's pronunciation
EP	Enhancing pronunciation
CP	Correction of pronunciation

Table 2 Explanations of abbreviations

Following the explanations of the used abbreviations, tables 3 and 4 are provided. Table 3 deals with the analysis of Group A and Table 4 focuses on the analysis of Group

B. When analysing the questionnaires, it is recommended to work with the actual questionnaire – which can be found in the appendices (see Appendix B) – for better understanding. Both the tables 3 and 4 are split into two and placed vertically to match the page proportions.

Analysis of Group A

Question	0	1	2	3	4	5	6	7
Ref. n.	Age	YSE	LEC	SATT	SA	UE	SPC	LP
1	18	10	B1	2	N	2	Y	2
2	19	14	B2	2	Y (1w)	1	N	4
3	19	10	B1	1	Y (1w)	1	Y	3
4	19	11	B1	3	Y (1w)	3	Y (speaking)	3
5	18	10	B1	2	Y (2w)	1	N	3
6	18	8	B1	2	Y (1w)	2	Y (speaking)	3
7	18	11	B1	2	N	2	N	2
8	19	10	B1	2	Y (1w)	1	Y	3
9	18	10	B2	2	Y (10w)	1	Y (speaking)	2
10	19	11	B1	3	N	2	Y (speaking)	3
11	18	10	B2	1	Y (1w)	1	Y	2
12	18	9	B1	2	Y (1w)	2	Y	3 4

8	9	10	11	12	13	14
IPL	SPL	EPV	IP	TP	EP	CP
media	teacher	AmE	media	Y	N	N
media	teacher, rec.	CzE	school, media	Y	Y (media)	N
media	writing pronun.	BrE	media	Y	N	N
school	writing pronun.	BrE	school	Y	N	N
media	writing pronun.	BrE	media	Y	N	N
media	practice	AmE	media	Y	N	N
media, school, dictionary	teacher, rec.	AmE	school, media	Y	N	N
media	teacher, rec.	BrE	school, media	Y	Y (media)	N
media, school	teacher, rec., PS	BrE	school, media	Y	Y (dictionary)	N
dictionary	teacher, rec.	CzE	school, media	Y	Y (dictionary)	N
media	teacher	AmE	media	Y	Y (media)	N
media, school	rec., PS	CzE	media	Y	N	N

Table 3 Analysis of the questionnaire of Group A

Analysis of Group B

Question	0	1	2	3	4	5	6	7
Ref. n.	Age	YSE	LEC	SATT	SA	UE	SPC	LP
1	21	11	B1	3	Y (1w)	3	Y	3
2	21	13	B1	4	N	3	N	3
3	20	10	B1	1	Y (1w)	1	N	3
4	20	11	B1	2	Y (4w) NZ	3	N	3
5	21	13	B1	1	N	1	N	2
6	25	17	B2	1	Y (2y)	1	N	2
7	25	13	A2	2	Y (1w)	3	Y	3
8	24	13	B1	2	Y (2w)	3	Y	3

8	9	10	11	12	13	14
IPL	SPL	EPV	IP	TP	EP	CP
media	rec.	CzE	media	Y	Y (media)	N
media, school	rec.	CzE	media	Y	Y (media)	N
media, school	teacher, rec., writing pr.	CzE	media	N	Y (media)	N
media	teacher, rec.	CzE	school, media	Y	N	N
media	no learning, teacher	AmE	media	Y	Y (media)	N
media, dictionary	teacher, rec., PS	BrE	media, natives	Y	Y (self talk)	N
dictionary	rec.	BrE	school	Y	Y (media)	N
media, school, dictionary	teacher, rec, PS	CzE	school, media	Y	Y (media, dictionary)	N

Table 4 Analysis of the questionnaire of Group B

4.3.1 General Observations

One of the biggest differentiators between the two groups was the **age**. The average age of an assessee from Group A was found to be approximately 18.5, while the average age of participants from Group B was roughly 22. The **time spent studying English** (marked as YSE in the tables) is closely related to the age of the speakers; the average YSE of Group A was 10.3 and that of Group B was 12.6. Be that as it may, it transpired that these two factors did not influence assessee's pronunciation quite as much.

In the matter of **level of English in class** according to CEFR (marked as LEC in the tables), the most common was B1 which was indicated by 15 assesseees; four respondents put B2, and one put A2.

Students were also asked to determine their **attitude towards English** (SATT). This is indicated by a grade on the scale from one to five (one is the best) in the table for better clarity. The median in both groups was the same: two. This clearly manifests that the assesseees have a really good stance towards English, thus presumably making them more likely to desire to improve their pronunciation in the long run.

Another important fact to ascertain was speakers' **stay abroad** (SA). Nine out of twelve research subjects from Group A answered that they had previously been to an English-speaking country, the United Kingdom specifically, the most common time frame being one week. One assessee, namely A9, stated a ten-week long stay, and they proved to be one of the better performing speakers, resulting in SA having a possible higher influence on pronunciation performance. The same was observed in Group B, where six people noted that they had been to an English-speaking country (most commonly the UK but participants B4 and B6 noted New Zealand as well). Speaker B6 remarked their stay in the UK and New Zealand for two years, and they were one of the highest scorers in this research by and large. Given these points, stay abroad (in an English-speaking country) is surely one of the important influencers of having desirable pronunciation; however, it is neither the only prerequisite for it, nor is it the most decisive influencer as such a thing cannot be completely demonstrated and it differs from person to person.

We were also interested in speakers' **use of English** (UE) which is displayed in the tables by marks – as in SATT. Here we can again observe a noticeable disparity between the two groups. On average, the mark in Group A was 1.6 (meaning that the average assessee used English every day or quite often), while Group B had 2.3 (the average respondent used English quite often or just sometimes – mainly in school). Perhaps we could deduce that the younger the person, the more likely they are to use English in their everyday lives mainly due to the English media – especially on the internet – growing ever more so popular.

The participants were also asked whether they thought they spent enough time **studying pronunciation in their classes** (SPC). Twelve speakers deemed the time allocated to pronunciation in classes as sufficient, while the rest thought the opposite. This

is certainly quite a subjective matter, and it also depends on the teacher, rendering us unable to draw any real conclusions. This question was asked out of mere interest. Speakers were then asked to evaluate **their pronunciation** (LP). In the tables this is again displayed with a number (one to five). The average mark in both groups was 2.8 which corresponds with the answer 'it needs some more work' in the questionnaire, portraying the students not exactly happy with their pronunciation and being aware of their deficiencies.

Further, students' ways of learning pronunciation – both in their free time and at school – were ascertained. First, let us delve into **individual learning of pronunciation** (IPL). The vast majority of assesseees from both groups chose media – that includes TV, YouTube, Netflix and other media of the kind. This can be a very effective method of learning any language as far as I am concerned, as students do encounter 'real' English, to say nothing of the pronunciation (that is if they listen to native speakers). The process of learning can take place either passively or actively, the latter being more efficient, of course. Active learning in this instance might be realising the grammatical structure of the sentences, investigating new words and phrases and also repeating the pronunciation. This approach, however, is not particularly likely among many students. The vast majority apply passive learning, at least. Among other ways of learning, some students also indicated school and dictionaries.

