# UNIVERZITA PALACKÉHO V OLOMOUCI PEDAGOGICKÁ FAKULTA <br> Ústav cizích jazyků 

Bakalářská práce

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Obor: Anglický jazyk se zaměřením na vzdělávání a Výchova ke zdraví se zaměřením na vzdělávání

## Pronunciation of Native and Non-Native Speakers of English

## Prohlášení:

Prohlašuji, že jsem bakalářskou práci vypracovala samostatně a použila jen prameny uvedené v seznamu literatury.

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## LIST OF ABBREVIATIONS

| ENL | English as a Native Language |
| :--- | :--- |
| ESL | English as a Second Language |
| EFL | English as a Foreign Language |
| ELF | English as a Lingua Franca |
| GA | General American |
| L1 | Native language |
| L2 | Second language |
| MSA | Modern Standard Arabic |
| RP | Received Pronunciation |

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Appendix 1: Kachru's three concentric circles of English
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#### Abstract

This thesis focuses on pronunciation of native and non-native speakers of the English language in terms of English as a lingua franca of the globalized world. Most common varieties in pronunciation of different L 1 s are described with varieties in pronunciation of Czech speakers of English being emphasized and compared to the British standard phonological system of the English language and as a result, core norms pivotal for intelligibility are defined.


## INTRODUCTION

> "English is England's language but the world's treasure".
> Liu Dailin quoted in Jenkins (2017, p.5)

Communication is a ubiquitous phenomenon spread across species and it has evolved, particularly in human cultures, into what is called 'speech', and the sounds of speech produced by speakers of the English language will also be the central subject-matter of this thesis.

According to Seidlhofer (2015), it could be accepted as a universal fact that English has been the cause and consequence of globalization and has become the most widespread means of international and intercultural communication that there has ever been, the lingua franca of the contemporary world.

The importance of English cannot be emphasised enough since it is present almost everywhere and more non-native speakers are using it today than those of native origins, Jenkins (2017, p. 1) compares the number of 1,350 million non-native speakers to 337 million of first language speakers.

With such broad spectrum of communication being conducted outside the first language circle speakers, it becomes obvious that the goals of international communication have changed hand in hand with the growing number of speakers and English is no longer used only as a foreign language with the objective of being able to communicate with natives, but the trend has shifted predominantly towards English becoming an international language and is now used in settings where a native speaker is not even present, and as Hanzlíková and Skarnitzl (2017, p.285) state "it is no longer necessary to attempt to attain native-like pronunciation, as people who started learning English later are unlikely to ever achieve a native-like pronunciation, and instead learners should focus on mutual intelligibility."

Despite all the mentioned above, the experience of many practising teachers is that achieving the native-like pronunciation model is still generally considered the standard, if not explicitly stated goal - by most teaching and learning materials at least, sometimes with the exception of business English student's books. However, the reality of teaching and learning is rarely that straightforward as the native model is still being perceived as the desirable one and learners are consciously or unconsciously striving to reach it. Hence, it should be acknowledged that this goal of nativelikeness might be the pitfall for their successful communication (i.e. to understand and make themselves understood) as their enthusiasm for English might be
tempered by their focus on 'sounding right' - no matter if it is in the classroom or 'in the world out there'.

The arguments presented above have led to establishing the aims of this work which are to introduce general terms for defining different contexts in which English may be understood, and which form perceptions of what is considered either standard or non-standard in the English language. The key objective of the thesis will be to provide an analysis of the most common varieties and deviations related to pronunciation among learners and users of English with an emphasis on Czech speakers of English and their specific problem areas, contrasted to the standard phonetic system of the English language which will also be introduced in order to form a foundation for understanding English speech sound production. Lastly, following the provision of information and arguments mentioned above, basic features of pronunciation crucial for intelligibility and overall understanding will be defined with regards to the most common variations observed in speakers of English.

## 1 TERMINOLOGICAL DISTINCTIONS OF WORLD ENGLISHES

The following chapter is subdivided into four sections where the terms English as a native language, English as a second language, English as a foreign language and English as a lingua franca will be examined in their broadest sense as they are pivotal for establishing a core for this thesis and they will be given a brief summary based on Braj Kachru's model of 'Three Concentric Circles of English' (Bauer, 2002, p. 21) which will be used for illustrating and linking these distinctive terms together.

The term 'lingua franca' has already been mentioned in the introductory text and it is not the only one central to this work. The subsequent sections contextualize the model of classification of the English language which has been an object of research for - among others - the linguist Braj Kachru. Kachru's studies have shown associations between the way English has spread historically and the roles it plays today and Walker (2015, p. 2), Bauer (2002, p. 21) and Kirkpatrick (2007, p. 18) describe Kachru's sociolinguistic profile of English in more depth by introducing The Inner Circle as a group of speakers who share the same mother tongue, The Outer Circle is understood to recognize speakers from countries where English is considered a second language and the Expanding Circle is composed of countries where English serves neither official nor an unofficial role, but has become an integral part of education and commerce.

### 1.1 English as a Native Language and Standard English Ideology

Grounded on the historical events that began with the first expeditions in the 17 th century and that have led to spreading English from the British Isles across other continents and countries, what is considered a standardized version of the English language has been established. Since that time, English has served as a first or native language, meaning the mother tongue and an official language, in what is now referred to by Braj Kachru as the Inner Circle - the UK, Ireland, the USA, Canada, Australia, New Zealand, the Caribbean and South Africa (Walker 2015, p. 2).

According to Crystal (2008, p. 347) it is the mother tongue that defines who can be considered a native speaker with the main idea behind the concept being that the first language (L1) has been acquired organically during childhood by interactions with the main caregiver, usually the mother. He argues that this way of acquisition ensures that such speaker is equipped with "the most reliable intuitions, whose judgements about the way the language is used can therefore be trusted" (Crystal, 2008, p. 347). The characteristics of native speakers are discussed in more detail by Davies (2013, p. 15) who comes to similar conclusions about speaker's L1 being acquired in childhood and native speaker's intuitions about his or her idiolectal grammar as well as grammar based on the standard English features but outside the speaker's idiolect. Moreover, he emphasizes a unique capacity of being able to spontaneously produce very fluent speech with a limited number of pauses while at the same time, the speaker has a complete command over a broad range of his or her portfolio of complete lexical items, which gives the native speaker a thorough communicative competence, including, in particular, the capacity to translate and interpret into their L1.

Davies (2003) also conceptualizes the native speaker by the idea of 'membership' and 'shared cultural knowledge' which goes hand in hand with the tradition that the native speaker represents. He argues that "the native speaker is relied on to know what the score is, how things are done, because s/he carries the tradition, is the repository of the language" (Davies, 2003, p. 207).

The concept of the native speaker and the tradition it represents is well seeded also in the ideology of standard English which carries a unique status among other varieties of English and has become a controversial topic for discussions among scholars.

According to Reed (2020), standard English, also referred to as the 'Queen's English', serves as a formal variety of English, which is considered the national norm or a version of English - a native language, which, according to Quirk (quoted in Seidlhofer, 2015, p. 46) is
"fully described and with defined standards observed by the institutions of state", used specifically in formal settings and taught at schools, especially with emphasis on 'correct' pronunciation. And as it is remarked in Hamilton (2020) "the standard form of English is a social construction associated with and invented by powerful social groups which protect this form of language that works as a gate keeper to different opportunities in society and given its history, it is bound with notions of race and class". Davies (2013) also elaborates on this topic when he assumes that it is a phenomenon for, not only language norms, but standard English in this case, to be established by elite groups because they are viewed as "desirable to imitate or because they have power." (Davies, 2013, p.65).