As for **learning pronunciation at school** (SPL), the most common reply was listening to and repeating after their teacher and also listening to recordings. Whether repeating after teachers is a favourable technique depends on the pronunciation of the teachers themselves. This can prove to be a double-edged sword indeed, as if their pronunciation is correct, then students have the opportunity to hear it live and have first-hand experience with it; however, on condition that the teacher's pronunciation is of poor quality, it may wreak quite a havoc in student's pronunciation as a consequence. And it is quite a known fact that unlearning a bad habit can be a difficult thing to achieve. Listening to a recording may be a good tool for learning listening but when it comes to learning pronunciation, a video should serve a better purpose as students can also see the shaping of the mouth. Four research subjects also stated that they write pronunciation with every new word, and four other mentioned using phonetic symbols. Phonetic symbols are there for exactly this purpose and certainly are very clear an instrument for pronunciation learning.

Next, the students were to label their **pronunciation** as either AmE, BrE or CzE (= ‘Czenglish’). This question was abbreviated as EPV in the tables. On the whole, five students indicated they thought they used AmE, seven chose BrE and eight picked CzE. It was also very difficult to determine their actual pronunciation based on this research as this can be determined by their speech rather than pronunciation of a set of words aimed at the pronunciation of individual phonemes. Moreover, it is not exactly up to segmental elements to define one’s pronunciation but rather suprasegmentals which play a more significant role in determining this. Although this may be true, the overall proclivity to rhoticity was substantial – specifically in subchapters 4.4.2 and 4.4.7 – which may demonstrate their pronunciation as at least influenced by AmE.

We also tried to ascertain the possible **influences on students’ pronunciation** (IP). Here again the vast majority stated media (TV, YouTube, Netflix etc.) as their primary influencer. Important thing to note is that the most frequent pronunciation of English in the world is General American (which is rhotic), and that surely reflects in media, too. This may also considerably contribute to the prevailing rhoticity in English among Czech speakers. In addition, nearly a half of the participants stated school as an influencer, too.

Students also declared their **teacher’s pronunciation** (TP) as good and that it can serve as a sufficient example. Only one assessee said otherwise. Teachers may have a huge influence on their students’ pronunciation, and it is therefore imperative that they have ample knowledge of the topic.

Another important area to search was whether the respondents **improve** their **pronunciation** on their own (EP). Here we can observe differences between the two groups. While there were only five speakers in Group A who indicated effort in enhancing their pronunciation, there were seven such speakers in Group B. Most of the participants determined media as the primary tool for such a task, fewer then mentioned dictionaries.

Lastly, speakers were asked whether they mind being **corrected in their pronunciation** (CP). Here the results were unanimous – all the assessees were in favour of being corrected, many of them further elaborating that this is crucial for their improvement.

4.4 Analysis of the Recordings

Based on the hypothesis, the assesseees were tested on seven problematic phonemes: short front vowel /æ/, short central vowel /ə/, aspirated plosives /p/, /t/, and /k/, velar nasal /ŋ/, dental fricatives /θ/ and /ð/, bilabial approximant /w/ and post-alveolar approximant /r/. Students were to read all the selected words from **the list of words** (described in subchapter 4.2.1 Methods of Research) aloud, and they were recorded doing so. The recordings were then analysed and the data extracted was recorded into the **evaluation paper** (further description in subchapter 4.2.1 Methods of Research) based on which further analysis was executed. Now we shall examine the seven sections, each targeting one area of problematic pronunciation.

4.4.1 Pronunciation of /æ/

This section tested the phoneme /æ/ from two points of view: positioning and the difference in its length. The /æ/ phoneme appears in initial and medial positions, and therefore it needed to be tested in both instances. The former was examined by selected words *apple* and *alphabet*, while the latter by words *bag*, *back*, *bad*, *bat*, *sad*, *sat*. We have already shed light on the differences in length of /æ/ in medial positions in the theoretical part of the thesis. With this in mind, the phenomenon of longer allophone of /æ/ (for this part the symbol /æ:/ will be used) also had to be examined as its incorrect realisation could lead to a misunderstanding, and the listener could confuse the communicated word for a different one (i.e. *bag* pronounced as /bæg/ rather than /bæ:g/ could be mistaken for the word *back* etc.).

The respondents encountered substantial problems within this section. The most frequent mispronunciation of /æ/ in initial position in the word *apple* was /e/ - only 20 % of participants from both groups A and B pronounced the desired /æ/ sound. As for the word *alphabet*, which is not quite as known as *apple*, the vast majority of all assesseees pronounced it as /ʌ/ (/ʌlfʌbet/), scoring only 15 % in accurate delivery across the whole spectrum. This mispronunciation could be explained by the Czech phonetic spelling (in Czech, the majority of words is pronounced as it is written), and therefore, a common habit is to treat the English spelling somewhat similarly. However, the same did not happen in the word *apple* – despite the fact that it also begins with the grapheme *a* – where *a* was pronounced as /e/. The reason for that might be that the word *apple* is one of the first words we learn – so that we are well familiar with it – and that the English /æ/ more often

than not resembles /e/ rather than /ʌ/. On the contrary, many students were unfamiliar with the word *alphabet*, and thus they applied the Czech phonetic spelling, resulting in pronunciation of /ʌ/.

In terms of pronunciation of /æ/ in medial position, an overwhelming number of research subjects pronounced it as /e/ without making any distinction between the short and long variants whatsoever, leading to a possible misunderstanding. Although a few speakers were able to pronounce /æ/ or /æ:/ in medial position in certain words correctly, none of them was able to score 100 % accuracy in this section. One assessee however, namely n. 6 from group A, who was not able to pronounce /æ/ at all, made the /e/ longer – resulting in /e:/ – when the sound preceded a lenis consonant. By doing so, they were able to achieve that the two words could not be misunderstood for one another, and that the two sounds (/æ:/ and /e:/) were quite comparable to each other.

When it comes to the respondents' self-assessment after the recording, four people in total reported problems when pronouncing *alphabet* (again this is presumably due to the speakers not being familiar with the word). In like manner, there were only four respondents who mentioned problems with words with /æ/ in medial position. It seemed quite startling that not more than mere four speakers noticed the confusion when the uttered words from the pair sounded virtually the same.

/æ/		Group A						
Speaker	apple /æ/	alphabet /æ/	bag /æ:/	back /æ/	bad /æ:/	bat /æ/	sad /æ:/	sat /æ/
1	/æ/	/æ/	/æ/	/æ/	/æ:/	/æ/	/æ:/	/æ/
2	/e/	/ʌ/	/æ:/	/e/	/æ:/	/æ/	/æ:/	/æ/
3	/e/	/ʌ/	/e:/	/e/	/e/	/e/	/e/	/e/
4	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/
5	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/
6	/e/	/ʌ/	/e:/	/e/	/e:/	/e/	/e:/	/e/
7	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/
8	/æ/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/
9	/æ/	/æ/	/e/	/e/	/e/	/e/	/e/	/e/
10	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/
11	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/
12	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/

Table 5 Pronunciation of /æ/ by Group A

/æ/		Group B						
Speaker	apple /æ/	alphabet /æ/	bag /æ:/	back /æ/	bad /æ:/	bat /æ/	sad /æ:/	sat /æ/
1	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/
2	/e/	/ʌ/	/e/	/e/	/e/	/ʌ/	/e/	/e/
3	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/
4	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/
5	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/
6	/æ/	/æ/	/æ:/	/æ/	/æ:/	/æ:/	/æ:/	/æ:/
7	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/
8	/e/	/ʌ/	/e/	/e/	/e/	/e/	/e/	/e/

Table 6 Pronunciation of /æ/ by Group B

4.4.2 Pronunciation of /ə/

Testing of /ə/ proved to be significantly more difficult a task, indeed. The /ə/ sound is the most frequently occurring sound in English, and it appears in all three positions: initial, medial and final. Another key point is that it also appears in diphthongs and, most importantly, in weak syllables, which are quintessential phenomena in English. These all areas required testing, albeit to a very limited degree (as a consequence of the scale of this research). To test schwa in all three word positions, six words were selected (two for each position): *alive* and *ago* to test /ə/ in initial position; *settlement* and *syllable* to test it in medial position; and lastly *teacher* and *colour* to test the final position. Words *teacher* and *colour* were selected intentionally to ascertain whether the participants tend to use General American accent or BBC pronunciation (General British). Following that, words *no* and *hear* were used to examine /ə/ in diphthongs; and words *police* and *banana* to investigate its use in weak syllables.

The assesseees demonstrated a considerably higher success rate in terms of /ə/ delivery as opposed to /æ/. Schwa in the initial position was delivered correctly in 85 % of cases, hence the vast majority put the word stress on the second syllable rather than first as it is common in our Czech nature. The remaining 15 per cent of cases was mispronounced as /e/ which resulted in the stressed first syllable.

With regards to the medial position of the /ə/ sound, the research subjects were not able to score nearly as high accuracy in its delivery as in initial position, most of them pronouncing it as /e/ in the word *settlement* ('setlment/). As for the word *syllable*, half of

the speakers pronounced it as either /eɪ/ or /aɪ/ diphthong and the other half as /e/ – this may also be due to the choice of the word *syllable* itself as it is not the most common, and so the respondents had to improvise with their pronunciation. All things considered, the total percentage of the correct delivery of /ə/ in the middle of the words was mere 17.5 % across both groups.

When it comes to the final position of schwa, the overall proclivity to rhoticity among the Czech speakers demonstrated itself self-evidently, which may be largely due to the rhotic nature of Czech itself. Only 3 speakers ended the word with schwa and it was only in one of the two words. There was also one instance of pronunciation of /r/ as a trill (marked as /rt/ in the table) but more on that in subchapter 4.4.7.

Furthermore, schwa was examined in diphthongs, too. The selected words were *no* and *hear* which were to examine diphthongs /əʊ/ and /ɪə/ respectively. The former demonstrated the inclination to the dominating General American accent rather than BBC accent due to the pronunciation of /ɒʊ/, which is a typically American counterpart of the standard, and nowadays quite ‘posh,’ British /əʊ/. Only three out of the total twenty assesseees used the British /əʊ/. The latter turned out to prove the same inclination to the AmE, as the majority pronounced it as /ɪr/. Some participants misinterpreted the word for *her*, and hence mispronounced it entirely.

Lastly, /ə/ was investigated in weak syllables; for that purpose, two quintessential words containing this phenomenon were chosen: *police* and *banana*. Only 15 % put the stress in the word *police* on the second syllable (/pə'li:s/), while the rest inaccurately stressed the first syllable (/ˈpɒli:s/). On the other hand, *banana* was delivered correctly by 60 percent of the speakers, unlike the rest, who mispronounced the schwa as /ʌ/, resulting in the stress on the first syllable.

In the self-assessment the speakers reported only two problematic words regarding the schwa sound: *syllable* and *settlement*. The former was mentioned by eleven speakers in total and indeed proved to cause complication that only very few assesseees were able to pronounce correctly. Again, this is largely due to my wrong choice of the testing word as it is not a very common one. The latter was remarked by three students.

		Group A									
/ə/	Speaker	alive /ə/	ago /ə/	settlement /ə/	syllable /ə/	teacher /ə/	colour /ə/	no /əʊ/	hear /ɪə/	police /ə/	banana /ə/
	1	/ə/	/ə/	/ə/	/ə/	/r/	/r/	/əʊ/	/ɪr/	/ɒ/	/ə/
	2	/ə/	/ə/	/e/	/ə/	/r/	/r/	/oʊ/	/ɪr/	/ɒ/	/ə/
	3	/e/	/ə/	/ə/	/eɪ/	/r/	/r/	/oʊ/	/ɪr/	/ɒ/	/ʌ/
	4	/ə/	/ə/	/e/	/eɪ/	/r/	/r/	/oʊ/	/ɜ:r/	/ɒ/	/ə/
	5	/ə/	/ə/	/e/	/e/	/r/	/r/	/oʊ/	/ɪr/	/ɒ/	/ə/
	6	/ə/	/ə/	/e/	/e/	/r/	/r/	/oʊ/	/ɪr/	/ɒ/	/e/
	7	/ə/	/ə/	/e/	/aɪ/	/r/	/r/	/əʊ/	/ɪr/	/ɒ/	/ə/
	8	/e/	/ə/	/e/	/e/	/r/	/r/	/oʊ/	/ɪr/	/ɒ/	/ʌ/
	9	/ə/	/ə/	/ə/	/aɪ/	/r/	/ə/	/əʊ/	/ɜ:r/	/ɒ/	/ə/
	10	/ə/	/e/	/ə/	/e/	/r/	/r/	/oʊ/	/ɪr/	/ɒ/	/e/
	11	/ə/	/e/	/e/	/e/	/r/	/r/	/oʊ/	/ɪr/	/ɒ/	/ə/
	12	/ə/	/e/	/e/	/eɪ/	/r/	/r/	/oʊ/	/ɪr/	/ɒ/	/ə/

Table 7 Pronunciation of /ə/ by Group A¹³

		Group B									
/ə/	Speaker	alive /ə/	ago /ə/	settlement /ə/	syllable /ə/	teacher /ə/	colour /ə/	no /əʊ/	hear /ɪə/	police /ə/	banana /ə/
	1	/ə/	/ə/	/ə/	/e/	/r/	/r/	/oʊ/	/ɪr/	/ə/	/ə/
	2	/ə/	/ə/	/e/	/eɪ/	/r ^t /	/r ^t /	/oʊ/	/ɪr ^t /	/ɒ/	/ʌ/
	3	/ə/	/ə/	/e/	/e/	/ə/	/r/	/oʊ/	/ɜ:r/	/ɒ/	/ʌ/
	4	/ə/	/ə/	/e/	/eɪ/	/r/	/r/	/oʊ/	/ɪr/	/ə/	/ʌ/
	5	/ə/	/ə/	/e/	/e/	/r/	/r/	/oʊ/	/ɪr/	/ə/	/ə/
	6	/ə/	/ə/	/e/	/e/	/ə/	/r/	/oʊ/	/ɪə/	/ɒ/	/ə/
	7	/ə/	/ə/	/e/	/eɪ/	/r/	/r/	/oʊ/	/er/	/ɒ/	/ə/
	8	/ə/	/e/	/e/	/eɪ/	/r/	/r/	/oʊ/	/er/	/ɒ/	/ʌ/

Table 8 Pronunciation of /ə/ by Group B

¹³ The green colour always depicts the correct BBC English pronunciation, while the red colour indicates General American pronunciation. It was not considered a mispronunciation in the research; it merely points out the proclivity of the speakers to either pronunciation variant. Complete mispronunciation is marked by white colour in the tables.