Even though standard English seems to be the anchor point for English as a native language (ENL), Seidlhofer (2015, p. 46) considers this view problematic because standard English is only used by a limited number of native speakers as most native speakers of English do not conform to standard English norms and states that "there are countless native speakers of non-standard English just as there are countless non-native speakers of standard English." (Seidlhofer, p. 52) and Cushing (quoted in Hamilton 2020) both support this perspective by contrasting standard English with non-standard, yet widely used, native-speaker varieties that then become viewed as deviant or subordinate which leads to language and social stratification and it builds their existence on a hierarchy with notions of 'purity' and 'correctness'.

Additionally, Reed (2020) argues that standard English is a dialect of written English which is not the English most speakers use in their daily settings in their speech and particularly in relation to pronunciation, and Cushing (quoted in Hamilton 2020) elaborates on the need for either standard on non-standard variety of English based on different contexts speakers find themselves in. These contexts may be educational or include workplaces, where the competence in the standard variety of English becomes a benchmark for access, and, presumably, success.

This idea of evaluating competence in standard English is not valid only for native speakers in terms of their opportunities in life within their home country, but has also been a concern for non-native speakers of English as Standard English serves as a model for learning and assessment of their language competence as well - tests and teaching materials are based on the Standard English concept where, according to Davies (2013, p. 14) "the idealized native speaker's norm is the desirable goal for both native speakers and non-native speakers".

In contrast to what the arguments dealing with the ideology of native speaker and Standard English might be implying about setting sometimes unsurmountable obstacles for non-native speakers as well as stratifying the native speaker populations by imposing certain requirements a person must meet in order to be accepted in various situations, there is still the
renowned notion of a particular characteristic of the human mind that should not be overlooked. With the characteristic being the need for order and categorising, it is only natural that both native and non-native speakers have this innate need for a set of common linguistic rules for the English language and languages in general.

Therefore, it might be argued that without such a set of standard rules, particularly in relation to pronunciation, all communication would fail and that it might be the aspects of the common standard model that define what both native and non-native speakers share and what brings speakers together, rather than what should be eliminated as hindering in communication.

### 1.2 English as a Second Language

It has been established in the previous section that in the countries of the Inner Circle English is used and spoken mainly as a native language. In contrast, this chapter seeks to explain how another variety of the World Englishes has come into being - English as a second language (ESL).

ESL is a dominant feature of Kachru's Outer Circle where mostly countries with English as a post-colonial second language are gathered. However, ESL has also been an important and broad concept in learning and teaching English for those who had emigrated to L1 countries and are seeking to grasp the L1 language. This function of ESL is not the central concern of this particular section of the thesis, but it is mentioned for understanding the complexity of the term.

The history of teaching English to people of other languages can be dated back to the beginning of $15^{\text {th }}$ century when people with different mother tongues found it vital to learn the English language in order to be able to "further their trading and commercial interests, promote empire, facilitate the everyday survival of refugees and other migrants, or for combination of these causes" (Jenkins, 2017, p. 5), and since the beginning of the $17^{\text {th }}$ century for a period of over 350 years, Great Britain was respected and looked upon as the world's leading power with immense impact on the world's social and economic affairs and the extent to which this expansion corresponds with the spread of the English language into countries which are now considered ESL countries, is indisputable (Bragg, 2021).

English even in that time served as a contact language and Gramely et al. (2021, p. 315) have argued that "contacts between English-speaking seamen, merchants, plantation owners and overseers, missionaries, colonial magistrates and officers, and many others, on one hand, and native colonized populations, on the other, did lead to new languages that have brought the
peoples of Europe and the peoples of the rest of the world to share a common destiny". According to the Kachruvian circles, there are several countries carrying the legacy of sharing the English-based 'common destiny' which might be also understood as the special and often official role that English has in post-colonial settings of the British Empire like India, Pakistan, Malaysia, Singapore, Kenya, Tanzania or Nigeria, to name only few, as it is not the primary aim of this work to review the complete list of all countries where English has an official second language status.

During the time of establishing the British Empire through colonization, the English language was used as a language of administration in the above mentioned Outer Circle countries, and in this sense it spread with the need of the British Empire to teach English to local people in order to ensure the administration of such vast areas of the world and as Walker (2015, p. 3) suggests, those responsible for the flourishment of the Empire were of the opinion that English and its literature could serve as a civilizing force and both were introduced into schooling in these countries. As a consequence of these measures English has acquired a special status in the Outer Circle countries and it is still used to a great extent for administration and is prevalent in education or media.

Even after restoring their independence following the dismantling of the British Empire, most ESL countries deliberately determined English as their official language, often because of the diversity of languages spoken around the country, e.g. India or Malaysia, where, according to Walker (2015) and also Jenkins (2017) local varieties of English, e.g. Singapore English or Indian English, serve as a means for internal communication even though they cannot be considered the first language of the majority of the speakers but it allows for their mutual intelligibility. Moreover, as Crystal (2003, p. 145) illustrates, these international varieties "express national identities, and are a way of reducing the conflict between intelligibility and identity.", also, he compares the variety of these new Englishes to dialects all people recognize within their own country, with the only difference that in the case of ESL countries these dialects apply to whole countries to an extent which is vastly international.

### 1.3 English as a Foreign Language

What has already been outlined in the previous section is also suggested in Seidlehofer (2015, p. 2) who proposes that it would be hard to argue against the fact that English has spread around the world to become "the predominant international language" and considers it a
principal reason for English being the at the core of foreign language teaching in school curricula on international scale.

The arguments put forward by Seidlehofer correspond with Kachru's Expanding Circle which, in Crystal's explanation (2003, p. 60), involves countries which acknowledge the importance of English as an international means of communication with the 'outside' world without having experienced the history of colonization and where English has not been recognized in any official way by these nations. According to Walker (2015, p. 4) English within the countries of the Expanding Circle is "neither considered a first language, a second language, nor an official language.", which leads to a conclusion that English in these countries is not used or spoken in the normal course of daily life (Kirkpatrick, 2007), but learnt at school based on compulsory curricula or taught in language schools together with other foreign languages with the native-speaker norm as a well-grounded goal (Seidlhofer, 2015). The reason for this is that it has long been assumed that most learners' target in studying English as a foreign language (EFL) is to communicate with native speakers of English or any other foreign language, particularly in relation to pronunciation, where the native accent is considered the desired objective, whether the model of Received Pronunciation (RP) or General American (GA) (Walker, 2015).

Walker then (2015, p. 5) argues that "the new role for English" should be considered and illustrates that on the example of international travel movements which show that $75 \%$ of all travel is conducted between non-English speaking countries with the conclusion that speakers of Expanding Circle use English to communicate mainly with other speakers of Expanding or Outer Circles than with those belonging to the Inner Circle spectrum.

As the name of the 'Expanding Circle' suggests and as Walker (2015) mentions, the constantly growing number of countries, let alone the number of speakers of EFL, is merely impossible to determine, yet Crystal (2003, p. 5) estimates that there are over 100 countries where English has been understood as a priority in foreign-language teaching.

It is in countries like Russia, China, Brazil or the Czech Republic where English is the most common compulsory language children start learning as their foreign language when they enter school, or a foreign language most available to adult learners who wish to be able to use what Seidlehofer (2015, p. 2) refers to as "the international language" of the $21^{\text {st }}$ century - the English language.

### 1.4 English as a Lingua Franca

The previous section attempted to explain the term of EFL, the aim of this particular section is to deal with the concept of English as a lingua franca (ELF) in relation to spoken English and the ways it is pronounced. As Seidlhofer (2015, p. 17) points out "the acronyms are treacherously similar, but the concepts are quite different".