4.4.3 Pronunciation of /p/, /t/, and /k/

Aspirated plosives were tested together in one section, each plosive being represented by three words, with each of the words testing the given plosive in all three positions: initial, medial and final, totalling up to nine words for this section. The fortis bilabial plosive /p/ was examined by selected words *pie*, *apart* and *rope*; the fortis alveolar plosive /t/ by *tea*, *particularly* and *it*, and lastly the fortis velar plosive /k/ was inspected by words *cup*, *account* and *book*.

Examining the aspirated plosives /p/, /t/ and /k/ brought about the first considerable differences between groups A and B. Up until this section the individual results of the two groups were relatively comparable; however, in this instance, Group B was markedly more successful at delivering the sounds with aspiration – group A scored only about 17.5 % accuracy in all examples, whereas Group B scored solid 40 %.

When it comes to aspiration of /p/ (marked as /ph/ in the table), it was the more successful of the three. In the final analysis, respondents scored about 28 % in the acceptable delivery of /ph/, with Group B providing 2/3 of the samples. However, none of the speakers from both groups was able to deliver a ‘full-blooded’ aspirated /p/ regardless of its position; the manner of articulation was good, nevertheless weakly performed. It is also important to note that the strongest aspirations were recorded in initial positions. The rest of the assesseees was either not able to produce any aspiration whatsoever or only an extremely subtle one which was not considered sufficient – this was marked as /p0/ in the table.

Aspiration of /t/ (marked as /th/ in the table) had the lowest percentage in this section with both groups combined reaching some 18 % of the /th/ delivery with group B, again, providing some 2/3 of all samples. Yet again, none of the accepted instances of aspiration quite reached the level of the true English aspiration. Further, the majority of aspirated /t/s occurred in initial positions, just as in the example of /p/. An overwhelming number of speakers did not show any signs of aspiration at all – this was marked as /t0/.

As for the aspiration of /k/ (marked as /kh/ in the table), the correctness was the highest of the three aspirated plosives, that is 33 %. Here, the assesseees did not seem to have a preference in terms of /k/ position as to where aspiration would be the most notable – in instances of both /p/ and /t/, aspiration was usually the strongest in initial position.

As neither of the voiceless plosives is aspirated in Czech, Czechs tend not to aspirate the fortis plosives when they speak English either. Moreover, aspiration is quite an advanced phenomenon in English pronunciation, rendering it relatively difficult for students whose level is, on average, B1 according to CEFR.

The only word noted as tricky to pronounce by the research subjects with regards to the aspirated plosives was *particularly*; however, they did not struggle only with /th/ in this word but with the whole word, which can be considered as a bad choice of the testing word on my part. Looking back, I would have probably chosen a simpler word like *attack*, for instance.

/p/, /t/, /k/		Group A							
Speaker	pie /ph/	apart /ph/	rope /ph/	tea /th/	particularly /th/	it /th/	cup /kh/	account /kh/	book /kh/
1	/p0/	/p0/	/p0/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/
2	/p0/	/p0/	/p0/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/
3	/ph/	/ph/	/ph/	/th/	/t0/	/t0/	/kh/	/kh/	/kh/
4	/p0/	/p0/	/p0/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/
5	/p0/	/p0/	/p0/	/t0/	/t0/	/th/	/k0/	/k0/	/k0/
6	/p0/	/p0/	/p0/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/
7	/p0/	/p0/	/p0/	/t0/	/t0/	/t0/	/kh/	/kh/	/kh/
8	/p0/	/p0/	/p0/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/
9	/ph/	/ph/	/ph/	/th/	/th/	/t0/	/kh/	/kh/	/kh/
10	/p0/	/p0/	/p0/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/
11	/p0/	/p0/	/p0/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/
12	/p0/	/p0/	/p0/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/

Table 9 Pronunciation of /p/, /t/ and /k/ by Group A

/p/, /t/, /k/		Group B							
Speaker	pie /ph/	apart /ph/	rope /ph/	tea /th/	particularly /th/	it /th/	cup /kh/	account /kh/	book /kh/
1	/ph/	/p0/	/ph/	/th/	/t0/	/t0/	/kh/	/kh/	/kh/
2	/p0/	/p0/	/p0/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/
3	/ph/	/p0/	/p0/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/
4	/p0/	/p0/	/ph/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/
5	/p0/	/p0/	/ph/	/t0/	/th/	/th/	/kh/	/kh/	/kh/
6	/ph/	/ph/	/ph/	/th/	/th/	/th/	/kh/	/kh/	/kh/
7	/ph/	/ph/	/ph/	/th/	/t0/	/t0/	/kh/	/kh/	/k0/
8	/p0/	/p0/	/p0/	/t0/	/t0/	/t0/	/k0/	/k0/	/k0/

Table 10 Pronunciation of /p/, /t/ and /k/ by Group B

4.4.4 Pronunciation of /ŋ/

Given the rather problematic phonological nature of /ŋ/, all the peculiarities described in the theoretical part needed to be examined. Velar nasal /ŋ/ was tested in both medial and final positions.

First, the sound was tested in medial position. Words *finger* and *hunger* are monomorphemic – each word is just one free lexical morpheme – and thus the *ng* is to be pronounced as /ŋg/. Throughout both groups A and B, the absolute majority of speakers pronounced the *ng* as /ŋg/, just as they would in their mother tongue (in Czech, /ŋ/ exists only as an allophone of /n/, and appears as an assimilation of /n/ and /g/ or /n/ and /k/; however, /ŋ/ is never pronounced in isolation). Nevertheless, there were two instances of /ŋ/ – one in each group – namely assesses 2A and 6B (both of them being ‘high scorers’ in this research). A possible explanation might be that they are aware of the fact that in most examples, *ng* is pronounced just as /ŋ/ in English.

To further test /ŋ/ in medial position, words *singer* and *hanger* were used; these, however, are examples of polymorphemic words (they consist of more than one morpheme), and as such, *ng* is to be pronounced as /ŋ/ rather than /ŋg/. Group A scored approximately 38 per cent of accurate pronunciations, whereas only one respondent from Group B was able to deliver /ŋ/ rather than /ŋg/.

With regards to /ŋ/ in final position, it was examined by words *playing*, *strong* and *tongue*, and overwhelming 90 % of all the participants pronounced *ng* as /ŋg/ in final position. This goes to show how common a mistake this is. It can be easily explained by the Czech /ŋ/ which only ever occurs with /g/ or /k/ but never individually. On the contrary, in English, /ŋ/ is much more likely to appear individually than being accompanied with either /g/ or /k/. There was also one unique example of pronunciation of the *-ing* ending as /ɪn/ (pleɪn) – a characteristic phenomenon of certain dialects (i.e. Cockney) and, typically, of the Southern American English.

Lastly, *nk* word ending was examined, too. In English, *nk* is always pronounced as /ŋk/ which works just the same in Czech. Therefore, it is of no surprise that the students demonstrated 100 % correct delivery of this sound.

Six respondents marked the word *tongue* as challenging to pronounce. It is difficult to say whether they struggled with the whole word or just the /ŋ/ sound but there were only two speakers that uttered it correctly, leaving the rest with incorrect pronunciation (/ŋg/). One speaker also mentioned the word *hanger*.

/ŋ/ Group A

Speaker	finger /ŋg/	hunger /ŋg/	singer /ŋ/	hanger /ŋ/	playing /ŋ/	strong /ŋ/	tongue /ŋ/	drink /ŋk/
1	/ŋg/	/ŋg/	/ŋ/	/ŋ/	/ŋg/	/ŋg/	/ŋ/	/ŋk/
2	/ŋ/	/ŋ/	/ŋ/	/ŋ/	/ŋ/	/ŋ/	/ŋ/	/ŋk/
3	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
4	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
5	/ŋg/	/ŋg/	/ŋ/	/ŋ/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
6	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
7	/ŋg/	/ŋg/	/ŋ/	/ŋ/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
8	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
9	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
10	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
11	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
12	/ŋg/	/ŋg/	/ŋ/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/

Table 11 Pronunciation of /ŋ/ by Group A

/ŋ/ Group B

Speaker	finger /ŋg/	hunger /ŋg/	singer /ŋ/	hanger /ŋ/	playing /ŋ/	strong /ŋ/	tongue /ŋ/	drink /ŋk/
1	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
2	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
3	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
4	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
5	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/n/	/ŋg/	/ŋg/	/ŋk/
6	/ŋ/	/ŋ/	/ŋ/	/ŋ/	/ŋ/	/ŋ/	/ŋg/	/ŋk/
7	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/
8	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋg/	/ŋk/

Table 12 Pronunciation of /ŋ/ by Group B

4.4.5 Pronunciation of /θ/ and /ð/

Dental fricatives /θ/ and /ð/ were tested together in one section as the only difference between the two is in their voicing. Both of the phonemes appear in all positions: initial, medial and final. Two words were specifically selected to examine each position of both phonemes, resulting in 12 testing words in total for this section. Fortis dental fricative /θ/ was tested by words *think* and *three* in initial position, by *method* and *something* in medial position, and words *earth* and *month* were to examine it in final position. In like manner, /ð/ was investigated initially by words *this* and *the*, by *father* and *other* in medial position, and finally by words *bathe* and *with*, where in *with*, ‘th’ may be pronounced both as /ð/ and /θ/ (as suggested by Oxford Learner’s Dictionaries), although common, and perhaps traditional, pronunciation of ‘th’ in *with* is /ð/.

As it was in the case of examining aspirated plosives, investigation of dental fricatives produced considerable differences between groups A and B. This time however, it was Group B that was left lagging far behind, achieving a score of 40 % in correct pronunciation of both /θ/ and /ð/, whereas Group A managed to attain 67 per cent.

Voiceless dental fricative /θ/ proved to be the easier of the two to pronounce. /θ/ in initial position was pronounced correctly in all cases apart from one in Group A. On the other hand, in Group B the assesseses struggled, having the correct pronunciation in only about half of the examples. Some difficulties were encountered in medial and final positions where there occurred most mistakes from group A. Group B still managed to achieve approximately 50 % accuracy. The most frequent mispronunciations of /θ/, regardless of its position, were /f/, /t/ or /th/, with /t/ (without aspiration) being the most frequently occurring one. It was also observed that the participants struggled most with the word *method* as it may not have been very well known to them, thus resulting in no previous experience with its pronunciation.

The investigation of the voiced dental fricative /ð/ did not manifest nearly as successful pronunciation as of its voiceless counterpart. The prevailing deviations from the correct pronunciation were /d/ in initial and medial positions and /θ/ in final position in the word *bathe* (which was frequently pronounced /beɪθ/). In terms of the word *with*, both /θ/ and /ð/ were accepted as correct, with predominant /θ/ pronunciation which is not surprising as this word is considered one of only a few exceptions. In certain cases /ð/ was mispronounced as /t/ or /f/ (/fɑ:.tər/, /beɪt/ and /wɪf/). Most of the respondents encountered

problems when trying to pronounce /ð/ regardless of its position within a word. The word *bathe* in particular turned out to be the most challenging one with only two instances of correct pronunciation. This may be due to the rather unknown rule that only words where *th* is followed by *e* in final position are pronounced with /ð/ at the end.

As for the self-assessment after the recording, seven speakers noted the word *bathe* caused them trouble when pronouncing it. When we delve more into this the students were not necessarily confused about the word ending but rather about the word as a whole – they frequently pronounced it as /bɑ:θ/ which corresponds to the word *bath*. Yet again, this is probably a wrong choice of a testing word on my part as it is not very well known, especially among speakers of B1. Two respondents also marked word *method* and one mentioned the word *month*.

**/θ/,
/ð/** **Group
A**

Speaker	think /θ/	three /θ/	method /θ/	something /θ/	earth /θ/	month /θ/	this /ð/	the /ð/	father /ð/	other /ð/	bathe /ð/	with /ð/, /θ/
1	/θ/	/θ/	/t/	/θ/	/θ/	/θ/	/ð/	/ð/	/ð/	/ð/	/θ/	/ð/
2	/θ/	/θ/	/θ/	/θ/	/θ/	/θ/	/ð/	/ð/	/ð/	/ð/	/ð/	/θ/
3	/θ/	/θ/	/t/	/θ/	/θ/	/θ/	/d/	/d/	/d/	/d/	/θ/	/θ/
4	/θ/	/t/	/t/	/θ/	/θ/	/θ/	/d/	/d/	/t/	/d/	/θ/	/θ/
5	/θ/	/θ/	/θ/	/θ/	/θ/	/θ/	/d/	/d/	/d/	/d/	/θ/	/θ/
6	/θ/	/θ/	/t/	/θ/	/θ/	/θ/	/ð/	/d/	/ð/	/ð/	/θ/	/θ/
7	/θ/	/θ/	/θ/	/θ/	/θ/	/θ/	/d/	/d/	/d/	/d/	/θ/	/θ/
8	/θ/	/θ/	/t/	/θ/	/f/	/θ/	/d/	/d/	/d/	/d/	/θ/	/θ/
9	/θ/	/θ/	/θ/	/θ/	/θ/	/θ/	/ð/	/ð/	/ð/	/ð/	/θ/	/θ/
10	/θ/	/θ/	/θ/	/θ/	/θ/	/θ/	/ð/	/ð/	/ð/	/ð/	/	/θ/
11	/θ/	/θ/	/θ/	/θ/	/θ/	/θ/	/d/	/d/	/d/	/d/	/θ/	/θ/
12	/θ/	/θ/	/θ/	/θ/	/θ/	/θ/	/d/	/d/	/d/	/d/	/θ/	/θ/

Table 13 Pronunciation of /θ/ and /ð/ by Group A

	Group B											
/θ/, /ð/	think	three	method	something	earth	month	this	the	father	other	bathe	with
	/θ/	/θ/	/θ/	/θ/	/θ/	/θ/	/ð/	/ð/	/ð/	/ð/	/ð/	/ð/, /θ/
1	/θ/	/f/	/t/	/θ/	/θ/	/θ/	/d/	/d/	/d/	/d/	/θ/	/θ/
2	/f/	/f/	/d/	/f/	/θ/	/θ/	/d/	/d/	/d/	/d/	/t/	/f/
3	/th/	/t/	/th/	/th/	/f/	/f/	/d/	/d/	/d/	/d/	/f/	/f/
4	/θ/	/t/	/t/	/θ/	/t/	/θ/	/d/	/d/	/d/	/d/	/θ/	/θ/
5	/θ/	/f/	/f/	/θ/	/f/	/θ/	/d/	/d/	/d/	/d/	/θ/	/θ/
6	/θ/	/θ/	/θ/	/θ/	/θ/	/θ/	/ð/	/ð/	/ð/	/ð/	/θ/	/θ/
7	/th/	/t/	/t/	/f/	/t/	/f/	/ð/	/ð/	/d/	/ð/	/ð/	/ð/
8	/θ/	/θ/	/t/	/θ/	/t/	/θ/	/ð/	/ð/	/ð/	/ð/	/θ/	/t/