To elaborate more on the conclusions of Walker's (2015) proposed need for the new role English should adopt in the previous section, a solution for reconceptualizing English is put forward by Seidlhofer (2015). She believes that ELF represents the naturally adaptive process of language which is not based purely on the linguistic aspects of English, but the issue seems to be more socio-political and cultural, concerned with topics like "globalization, multilingualism, advocacy of linguistic diversity or human rights" (Seidlhofer, 2015, x) and as Jenkins (2017) suggests, these underlying policies should be perceived as one of the main reasons for and benefits of learning and teaching ELF which, at its core, carries the idea of "community as opposed to alienness, emphasizes that people have something in common rather than their differences and implies that 'mixing' languages is acceptable" (Jenkins, 2017, p. 11).

Above mentioned 'mixing of languages' may be recognised as the essence of any lingua franca, which as a term was first used to describe the pidgin spoken for trading purposes in the Mediterranean during the Middle Ages and was based on Arabic, French, Greek, Spanish and Turkish (Walker, 2015, p. 6). Throughout history, there were other languages that have been referred to as lingua francas - for instance Latin or Swahili, which were usually limited to certain areas of the world (Crystal, 2003, p. 12). Therefore, it can be argued that English is not the first lingua franca, but it might be the first lingua franca being used globally.

As such, ELF, according to Jenkins (2017), can be used as a medium of communication by people who do not speak the same language - they are speakers of different L1s, however an assumption can be held that there might be circumstances where speakers of ENL or ESL participate in ELF interactions, even though attributable to the fact that the number of ENL speakers is minor compared to the number of speakers of the Outer or Expanding Circle, the possibility of such interaction is, based on statistics, unlikely (Walker, 2015, p. 6).

If EFL and ENL are supposed to be used in the context of communication where a native speaker or speakers are present, the basic idea behind ELF seems to be in direct opposition. Jenkins (quoted in Saunders, 2019) argues that what needs to be emphasized is the notion of a language that as a lingua franca is simply a tool for communication and it cannot be learnt like other foreign languages, including EFL or even ENL, because the purpose of using ELF is not to adhere to the native language norms of which, according to Seidlhofer (2015, p. 8), ELF is, to a certain degree, independent. Both Jenkins (2017) and Seidlhofer (2015) assume that native

English, as it is used in conversations only within groups of native speakers, incorporates a large number of conventions and markers that are typical for members of these groups. Apart from the shared knowledge that native speakers can draw upon, there exist other notions for instance, characteristic way of speech and pronunciation, use of idiomatic language or certain phrasal verbs. Another point Jenkins (quoted in Saunders, 2019) makes in support of the incomparability of ENL and ELF is the way that users of these concepts of English behave when they communicate. She argues that the users of ELF are in command of much richer linguistic repertoire compared to ENL speakers who - particularly in case of British native speakers - are mostly monolingual.

In addition, she describes different approaches ELF and ENL users have to communication according to the accommodation theory. The idea is that native speakers are much less able to accommodate or adjust their speech to a local context and to use an appropriate kind of pronunciation and language that fit the character of the ongoing communication with regard to the other users of different L1s included and therefore, she aims to introduce 'the local speaker' in opposition to 'the native speaker'. A local speaker in terms of ELF should not be understood in geographical terms, but within the context of the environment, level of formality or which languages people in the given context speak, e.g. academic staff should be responsible for the decision making in assessing the level of competency in English needed for studying in an international setting, as testing in general has not been proven as an adequate measure of one's language ability (Saunders, 2019).

The phenomenon of ELF has evolved out of a need for a contact language among nonnative speakers of English across the Kachru's Circles and Seidlhofer (2015, p. 7) summarizes its definition as "any use of English among speakers of different first languages for whom English is the communicative medium of choice", and Jenkins (quoted in Saunders, 2019) argues that users who have adopted the ELF approach and mentality, often become more relevant and more skilled communicators.

## 2 INTRODUCTION TO THE PHONETIC SYSTEM OF THE ENGLISH LANGUAGE

> "Don't speak of letters when you mean sounds. Languages are made up of SOUNDS". Daniel Jones (quoted in Zsiga, 2013, p.14)

The purpose of introducing the phonetic system of the English language in this thesis is to demonstrate how and where speech sounds represented in English are made, as the understanding of their production is fundamental for identifying the most common varieties or
deviations that can occur in pronunciation and therefore also for setting core pronunciation features which are necessary for ELF communication with the idea of striving towards the goal of intelligibility which will be dealt with in subsequent chapters.

This chapter is divided into two main parts and then subdivided into several sections. Firstly, segmental features of the English pronunciation will be described prior to the introduction of super-segmental features, and even though debates have been taking place among scholars about which pronunciation model should be considered the standard one, Received Pronunciation (RP) model will be adhered to for the aims of this work.

### 2.1 The Segmental Features of The English Phonetic System

It could be accepted as a simplified, yet universal fact that speech is built up on words which consist of speech sounds made of vowels and consonants, and is based on the work of vocal tract articulators and that every speech sound is defined by a particular combination of the following (Zsiga, 2013, p.16):

- airstream mechanism
- state of the larynx
- state of the velar port
- place of articulation
- manner of articulation


### 2.1.1 Laryngeal and Velar Distinctions for English Vowels and Consonants

As Zsiga (2013, p. 20) states "speech sound is the movement of air made audible" and in order to be able to define characteristic of a speech sound, the state of vocal folds needs to be examined. There are three important terms that will be elaborated on, as they are essential for illustrating distinctions for English consonants and vowels - voicing, aspiration and glottal stops, with the last term being of less importance as, according to Roach (2009, p.26), it is considered to be a variation of standard pronunciation of several aspirated consonants (/p/, /t/, $/ \mathrm{k} /$ ). Additionally, so that all factors affecting speech sound production are covered, the part the velum plays in the speech sound mechanism will be briefly discussed as well in the final part of this section.

The mentioned move of air through the vocal tract relevant to the study of English pronunciation is known as egressive pulmonic airstream, which is caused by air being pushed out of the lungs, and where a speech sound is to be produced, the flow of air being forced out
needs to be obstructed which then leads to vocal folds being brought close to each other and put under pressure with the result of vibration which is called voicing - e.g. $/ \mathrm{z} /$ or $/ \mathrm{v} /$ (Roach, 2009, p. 24).

On the contrary, if a sound is produced without almost any vibration while the vocal folds are pulled out of the way, with the air being allowed to pass freely through the passage, the sound is voiceless (e.g./p/, /f/, /s/). In combination with complete blockage of articulators, built up pressure is created and as in case of $/ \mathrm{p} /$, /t/, /k/ in their initial position (Zsiga, 2013, p. 22), it is subsequently transformed into an audible plosion caused by a rushed escape of air from behind the oral closure - which is called aspiration (Davenport and Hannahs, 2005, p. 12).

Apart from producing vibration or aspiration, the state of vocal folds can be held in a position which then closes off the airstream to a full extent and a glottal stop / $\mathbf{2}$ / is produced as air is prevented from exiting the mouth. A glottal stop is often used in the middle of the word, in place of /p/, /t/, /k/ and /tf/ (Roach, 2009, p. 44), based on dialectal characteristics (Zsiga, 2013).

Lastly, Zsiga (2013) adds that there is one more defining characteristic which should not be omitted and that is the role of the velum. Based on whether the velum is open or closed either a nasal sound or an oral sound is produced, i.e. when the air is diverted through the nasal cavity a nasal sound, for instance $/ \mathrm{n} /$, is created but if the velum is closed, the sound is considered oral (p. 21).

Understanding the different ways in which vocal folds can function is important for establishing classification of vowels and consonants later on.

### 2.1.1.2 Consonant Sounds

Consonants, as one of the two general categories used for the classification related to speech sounds, are defined by Crystal (2008, p. 103) as "sounds made by a closure or narrowing of the vocal tract so that the airflow is either completely blocked, or so restricted that an audible friction is produced".

Based on the fact that consonant articulators are not difficult to feel, they are therefore often described in terms of place and manner of articulation (Crystal, 2008, p. 103).