Table 14 Pronunciation of /θ/ and /ð/ by Group B

4.4.6 Pronunciation of /w/

The bilabial approximant /w/ occurs in initial and medial position. In spelling the sound is most commonly represented by *w* and *wh*; however, there exist certain examples where there is no grapheme *w* or *wh*, and yet, /w/ is still pronounced. Furthermore, we can find numerous words which contain *w* grapheme but no /w/ sound appears in the word. These all instances were examined in this section. In addition, a common phenomenon of ‘/w/ overuse’ was examined, as well (this is when speakers pronounce /w/ where there should be /v/ sound instead, i.e. *village* /vɪlɪdʒ/ is commonly mispronounced as /wɪlɪdʒ/).

The assesses did not seem to have encountered too many difficulties with the pronunciation of /w/ in initial position. Words *where*, *win* and *one* were uttered correctly by all assesses apart from speaker B2, who mispronounced /w/ sound for /v/ in words *where* and *win*. There appeared a few mispronunciations of the word *write*. Three speakers pronounced it as /wraɪt/ rather than /raɪt/, the reason for that likely being the occurrence of *w* grapheme at the beginning of the word. On the whole, /w/ in initial position enjoyed quite astounding 94 % of accurate deliveries.

As for /w/ in medial position nearly the same accuracy was achieved. Words *twice*, *award* and *queen* were uttered correctly by nearly all participants; there were only two instances of mispronunciation of /w/ for /v/ in words *twice* and *award*. However, when we look at the word *answer*, where there is *w* grapheme but no /w/ phoneme (it is pronounced

as /ɑ:nse/), we can clearly observe the temptation to pronounce the word as /ɑ:nswə(r)/. Eight respondents in total made this mistake from ‘obvious’ reasons.

Lastly, the common phenomenon of ‘/w/ overuse’ was examined by words *village* and *veteran*. Because /w/ sound is never represented in spelling by *v* grapheme, it is a mistake to pronounce either of the words with /w/ in initial position; rather, the words are uttered with /v/ at the beginning. The word *village* was mispronounced as /wɪldʒ / by shocking 16 assessees from the total of 20, and the word *veteran* was mispronounced by nine speakers. There is no doubt that the phenomenon of ‘/w/ overuse’ is quite wide-spread among Czech speakers.

The most problematic word chosen by the students within this section was *veteran*, and it was marked by 9 speakers; even though the speakers achieved nearly three times more accurate deliveries of it than of the word *village*, which was mentioned only once. Lastly, two assessees marked the word *award*.

		Group A								
/w/	where	win	one	write	twice	award	queen	answer	village	veteran
Speaker	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/v/	/v/
1	/w/	/w/	/w/	/-/	/v/	/w/	/w/	/-/	/w/	/w/
2	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/v/	/v/
3	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/w/	/v/
4	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/v/	/v/
5	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/w/	/w/
6	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/w/	/v/	/v/
7	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/w/	/v/
8	/w/	/w/	/w/	/w/	/w/	/w/	/w/	/w/	/w/	/w/
9	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/w/	/v/
10	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/w/	/w/	/v/
11	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/w/	/w/
12	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/w/	/w/	/v/

Table 15 Pronunciation of /w/ by Group A

/w/	Group B									
	where /w/	win /w/	one /w/	write /-/	twice /w/	award /w/	queen /w/	answer /-/	village /v/	veteran /v/
1	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/w/	/w/
2	/v/	/v/	/w/	/w/	/w/	/v/	/w/	/w/	/w/	/w/
3	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/w/	/w/	/v/
4	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/w/	/w/
5	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/w/	/w/
6	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/-/	/w/	/v/
7	/w/	/w/	/w/	/-/	/w/	/w/	/w/	/w/	/w/	/w/
8	/w/	/w/	/w/	/w/	/w/	/w/	/w/	/w/	/v/	/v/

Table 16 Pronunciation of /w/ by Group B

4.4.7 Pronunciation of /r/

The last section of the actual research was to examine the pronunciation of the post-alveolar approximant /r/. The English /r/ appears in all positions: initial, medial and final, and it was tested in all of them. Words *rich* and *rocket* tested /r/ in initial position. Medial position was investigated from two perspectives: /r/ followed by a vowel sound and /r/ followed by a consonant sound. The former was examined by words *terrorist* and *cry*, whereas the latter by words *learn* and *part* – here we test the proclivity of the speakers' towards rhoticity, as the BBC English accent pronounces /r/ only in prevocalic position. Lastly, /r/ was tested in final position by words *power* and *neighbour*, where there we again observe the tendency to pronounce the /r/ sound rather than /ə/.

As far as /r/ in initial position is concerned, only one respondent, namely B3, mispronounced the post-alveolar approximant /r/ as an alveolar trill /r̄/, commonly known as 'rolled r' (marked as /r̄/ in the tables). This is how Czechs pronounce *r* grapheme in their native language; however, it is not desirable to pronounce the English *r* in that way. The rest of the speakers uttered a very decent post-alveolar approximant /r/.

As for /r/ in medial position before a vowel sound, we can again observe an overwhelming accuracy in its delivery as a post-alveolar approximant. There occurred only three mispronunciations as an alveolar trill. With regards to /r/ in the middle of a word in a pre-consonantal position, the vast majority of speakers uttered the /r/ sound, too. This, however, is a quintessential mark of a rhotic accent, hence showing the speakers'

proclivity to rhoticity yet again. Czech is a rhotic language itself, and as such it surely has an influence on the pronunciation of *r* in pre-consonantal position in English, too.

Although this may be true in case of Czech speakers of English, when we hear Germans speaking English, they are a great deal more likely to pronounce /r/ only in prevocalic position, as German is a non-rhotic language – just as BBC accent and some others. There were only two participants who showed marks of non-rhoticity in their pronunciation in this instance – those were namely speakers A9 and B6.

The same phenomenon can be observed in terms of /r/ in final position where the vast majority pronounced the post-alveolar approximant rather than /ə/ – as is typical for BBC English accent. Only one assessee pronounced /ə/ at the end of the word *neighbour* (/neɪbə/), and one research subject pronounced the alveolar trill in both of the words *power* and *neighbour*.

The most notable word deemed challenging by the speakers in the self-assessment regarding this section was *neighbour*, despite it being pronounced correctly in all cases apart from one. I suppose the students were merely afraid of the way the word looked rather than thinking that they had pronounced it incorrectly. Next, the word *terrorist* was mentioned by two speakers – probably due to two post-alveolar approximants /r/ in close proximity to each other.