### 2.1.1.2.1 Classification of Consonants according to The Manner of Articulation

The way in which an obstruction in the flow of air is created as well as the degree of constriction that is made independent of the area in the vocal tract both define the manner of
articulation (Roach, 2009, p. 29) and as Zsiga (2013, p. 21) states, there are three different ways of ensuring that moving air is made audible: "making it pop, making it turbulent or making it resonate", while the first two ways mentioned are dependent to some degree on the obstruction created in the airflow, and therefore called obstruents. Resonating sounds are classified as sonorants. An overall classification based on this distinction proposed by Zsiga (2013, p. 20 $21)$ is provided below.

### 2.1.1.2.1.1 Obstruent consonants

Considered as important to understand by Zsiga (2013, p. 22) is the fact, that all representatives of obstruent consonants, those being fricatives, affricates and plosives, can be voiced or voiceless, even though the production of the voiced stops and fricatives is fairly uneasy as the voiced plosives tend to devoice as the nature of obstruents lies in creating constrictions with the oral articulators, which stops the airflow and therefore the vibration ceases as well.

## Fricatives: f, v, $\boldsymbol{\theta}, \mathbf{\delta}, \mathbf{s , ~ z , ~ \boldsymbol { f } , \mathbf { 3 } , \mathrm { h }}$

Roach (2009, p. 39) defines fricatives as consonants which are produced when air is exited through a narrow passage and a hissing sound is produced, therefore they can be continually made without interruption, e.g. /s/ and /f/.

## Affricates: $\boldsymbol{t} \boldsymbol{f}, \boldsymbol{d} \boldsymbol{z}$,

On the other hand, an affricate is a combination of a plosive and a fricative as it starts with a complete block of air and continues as a fricative - all in one single sound, for instance $/ \mathrm{t} /$ / which compounds of two letters representing a single symbol (Zsiga, 2013, p. 22).

## Plosives: $p, b, t, d, k, g, ?$

For plosives or oral stops, as they can be referred to, and as their name suggests, a complete stop in the manner of articulation is present when the airflow is prevented from exiting the mouth by bringing together both active and passive articulators and producing e.g. the sound /p/ (Zsiga, 2013, p. 22).

### 2.1.1.2.1.2 Sonorant consonants

The class of sonorant consonants is further subdivided into nasal stops and approximants, and are, in comparison to obstruents, almost always voiced - there is no voiceless counterpart represented in the international phonetic alphabet (IPA) chart.

## Nasal stops: m,n, $\boldsymbol{n}$

Both categories of sonorants can be defined as sounds which lack any build-up pressure in the vocal tract and therefore no burst noise on release - Zsiga (2013, p. 23) compares the nasal stop $/ \mathrm{m} /$ with the plosive $/ \mathrm{b} /$ which are both articulated with the same lip position, the only difference has been shown in the opening of the velum, which is closed for plosive sounds.

## Approximants: $\boldsymbol{r}, \boldsymbol{l}, \boldsymbol{j}, \boldsymbol{w}$

Another class of the sonorant consonants is referred to as approximants and Zsiga (2013, p. 23) subdivides them further into glides while Roach (2009, p. 50) describes them as phonetically vowels but phonologically treated as consonants, such as the $/ \mathrm{w} /$ or $/ \mathrm{j} /$ sound, or rhotics including different versions of r-sounds, and laterals which stand for 1 -sounds, where air flows over the sides of the tongue (Zsiga, 2013, p. 23).

### 2.1.1.2.2 Classification of Consonants according to The Place of Articulation

In this section, the attention from the manner of articulation will be shifted to the place of the articulation which Davenport and Hannahs (2005, p. 13) describes as "the horizontal relationship between the articulators", and Zsiga (2013, p. 24) goes further in the explanation of active articulators (i.e. those which move) and passive articulators (i.e. those which the active articulator is moved to) with the principle being that several possible combinations of active and passive articulators can be achieved and together they determine the place of articulation and an overview based on a classification by Roach (2009, p. 53) is provided below.

## Bilabial Consonants: $\boldsymbol{p}, \boldsymbol{b}, \boldsymbol{m}$, w

As Zsiga (2013, p. 24) establishes, if a sound is made with the lower lip functioning as an active articulator, it is termed labial and if the lower and upper lip are brought together in order to make a sound, it is considered bilabial, e.g. $/ \mathrm{p} / \mathrm{or} / \mathrm{m} /$. In a comparative manner, when the lower lip makes contact with the upper teeth a labio-dental sound is produced, such as /f/.

## Labio-dental Consonants: $\boldsymbol{f}, \boldsymbol{v}$

However, it is the tongue which is perceived as the most agile and Zsiga (2013, p. 24) distinguishes sounds which are made by the tip of tongue and the body of the tongue.

## Dental Consonants: $\boldsymbol{\theta}, \boldsymbol{\partial}$

Sounds created with the tongue front are classified as dental, e.g. $/ \theta /$ or $/ \delta /$ and might even be referred to as interdental in case that speakers protrude the tip of the tongue between the teeth.

Alveoral and Post-alveoral Consonants: $t, d, s, z, n, l, f, 3, t \int, d z, r$

The alveoral place of articulation is specified by bringing the tongue front close to the alveoral ridge to produce e.g. a fricative sound $/ \mathrm{s} /$ or a plosive sound $/ \mathrm{t} /$. When the body of the tongue is used to make an obstruction right behind the alveoral ridge a post-alveoral sounds are made, such as $/ \mathrm{J} / \mathrm{/} / \mathrm{d} 3 /$ or $/ \mathrm{r} /$.

## Palatal Consonants: $\boldsymbol{j}$

Another class of consonant sounds is known as palatal for the space between the tongue and hard palate is narrowed in order to produce such as $/ \mathrm{j} /$.

## Velar Consonants: $\boldsymbol{k}, \mathfrak{f}, \boldsymbol{\eta}$

When the tongue is moved even further back to the velum, the place of articulation is called velar for e.g. $/ \mathrm{k} /$ or $/ \mathrm{g} /$, or velar nasal as for the sound $/ \mathrm{g} /$.

## Glottal Consonant: $\boldsymbol{h}$

The last category of consonants to be mentioned in this section is the glottal consonant $/ \mathrm{h} /$, produced only with larynx as its place of articulation, where the open vocal folds function as a channel for the noise of air which is rushed through them (Zsiga, 2013, p. 26).

### 2.1.1.3 Vowel Sounds

With consonants being covered in the previous section of the work, vowels are the other of the two general categories used for the classification of speech sounds and are defined by Crystal (2008, p. 517) as "sounds articulated without a complete closure in the mouth or a degree of narrowing which would produce audible friction; the air escapes evenly over the centre of the tongue", or by Zsiga (2013, p. 26) who defines vowels as "open articulations with the tongue never making contact at any particular place" and then proposes that "vowels are open-mouth periods separating the constrictions of the consonants. All speech is organized around this repeated closing-opening, consonant-vowel sequence and as such forms the basis of syllable structure" (Zsiga, 2013, p. 56).

### 2.1.1.3.1 Classification of Vowels

In contrast to consonants, vowels cannot be described appropriately in terms of place of articulation as the upper surface of the vocal tract does not come in contact with the tongue, but as Zsiga (2013, p. 28) states, the ways in which the tongue and lips move can be used for establishing an appropriate description which is based "on the position of the highest point of the tongue during that vowel".

There are other descriptive ways of classifying vowel sound production, such as length, lip rounding, nasality, voice quality or a distinction between tense and lax (Zsiga, 2013, p. 28, 71), but not all of them will be dealt with in this work as they are not considered the most common and relevant (Melen, 2010, p. 22).