Words	Group A							
	Rich /r/	rocket /r/	terrorist /r/	cry /r/	learn /-/	part /-/	power /ə/	neighbour /ə/
1	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
2	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
3	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
4	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
5	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
6	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
7	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
8	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
9	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
10	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
11	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
12	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/

Table 17 Pronunciation of /r/ by Group A

/r/ Group B

Words	rich /r/	rocket /r/	terrorist /r/	cry /r/	learn -/	part -/	power /ə/	neighbour /ə/
1	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
2	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
3	/rt/	/rt/	/rt/	/rt/	/rt/	/rt/	/rt/	/rt/
4	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
5	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
6	/r/	/r/	/r/	/r/	/-	/-	/r/	/ə/
7	/r/	/r/	/r/	/r/	/r/	/r/	/r/	/r/
8	/r/	/r/	/rt/	/r/	/r/	/rt/	/r/	/r/

Table 18 Pronunciation of /r/ by Group B

5 Conclusion

This research aimed to identify the difficulties of English pronunciation on a segmental level that Czech speakers of English as a second language commonly face. Additionally, the causes of frequent mispronunciations of certain English phonemes were to be uncovered throughout the process. The hypothesis suggested seven problematic areas regarding English pronunciation on segmental level: short front vowel /æ/, short central vowel /ə/, aspirated plosives /p/, /t/, and /k/, velar nasal /ŋ/, dental fricatives /θ/ and /ð/, bilabial approximant /w/ and post-alveolar approximant /r/.

Theoretical foundations needed to be laid prior to the research itself in order to get thoroughly acquainted with phonetical and phonological nature of individual phonemes in question as well as with their own relevant peculiarities. Moreover, certain general terms regarding the English pronunciation were also explained in the theoretical part.

To verify the hypothesis, a research was conducted which dealt with the seven problematic areas of English pronunciation. These precarious areas were investigated by voice recordings of the participants which were subject to later evaluation. The results of the research indeed proved difficulties with phonetic and phonological nature of the targeted sounds. It was observed that both short front vowel /æ/ and dental fricatives /θ/ and /ð/ not only caused considerable problems from the phonetic side (that is the way they are uttered) but their phonological nature (the organisation of sounds within words and other finer characteristics) was not completely understood by the speakers either. Further, the aspirated plosives /p/, /t/ and /k/ proved to be challenging mainly from the phonetic view as aspiration was realised either too weakly or not at all by the majority of the assesseses. Short central vowel /ə/, velar nasal /ŋ/ and bilabial approximant /w/ did not manifest any real obstructions with regards to their phonetic side; however, the results clearly indicated their complex and distinctive phonological nature. Different from all the other phonemes, the outcome of testing of the post-alveolar approximant /r/ demonstrated next to none phonetic difficulties among the students, as well as no phonological obstructions either. Nonetheless, the investigation of the post-alveolar approximant /r/ cast light on the overwhelming proclivity to rhoticity among the participants.

As for the causes of mispronunciations, generally speaking, the predominant one was the difference between English and Czech phonetic systems. It was observed that the students often employed the Czech phonetic system in English, commonly resulting in

errors in pronunciation, or, in the worst-case scenario, a complete loss of intelligibility. Furthermore, the absence of some English phonemes in Czech phonetic system can be among other causes for difficulties with English pronunciation. Ultimately, the research demonstrated a lack of familiarity with the theory of production of certain phonemes and the ignorance of the theoretical knowledge of distribution of the sounds within words.

The research was additionally conducted by means of a questionnaire. It can be concluded that neither the participants' age nor the time spent studying English had a considerable impact on their pronunciation. Nevertheless, the results demonstrated the longer the stays in English-speaking countries the bigger the influence on the speakers' pronunciation. The questionnaire also revealed that younger students used English in their everyday lives more often – and overall, they were the better performing group – whereas the older students claimed to use it primarily at school. Moreover, the results further indicated that media were the predominant influencers of the speakers' pronunciation which could also explain the speakers' proclivity to rhoticity due to the dominance of General American accent in media.

As can be seen, the research was quantitatively rather limited due to the ongoing epidemic at the time of writing the thesis which made it difficult to carry out the research at schools. Therefore, it is important to note that these difficulties in pronunciation on segmental level do not apply to every Czech speaker of English; however, they still remain quintessential problems. To better understand the implications of these results, future studies could investigate these phonemes in a larger number of examples to allow for a more complex analysis. Further, pronunciation lesson plans may be devised based on these findings.

By pinpointing and analysing the most problematic phonemes for Czech speakers of English, I hope to encourage mainly teachers of English – but students as well – to pay more attention to these specific examples in their striving for better and more intelligible pronunciation, as well as accentuating them in their English lessons.

References

- Baker, A. (2006). *Ship or Sheep?: An intermediate pronunciation course* (3rd ed.). Cambridge, UK: Cambridge University Press.
- Catford, J. C. (2001). *A practical introduction to phonetics* (2nd ed.). New York: Oxford University Press.
- Collins, B., & Mees, I. M. (2013). *Practical phonetics and phonology: A resource book for students* (3rd ed.). London: Routledge.
- Cruttenden, A. (2014). *Gimson's pronunciation of English* (8th ed.). London: Routledge.
- Jones, D. (1976) *An outline of English Phonetics* (9th ed.). Cambridge, UK: Cambridge University Press.
- Jones, D. (1956). *The pronunciation of English*. Cambridge: Cambridge University Press.
- Kelly, G. (2001). *How to Teach Pronunciation* (2nd ed.). Pearson ESL.
- Kenworthy, J. (1987). *Teaching English pronunciation*. G.B.: Longman.
- Ladefoged, P., & Disner, S. F. (2012). *Vowels and consonants* (3rd ed.) John Wiley & Sons.
- Lass, R. (2000). *Phonology: An introduction to basic concepts*. Cambridge, UK: Cambridge University Press.
- McMahon, A. M. (2002). *An introduction to English phonology*. Edinburgh: Edinburgh University Press.
- Ondráček, J. (2011). Problems in communication caused by mistakes in the pronunciation of English by Czechs. PhD diss., Masaryk University. Retrieved from https://is.muni.cz/th/krdh7/PhD_-_Final_.pdf
- Roach, P. (2009). *English phonetics and phonology: A practical course* (4th ed.). Cambridge: Cambridge University Press.
- Skaličková, A. (1982). *Fonetika současné angličtiny* (2nd ed.). Praha: SPN.
- Yavas, M. (2011). *Applied English phonology* (2nd ed.). Oxford: Wiley-Blackwell.

Appendices

Appendix A – List of Words

LIST OF WORDS FOR RECORDING

1.

apple	alphabet	bag	back
bad	bat	sad	sat

2.

alive	ago	settlement	syllable
teacher	colour	no	hear
police	banana		

3.

pie	apart	rope	tea
particularly	it	cup	account
book			

4.

finger	hunger	singer	hanger
playing	strong	tongue	drink

5.

think	three	method	something
earth	month	this	the
father	other	bathe	with

6.

where	win	one	write
twice	award	queen	answer
village	veteran		

7.

rich
learn

rocket
part

terrorist
power

cry
neighbour

Appendix B – Questionnaire

Questionnaire

Reference number:

Age:

1. How many years have you been studying English?
2. What is the level of English in your class according to CEFR (Common European Framework of Reference for Languages)?
 - a) A2 – Elementary
 - b) B1 – Intermediate
 - c) B2 – Upper-intermediate
 - d) C1 – Advanced
3. How would you describe your attitude towards English?
 - a) I love English
 - b) I quite like English
 - c) I neither like it nor dislike it
 - d) I don't really like English
 - e) I dislike English very much
 - f) Other:
4. Have you ever been to an English speaking country?
 - a) Yes → for how long, where:
 - b) No
5. How often do you use English?
 - a) Every day
 - b) Quite often
 - c) Sometimes (only in school)
 - d) Almost never
 - e) Other:
6. Do you think that you spend enough time studying pronunciation in your class?
 - a) Yes
 - b) NoPlease, specify your answer:

7. What do you think of your pronunciation?
 - a) I think it is very good
 - b) It is good enough
 - c) It needs some more work
 - d) I am not very happy about it
 - e) Other/comment:

8. How do you learn pronunciation? Please, feel free to specify your answers.
 - a) Films, serials, YouTube
 - b) From a dictionary
 - c) At school
 - d) Other:

9. How do you learn English pronunciation at school?
 - a) We listen to our teacher and repeat after her/him
 - b) We listen to a recording and repeat after it
 - c) We write down the pronunciation with every new word
 - d) We use phonetic symbols and transcribe the words
 - e) We do not learn pronunciation at school
 - f) Other:

10. What **pronunciation** of English do you think you mainly use?
 - a) American
 - b) British
 - c) 'Czenglish'
 - d) Other:

11. What do you think has the biggest influence on your pronunciation?
 - a) School, teacher
 - b) Films, serials, YouTube
 - c) Native English speakers
 - d) Other:

12. Do you think your teacher's pronunciation is good and that you can learn from it?
Please, specify your answer.
 - a) Yes
 - b) No

13. Do you try to improve your English pronunciation on your own? If yes, how?
 - a) Yes
 - b) No

14. Do you mind it when the teacher corrects your pronunciation?

15. After the recording, please highlight the parts of words which you feel you had problems pronouncing.

Thank you very much for your time ;)

Appendix C – Evaluation Paper

EVALUATION PAPER

Ref. Number:

1.

/æ/ /ʌ/ /e/ apple /æpl/	/æ/ /ʌ/ /e/ alphabet /ælfəbet/	/æ:/ /æ/ /ʌ/ /e/ bag /bæg/	/æ/ /ʌ/ /e/ back /bæk/
/æ:/ /æ/ /ʌ/ /e/ bad /bæd/	/æ/ /ʌ/ /e/ bat /bæt/	/æ:/ /æ/ /ʌ/ /e/ sad /sæd/	/æ/ /ʌ/ /e/ sat /sæt/

2.

/ə/ /e/ /ʌ/ alive /ə'laɪv/	/ə/ /e/ /ʌ/ ago /ə'gəʊ/	/ə/ /e/ /ʌ/ settlement /setlmənt/	/ə/ /e/ /ʌ/ /eɪ/ syllable /sɪləbl/
/ə/ /r/ /r ^T / teacher /ti:tʃə/	/ə/ /r/ /r ^T / colour /kʌlə/	/əʊ/ /ʊʊ/ no /nəʊ/	/ɪə/ /ɪr/ /ɪr ^T / hear /hɪə/
/ə/ /ɒ/ police /pə'li:s/	/ə/ /ʌ/ banana /bə'nɑ:nə/		

3.

/p ^h / /p ⁰ / pie /paɪ/	/p ^h / /p ⁰ / apart /ə'pɑ:t/	/p ^h / /p ⁰ / rope /rəʊp/	/t ^h / /t ⁰ / tea /ti:/
/t ^h / /t ⁰ / particularly /pə'tɪkjələli/	/t ^h / /t ⁰ / it /ɪt/	/k ^h / /k ⁰ / cup /kʌp/	/k ^h / /k ⁰ / account /ə'kaʊnt/
/k ^h / /k ⁰ / book /bʊk/			

4.

/ŋg/ /ŋg/ /ŋ/ finger /fɪŋgə/	/ŋg/ /ŋg/ /ŋ/ hunger /hʌŋgə/	/ŋ/ /ŋg/ /ŋg/ singer /sɪŋə/	/ŋ/ /ŋg/ /ŋg/ hanger /hæŋə/
/ŋ/ /ŋg/ playing /pleɪŋ/	/ŋ/ /ŋg/ strong /strɒŋ/	/ŋ/ /ŋg/ tongue /tʌŋ/	/ŋk/ /ŋ/ drink /drɪŋk/

5.

/θ/ /f/ /s/ /t/ think /θɪŋk/	/θ/ /f/ /s/ /t/ three /θri:/	/θ/ /f/ /s/ /t/ method /meθəd/	/θ/ /f/ /s/ /t/ something /sʌmθɪŋ/
/θ/ /f/ /t/ earth /ɜ:θ/	/θ/ /f/ /t/ month /mʌnθ/	/ð/ /d/ this /ðɪs/	/ð/ /d/ the /ðə/ /ði:/
/ð/ /d/ father /fɑ:ðə/	/ð/ /d/ other /ʌðə/	/ð/ /v/ /f/ /θ/ bathe /beɪð/	/ð/ /θ/ /d/ /t/ /f/ with /wɪð/ /wɪθ/

6.

/w/ /v/ Where /weə/	/w/ /v/ Win /wɪn/	/w/ /v/ One /wʌn/	/-/ /w/ /v/ Write /_raɪt/
/w/ /v/ Twice /twɑɪs/	/w/ /v/ Award /ə'wɔ:d/	/w/ /v/ Queen /kwi:n/	/-/ /w/ /v/ Answer /ɑ:n_sə/
/v/ /w/ Village /vɪlɪdʒ/	/v/ /w/ Veteran /vetərən/		

7.

/r/ /r ^T / rich /rɪtʃ/	/r/ /r ^T / rocket /rɒkɪt/	/r/ /r ^T / terrorist /terərist/	/r/ /r ^T / cry /kraɪ/
/-/ /r/ /r ^T / learn /lɜ:_n/	/-/ /r/ /r ^T / part /pɑ:_t/	/ə/ /r/ /r ^T / power /paʊə/	/ə/ /r/ /r ^T / neighbour /neɪbə/

Summary in Czech

Čeští mluvčí angličtiny často naráží na mnohé obtíže v průběhu učení se anglické výslovnosti. Správná, nebo alespoň srozumitelná, výslovnost kteréhokoliv jazyka je zásadní pro dosažení vzájemného porozumění. Tato práce si dává za úkol prozkoumat sedm obtížných oblastí anglické výslovnosti na segmentální rovině, které autor práce předem stanovil v hypotéze, a dále také jejich potenciální příčiny.

Hypotéza musela být ověřena a potvrzena – za tímto účelem byl proveden výzkum mezi českými mluvčími angličtiny za využití hlasových nahrávek klíčových fonémů, a tyto nahrávky byly následně kvalitativně ohodnoceny. Součástí výzkumu byl dále ještě dotazník, který byl k dispozici všem zúčastněným. Analýza tohoto dotazníku byla provedena stejně tak. Protože respondenti byli jiného věku a odlišného studijního pozadí, byly vytvořeny dvě skupiny, které byly v průběhu analýzy porovnávány. Finální výsledky potvrdily hypotézu v šesti ze sedmi odhadovaných problematických oblastech anglické výslovnosti.

Z výsledků dále vyplynulo, že hlavní příčiny problémů českých studentů s anglickou výslovností jsou rozdíly mezi českým a anglickým fonetickým systémem, nepřítomnost jistých anglických fonémů v českém jazyce a závěrem také neznalost teoretických a praktických základů anglických fonémů z fonetického a fonologického hlediska.