Therefore, with the movement of the tongue being generally perceived as the most influencing element in English vowel classification, vowel distinctions based on the position of the tongue in the mouth as well as relative length of the vowel sounds will be used for the aim of this thesis and provided below as well as it will be contrasted to a set of what is generally considered standard reference points - the cardinal vowel system.

### 2.1.1.3.2 Cardinal vowels

The linguistic system of cardinal vowel allows for a particular description of vowel properties. The primary purpose of this standard reference system is to provide reference points for orientation in the vowel space (Zsiga, 2013, p. 58). Roach (2009, p. 12) considers cardinal vowels to be the reflection of the range of vowels available to the human vocal apparatus and as Roach (2009, p. 13) mentions, these vowels are extreme in their expression and they are not correspondent to actual vowel qualities in any particular language, additionally, Zsiga (2013, p. 58) argues that "they define the extreme corners of the vowel space - high front, low back, and high back - with respect to which other vowel qualities can be defined".

### 2.1.1.2.3 Tongue Height based Classification of Vowels

With the standard reference points in the form of the cardinal vowel system having been introduced, a way of describing and comparing vowels universally has been provided.

This section of the work will examine how vowels can be classified according to the height and overall position of the tongue in the oral cavity.

Zsiga (2013, p. 28) elaborates on tongue-height classified vowels and explains that the tongue body can move vertically - either up for the high vowels: $/ \mathrm{I} /, / \mathrm{i} /, / \mathrm{u} /, / \mathrm{v} /$, or it can be
brought down for the low vowels as in the case of the vowel sounds /æ/, /a/, /a/. The mid vowel sounds are created when the tongue stays in the middle of the oral cavity as in $/ \mathrm{e} /, / 3 /, / \Lambda /, / \mathrm{o} /$, 10/.

Another distinction might be understood as horizontal - the tongue can be moved forward for the front vowels as in the sounds /3/ /i/, /I/,/e/, /æ/ or backward for back vowels as /u/, /v/, $/ 0 /, / 0 /, / \mathrm{a} /$ and $/ \mathrm{\sigma} /$. Central position of the tongue is represented by central vowels and represented by the symbols $/ \mathrm{a} /$ and $/ \mathrm{N} /$.

The reduced vowel schwa / $9 /$ is of a specific category and its vowel quality is used in short, unstressed syllables, as in the word 'about'/əbavt/. The schwa can be described as short, mid, central vowel and when it is being produced, the mouth is open for a vowel sound with the tongue remaining in neutral position. In comparison, the symbol $/ \Lambda /$, which is also called 'wedge', is used as a mid, central vowel in stressed syllables, e.g. 'abut' /əbıt/ (Zsiga, 2013, 27-29).

Having examined the classification of vowels according to the height of the tongue and the tongue being moved forward or backward, another distinction based on relative length of vowel sounds described by Roach (2009, p. 13) will be provided.

### 2.1.1.3.4 Length Based Classification of Vowels

When vowels are to be contrasted based on length which is defined as the physical duration of a sound (Crystal, 2008, p.273) and Zsiga (2013, p. 67) argues that there are many factors influencing the amount of time it takes to articulate a given segment, such as the speed of speech among others and also Roach (2009, p. 13) emphasizes that the length of a vowel is only a relative distinction which can vary in different contexts. However, long and short values of vowel sounds are conventionally accepted (Crystal, 2008, p. 273). Interestingly, Davenport and Hannahs (2005, p. 41) states that long vowels might be $50-100 \%$ longer than short vowels.

The key objective of this section is to provide an overview of English vowels according to their relative length, while all mentioned vowel sounds will be accompanied by an example word in which they occur.

## Short vowels: $I, e, a, a, n, o$

Roach (2009, p.13-14) describes short vowels in their relation to cardinal vowels. In his distinction, short vowels are represented by the sound /I/ as in the word 'fish', which is more
open and closer to the centre than cardinal vowel no. 1, the sound /e/ appears e.g. in the word 'yes' and is considered a front vowel approaching an area between cardinal vowels no. 2 and 3 , while the sound $/ æ /$, as in 'cat', is front but not as open as cardinal vowel no. 4 , followed by the sound $/ \Sigma /$ which is understood as a central vowel pronounced e.g. in 'rush'. Another short vowel sound can be found e.g. in the word 'gone' represented by the symbol / $\mathrm{p} /$ and produced to the back of the mouth and considered open based on tongue height. Lastly, the symbol $/ \mathrm{v} / \mathrm{is}$ closer to the centre and also more open with the nearest cardinal vowel being cardinal vowel no. 8 and can be audible in the word 'pull'.

## Long Vowels: $i$ :, $u$ :, s:, s:, a:

English long vowels are different from the six short vowels described above as they have a tendency to be longer in similar contexts such as the sound that follows them. To differentiate them from the short vowels, they are represented by different symbols (Roach, 2009, p. 16) as well as transcribed with the diacritic /:/ that follows the particular sound symbol (Crystal, 2008, p. 273).

As brought forward by Roach (2009, p. 16) the long vowel /i:/ occurs in words such as 'mean' and is closer and more front to the cardinal vowel no. 1 than the short vowel in the example of 'fish' mentioned above. Another long vowel is $/ 3: /$ and can be heard in e.g. the word 'bird' or, very often an expression of hesitation of the speaker in 'er' and is classified as midcentral. /a:/ symbolizes the sound in 'pass' as an open vowel close to the cardinal vowel no. 5, followed by vowel sound found in the word 'horse' - / $5: /$ which is located between cardinal vowels no. 6 and no. 7, far to the back of the mouth. Lastly, /u:/ as in 'soon' is close to the cardinal vowel no. 8 .

## 

RP English which also serves as model system in this work for describing speech sounds, has a large number of diphthongs or "sounds which consist of a movement or glide from one vowel to another" (Roach, 2009, p. 17) and Zsiga defines them as "vowels that require a change in tongue and/ or lip position, often a drastic change, over the course of their duration" (Zsiga, 2013, p. 67).

In the case of English diphthongs, they are ranged across the whole vowel space (Zsiga, 2013, p. 67) and are similar to long vowels (Roach, 2009, p. 17). Melen (2010, p. 22) emphasizes the fact that the first part of a diphthong is much longer than the second part and

Roach (2009, p. 17) supports this fact by an example of the word 'eye' where the diphthong /ai/ occurs, where with the glide from /a/ to / $\mathrm{I} /$ the loudness of the sound is decreased and therefore $/ \mathrm{I} /$ is produced in much shorter and quieter manner and as Zsiga (2013, p. 68) adds, pronouncing diphthong vowel sounds without the off-glide often marks a non-native speaker of English as it is difficult to master and deleting the off-glide might even lead to changing the meaning of the word.

## Triphthongs: ela, ala, sla, a0д, aшa

The most complex vowel type sound in the English language is the triphthong (Melen, 2010, p. 26) as they glide from one vowel to the another and then to one more while being produced at high speed and uninterrupted, as in the conscious pronunciation of the word 'hour', which is pronounced as /ava/. According to Roach (2009, p. 18) triphthongs tend to be difficult to pronounce (similarly to diphthongs) and also difficult to recognize. However, they can be described as composed of closing diphthongs with the schwa added on the end of the vowel sound combination.

### 2.2 Suprasegmental Features of The English Phonetic System

The attention in the previous parts of the thesis has been focused on phonetic segments which form the smallest units identifiable within the stream of speech. However, as Zsiga (2013, p. 331) proposes, phonetic elements group into units at different levels and therefore some patterns present in phonology are better described and understood when represented in units of higher-level organization.

Therefore, the central focus of this section is to analyse those features of speech which span over more segments, not only the basic units of speech. These suprasegmental, or prosodic elements such as the syllable, word stress and phenomena of connected speech as rhythm, elision, assimilation, linking and intonation will be the key objective of the following section.

### 2.2.1 The Syllable

The syllable, as Crystal (2008, p. 467) defines it, is "a unit of pronunciation typically larger than a single sound and smaller than a word", and as such is considered to be the smallest, yet very important segment of any utterance produced by speakers - native speakers of the English language in particular have developed an ability of counting syllables in order to be
able to make phonological generalizations of which the syllable is an appropriate unit, an example might be the allophonic distribution of the consonants /t/ and /l/ in an uncodified position in the middle of a word - the native speaker is able to recognize the pattern based on the generalization that comes forth as the speakers breaks the word into syllables (Zsiga, 2013, p. 331).

Melen (2010, p. 39) examines the syllable from the points of view of both phonetics and phonology. On phonetic grounds, syllables are described as consisting of a centre with very little or no obstruction to the stream of air with the sound produced being relatively loud -Zsiga (2013, p. 334) uses a term "the peak of sonority" around which the other sounds are organized with less prominence, i.e. the sounds before and after the centre will be less loud, as the vowel /i/ in the word 'pin', for instance.

### 2.2.1.1 The structure of English syllable

Firstly, Roach (2009, p. 56) introduces the term of minimal syllable and defines it as "single vowel in isolation", e.g. the words 'are'/a:/ or 'or'/s:/ represented by a single vowel sound, which is a single peak of sonority preceded and followed by no other sound. Another example may be the sound produced when someone asks for silence $/ \mathrm{J} /$.

Zsiga (2013, p. 353) proposes another model of syllable structure where the constituent parts of a syllable are divided into onset + rhyme, and further rhymes into nucleus + coda.

The most sonorous element of a syllable is then the nucleus while lower sonority sounds before the nucleus are grouped into the onset, those following the nucleus are grouped into the coda. By definition, a syllable must contain a nucleus, however syllables lacking codas ('free'), onsets ('inch') or both ('eye') exist.

This distinction is important for determining whether a syllable is closed or open. Melen (2010, p. 39) illustrates this on several examples for open syllables as with the word 'fine' or 'eye' and 'fin' or 'print' for closed syllables, and also argues that closed syllable are more widely used in English for its tendency to group consonants at the end of words.

### 2.2.1.2 Strong and Weak Syllable

Another noticeable feature of English syllables is that they may take on properties according to which they are called either strong or weak. It is clear from a description that Zsiga (2013, p. 356) puts forward that there are several ways of realization for making as syllable to
sound more prominent, i.e. by making it longer or louder, the vowels and consonants of the syllable could be more carefully articulated, or it may be produced with higher pitch. Roach (2009, p. 64), on the other hand, argues that "the most important thing is that any strong syllable will have as its peak one of the vowel phonemes" except $/ \partial /, / \mathrm{i} /, / \mathrm{u} /$, and if the peak vowel is one of $/ \mathrm{I} /$, $/ \mathrm{e} /, / \mathfrak{x} /, / \mathrm{A} /, / \mathrm{p} /, / \mathcal{J} /$, then there will be a coda. In contrast, there is only a small number of peaks for weak syllables, while words can end in a weak syllable ending in a vowel and therefore with no coda, such as in 'better' / $2 /$, or 'happy' $/ \mathrm{i}$ /, and lastly 'thank you'/u/.

Another importance of distinguishing between strong and weak syllables lies in the fact that strong, or stressed, syllables occur near the word edges which provides information on how discrete words can be derived from a continuous stream of speech by marking word edges (Zsiga, 2013, p. 357). Melen (2010, p. 40) supports this argument by stating that breaking words down into syllables is not an easy task for learners of English as attention must be paid to whether a syllable is considered open or closed, the dialect plays its role, whether the speech is rapid or slow, formal or informal, spontaneous and the overall context of the utterance must be taken into an account, making it one of the aspects of native speaker's general knowledge and competence.

The previous sections have shown the syllable as a basic unit of speech and that syllable segments are organized around a sonority peak, which can be either a vowel or a syllabic consonant. It has also been illustrated that syllables can consist of an onset, nucleus and coda, while the structure of a syllable determines whether thy syllable is closed or open, strong or weak. The properties of syllables mentioned above may be understood as a foundation for many other suprasegmental features of speech which will be discussed in subsequent sections.

### 2.2.2 Stress

The term stress might be understood as varying levels of emphasis placed on different syllables in a word (Zsiga, 2013, p. 354) or as Crystal (2008, p. 454) defines it "the degree of force used in producing a syllable". The extent of the emphasis put on a syllable then defines if the syllable is considered stressed or unstressed when the former is produced more prominently than the latter.

Roach (2009, p. 73) states that there are two approaches to studying linguistic stress from the point of view of production and of perception. When a stressed syllable is produced, more muscular energy involved in speech sound production is involved, and when the stressed syllable is being perceived the characteristic commonly recognized is its prominence, however

Melen (2010, p. 41) puts forward an argument that more important that the muscular energy involved in the production of a stressed syllable is its higher pitch and its length.

Zsiga (2013, p. 356) argues that a syllable may be made prominent in several ways - it can be made longer, louder, it may have higher pitch, or it can simply be more clearly articulated with all these factors being present in English.

### 2.2.2.1 Word stress

Word stress is most often marked in transcription by a small vertical line ('), which will also be used in this work where examples of stress placement will be presented. Zsiga (2013, p. 360) states "stress is multi-leveled" and it can be examined on three or even four different levels. Roach (2009, p. 75) proposes examples of primary stress, secondary stress and the last level of stress carrying the quality of being unstressed at all.

The primary stress is illustrated by Roach (2009, p. 75) on the example of the word 'around'/ə'raund/. The stress diacritic marks the second syllable of the word with the first being weak, recognized in speech by the pitch of the voice which does not continue on the same level but usually falls from a higher to lower pitch on the second syllable for 'around'.

Another type of stress, the secondary stress, is distinguished as weaker than the primary stress, yet stronger than the weak syllable as in anthropology /,ænӨra'poladji/, where the secondary stress is transcribed with a low mark (, ).

### 2.2.2.2 Stress Placement

The placement of stress in English in often considered a complicated matter as in English, stress can be placed on any syllable within the word - illustrated by Melen (2010, p. 42) on following examples, indicated in bold - " mother, experience, intonation, throughout", however he also mentions that the most common stress placement seems to be on the first syllable, which is supported by Zsiga (2013, p. 360) who indicates that "the main stress is usually found near word edges, not in the middle of words".

There are differences in stress placement based not only on a number of syllables in the word and their phonological structure, but there are more distinguishing factors put forward by Roach (2009, p. 76) such as determining the complexity of the word on morphological level (whether it contains e.g. a prefix, suffix or if it is a compound word where the element on the left is usually more prominent, etc.) or the grammatical category of the word (e.g. there is a difference 'object' as a noun and 'object' as a verb).

The concept of stress in the English language is such a complex matter that both Roach (2009, p. 76) and Melen (2010, p. 42) suggest learning the placement of stress for each word individually as again, the ability of being able to predict the treatment of stress placement in unfamiliar words is mostly the domain of competence of the native, sometimes close to native speaker.

### 2.2.3 Rhythm

Melen (2010, p. 51) views rhythm as one of the most important aspects of connected speech for intelligibility in English, with one of the reasons being that English has long been considered a stress-timed language. The stress-timed rhythm theory is explained by Roach (2009, p. 107) as "the times from each stressed syllable to the next will tend to be the same, irrespective of the number of intervening unstressed syllables".

The rhythmic property of speech is closely linked to the definition of stress as a prominence relation (Zsiga, 2013, p. 358) and this statement correlates with a definition of rhythm proposed by Crystal (2008, p. 417) as "the perceived regularity of prominent units in speech. The rhythmicality may be stated in terms of patterns of stressed $v$. unstressed syllables" and Roach (2009, p. 107) provides an example sentence: 'Walk 'down the 'path to the 'end of the ca'nal, which shows that irrespective of the number of unstressed syllables separating the stressed syllables (in bold), the time intervals between stressed syllables measured in speech should be almost the same. However, the theory of stress-timed language has been proven to lack enough scientific data to confirm that the tendency to hear speech more rhythmical than it is in reality is truly evidence based.

Zsiga (2013, p. 360) finds it important to note that the alternating nature of stress is captured by introducing the term of a 'metrical foot', which she defines as "a grouping of one or more syllables, one of which (the head) is stressed. In the simplest case, a foot consists of two syllables". According to Roach (2009, p. 108), the foot starts with a stressed syllable and contains all unstressed syllables that follow up to the next stressed syllable, again illustrated on the same example sentence as above: |'Walk |'down the | 'path to the |'end of the ca| 'nal|.

The importance of a single foot is based on its importance in given context and there are many factors influencing the regularity of the English rhythm, be it the fact whether the speech is given in formal settings where higher degree of regularity can be measured or other aspects leading to less regularity such as context, conversational style, anxiety or hesitation (Melen, 2010, p. 51).

### 2.2.4 Assimilation

The term assimilation is perceived as one of different kinds of phonological alternations and refers to the influence of one sound segment on the articulation of another resulting in the sounds becoming either more similar or even identical (Crystal, 2008, p. 39), or in other words "two sounds that are different become more alike" (Zsiga, 2013, p. 232), and as such produce sound changes.

Assimilation naturally occurs in the speech of native speakers, especially in rapid speech and casual context while the extent to which sound change caused by assimilation is recognizable varies adequately (Roach, 2009, p. 110). A crucial task for identifying one of the two types of assimilation is to first identify whether the phoneme in question assimilates with the preceding phoneme or if it is influenced by a phoneme that follows, based on this distinction the assimilation is called regressive or progressive. A regressive assimilation takes places when the first phoneme is influenced by the phoneme that comes after it and Roach (2009, p. 111) gives several examples such as 'that person' is in rapid speech pronounced as /ðæр рз:sn/ - the alveoral consonant /t/ changes into /p/ before a bilabial consonant. Progressive assimilation is created in the opposite direction with examples such as in cases of final /t/, /d/ followed by /j/ and combined to form $/ \mathrm{t} \mathrm{f}$ / and $/ \mathrm{d} 3 /$ so that ' not yet' sounds / not $\int \mathrm{et} /$.

Assimilation is a phenomenon that is often considered the reason for spoken English being perceived as more difficult than its written form by learners who might find it difficult to follow native speaker's spontaneous speech, however as it will be proposed in later parts of this thesis, not assimilating where a native speaker would, is not considered a core intelligibility feature within ELF.

### 2.2.5 Elision

Elision is another aspect of connected speech typical for native speaker's utterance and similarly to assimilation, is not crucial for learners of English to be able to elide, however, the knowledge of it might improve their understanding of English in a native context (Melen, 2010, p. 48).

Elision is defined by Crystal (2008, p. 166) as "an omission of sounds in connected speech, both consonants and vowels may be affected, sometimes whole syllables may be elided". A common example is the loss of a weak vowel after $/ \mathrm{p} /$, /t/, /k/ as in examples
illustrated by Melen (2010, p. 48) 'potato' / $\mathrm{p}^{\mathrm{h}}$ 'teitəo/, 'tomato' $/ \mathrm{t}^{\mathrm{h}}$ 'ma:təo/, or 'today' $/ \mathrm{t}^{\mathrm{h}}$ ' del/. Another possible case for elision is a weak vowel followed by $/ \mathrm{n} /$, $/ \mathrm{l} /, / \mathrm{r} /$ which then become syllabic as in 'tonight'/tnart/ or 'police'/pli:s/. Another typical opportunity for elision to occur is consonant clusters where consonants are elided for the sake of its convenience, for example 'next day' will be pronounced /neks deI/ or acts/æks/ or the loss of/v/ in 'of' before consonants, 'lots of them' therefore becomes /lpts ə ðem/, for instance (Roach, 2009, p. 114).

### 2.2.6 Linking

As another aspect of fluent speech, linking might be explained as a means for easing the conversation by introducing a sound between linguistic units (Crystal, 2008, p. 285) and according to Hewings (2020, p. 58) a smooth connection between words within a speech unit is achieved when "the sound at the end of one word is linked to the sound at the beginning of the next so that there is a smooth connection between them".

Roach (2009, p. 115) considers linking /r/ to be one of the most widespread examples of linking in connected speech and Hewings (2020, p. 58) provides some examples from which is evident that in case a word ends in -r or -re with a final vowel sound such as car $/ \mathrm{ka}: /$ and is followed by a word with an initial vowel sound such as 'engine', a linking /r/ sound is inserted in order to make pronunciation smoother - /kar end $3 \mathrm{~m} /$.

However, it is important to consider the fact that for many rhotic English accents (Scottish, Irish and most North American accents) it is only natural to always pronounce $/ \mathrm{r} /$ in words ending in -r or -re, e.g. / ka:r/.

There is another, however less common, practice of inserting /r/ sound where a word end in one of the vowels /a:/,/ $0: /, / 3: /$, /ə/,/ıə/, /ea/, /və/ but its spelling does not include -r or -re ending (Hewings, 2020, p. 58). Roach (2009, p. 115) provides an example of this 'unjustified' spelling as can be seen in the phrase 'media event' which can be pronounced with 'intrusive $r$ ' as /mi:dər ivent/. This way of pronouncing is not always considered as standard or correct, even though it is practised by native speakers.

There are many more examples of different types of linking, e.g. very common one takes place in cases where a consonant sound at the end of a word is linked to a vowel sound at the beginning of the next as in the phrase 'one evening' / wan i:v.nıy/, or when a word ends with a consonant sound followed by the same consonant in the initial position of the next word there is one longer consonant sound produced instead of two separate ones as in 'glorious sunshine' /glo:.ri.əs s^n.fann/ (Hewings, 2020, p. 58).

Linking is a very typical and prominent aspect of connected speech which allows for understanding of the great difference between pronunciation of words in isolation and in the context of fluent speech, causing sometimes confusion about edges of the individual words. When the words merge based on linking the final and initial sounds, the word boundaries become altered. However, as always, it is the context which usually resolves any possible misunderstanding.

### 2.2.7 Intonation

Intonation is an inseparable feature of fluent speech. Prior to its explanation in this section, it is important to define another term which is fundamental for understanding other aspects linked to intonation, as it is influenced by a certain variable - the pitch.

Pitch is defined by Davenport and Hannahs (2005, p. 84) as "the physical basis for intonation" which is realized in the work of vocal folds and their vibration and perception of the frequency of this vibration is known as pitch. The higher the vibration rate is, the higher the pitch is perceived to be. Therefore, high pitch can be noticeable in young children or women with the reason being that their vocal folds vibrate at a higher frequency than those of men whose pitch is typically perceived as lower. When speech is being produced, the rate of vocal fold vibration varies either consciously (e.g. for a specific reason of imitating some) or unconsciously (e.g. body movement during exercise, making the pitch rise and fall which is out of the speaker's control, or the mentioned physical structure) caused by changing the position of articulators.

The English language is classified as one of intonation languages as it uses pitch variation over larger section of speech, such as phrases or sentences (Davenport and Hannahs, 2005, p. 86), and Roach (2009, p. 129) mentions a term tone unit, which is crucial for analysing intonation. Melen (2010, p. 59) argues that a tone unit can be defined by logical pauses organized around phrases and clauses, marking the meaning of the utterance. These pauses are marked by a vertical line ( $\mid$ ) as in | In France, | where farms tend to be smaller, | the subsidies are more important. |. The example illustrates that these clusters of words which are said together correlate with punctuation marks (e.g. commas where the speaker might pause or take a breath) and at the end of the sense group, i.e. the sentence, the voice comes to a stop completely. These pauses are crucial for avoiding misunderstanding or confusion and for ensuring intelligibility.

Intonation is defined by the way pitch is manipulated which can be described as high and low (Roach, 2009, p. 119) or falling and rising (Zsiga, 2013, p. 392) and can be identified by several universal properties. Low pitch is usually linked to general statements and finality, while rising pitch is associated with non-finality, uncertainty (Zsiga, 2013, p. 393).

Another practical distinction between the typical use of falling and rising intonation is suggested by Melen (2010, p. 61-62) who assigns falling intonation to the use in declarative clauses or wh-questions, imperative and exclamation phrases, while rising intonation is understood to be present in yes/no questions or according to Zsiga (2013, p. 393) also in positive tag questions.

As it has been shown in the above section, intonation can influence speech to a great extent and therefore is traditionally considered crucial for intelligibility within native speaker groups or even EFL/ESL contexts and a great amount of time is usually dedicated to practising and correcting intonation. The level of importance of segmental and suprasegmental features of English for non-native speakers and users will be discussed in subsequent chapters of this thesis as there have been numerous debates among scholars and English teachers about which of segmental or supra-segmental features should be considered more crucial in pronunciation teaching, especially in the context of English as a lingua franca.

## 3 VARIATION IN ENGLISH PRONUNCIATION

"What could possibly matter more than to take a human being and change her into a different human being by creating a new speech for her?" My Fair Lady, Act 1, Scene 1 (quoted in Zsiga, 2013, p. 427)

The theme of the play My Fair Lady suggests how the language one speaks shapes the way a person is perceived and how identity can be formed through language. The previous chapter of this work introduced some phonetic and phonological properties and rules of the English language as if speech production could be considered a uniform phenomenon, however variation in pronunciation is inevitable (Zsiga, 2013, p. 427).

Variation in speech and pronunciation comes from different sources, some of them might be influenced, some of them are determined by an inborn physical structure of the speaker, and if understood in this way, it could be argued that variation is only natural and present even among speakers of the same language who, by definition, do not use the language in the same way, supported by the fact that there are such terms as British, American or Australian Englishes (Walker, 2015, p. 9).

The concepts of pronunciation variety, its sources and typical 'deviations' in English pronunciation of speakers of eight different L1s with the emphasis on Czech speakers of English will be the key objectives of this chapter.

### 3.1 The Study of Variety

Walker (2015, p. 9) argues that variation "is an entirely natural phenomenon, and a basic fact of language life" which most speakers of all languages encounter over the course of linguistic demands of everyday life with language variation being mostly linked to spoken language in contrast to written language since "any widely-spoken language is likely to vary not just from region to region but also across socioeconomic, ethnic and sexual boundaries" (Cruzz-Ferreira and Abraham [quoted in Walker, 2015, p.9]). Variation seems to have different sources in terms of place (dialect), situation (register), social standing and identity including class, race, gender, age and sexuality.

### 3.2 Typical Variations in Segmental Features

The previous section mentioned different sources for variety among speakers of English which, together with the information provided in chapter 2, will serve as a contrastive foundation for illustrating the ways in which non-native speakers may vary in terms of pronunciation on segmental level and non-standard features of pronunciation associated with speakers of different L1s and Czech speakers of English will be examined in more detail in subsequent sections.

Jenkins (2017, p. 32) puts forward an argument that "habit formation plays a major role in the production of L2 sounds" as the muscles involved in L1 speech production are automatically activated in L 2 production and a great effort is taken to consciously control them until sufficient practice leads to new habits being formed, especially with sounds that are different or sometimes even absent in the L2. On the other hand, there might also be similarities between speaker's L1 and L2 sounds and the latter sounds are then altered and categorized according to L1 sounds familiar to the speaker, which is understood by Walker (2015, p. 29) as employment of substitution strategy by learners which might result in confusion for both native and non-native speakers and listeners.

There are more factors influencing variety in pronunciation and Jenkins (2017, p. 34) concludes that they typically lead to three main groupings of segmental deviation types: sound substitution and conflation, elision and addition.

Jenkins (2017, p. 34) illustrates the use of Japanese /l/ instead of /r/ and vice versa, as an example for deviations involving substitution. Walker (2015, p. 29) examines substitution in situations caused by the fact that the consonant sounds $/ \mathrm{t} / \mathrm{f} /$ is not present in many Portuguese accents and there the word 'chair' often sounds as 'share'. Jenkins (2017, p. 35) mentions the tendency to pronounce both $/ \theta /$ and $/ \mathrm{s} /$ sounds as $/ \mathrm{s} /$ without any distinction, for instance, as an example of conflation.

Typical for speakers of Taiwanese background is the omission of the /r/ sound in 'price', which in terms of deviation can be recognized as consonant deletion, where in other cases a sound might be replaced by $/ \mathrm{R} /$ as in the Chinese-English pronunciation of 'duck' which is then pronounced as $/ \mathrm{d}_{\wedge} \mathrm{F} /$. An example of epenthetic addition might be inserting an intrusive sound between two other sounds such as $/ \mathrm{t} /$ in the word 'mince' /mints/ or the $/ \mathrm{p} /$ sound in 'comfy' then sounding as $/ \mathrm{k} \wedge \mathrm{mpfı} /$, while paragoge, another type of addition, is defined by the addition of another sound to the end of a word, such as a Korean speaker of English would use in the word 'luggage' and pronounce it as /lagidzı/.

### 3.2.1 Typical Variations in Segmental Features of Czech Speakers of English

Most common deviations in pronunciation on an international scale were mentioned in the previous section, with some examples of typical variations from standard patterns. This section will illustrate deviations on segmental level of pronunciation generally known as being problematic for Czech speakers of English.

When both English and Czech vocalic systems are compared, it becomes evident that the most prominent difference lies in the complexity of the English vowel system (Skarnitzl and Rumlová, 2019, p. 110) and a higher number of vowels in general (Melen, 2010, p. 15). The larger English vowel inventory leads Skarnitzl and Rumlová (2019, p. 110) to the assumption that the vowels not present in the Czech open vowel region may be recognized as most problematic for Czech users of English. There is only one pair of Czech vowels /a/, /a:/ in the open region, while the English vowels are represented by $/ æ /, / \Lambda /, / \mathrm{a}: /$, and $/ \mathrm{p} /$. Melen (2010, p. 17) argues that the non-existence of e.g. the sound $/ æ /$ might be perceived by Czech learners as long (e.g. as in 'badly') or short (e.g. in 'hat'), nevertheless it is set apart from Czech / $\varepsilon$ :/ by being much more open. How problematic it seems to be is supported by Skarnitzl and Rumlová (2019, p. 110-111) who suggest that it is the only thoroughly examined English vowel sound in terms of production and perception of Czech learners. An example of a frequent realization
of the $/ \mathfrak{æ} /$ sound is illustrated in the tendency of Czech speakers to pronounce the front open $/ æ /$ as mid to open-mid vowel $/ \varepsilon /$, while the contrast with short $/ \mathrm{e} /$ is achieved by prolonging it which in a phrase like 'bad bed' might sound as /be:d bed/. Šimáčková (quoted in Skarnitzl and Rumlová, 2019, p. 111) contributes with her own findings of Czech speakers' reliance on duration when a decision is to be made between /æ/ and /e/ and also Šimáčková and Podlipský (quoted in Skarnitzl and Rumlová, 2019, p. 111) argue that vowel height distinction is less likely to a be a contrastive factor in pronunciation of $/ æ /$.

Melen (2010, p. 15) states that there are other differences between Czech and English vowels, however the difference in articulation seems to be the most significant as the tip of the tongue in Czech is brought in contact with the lower floor of the oral cavity, including lower incisors and gums, while there is no such contact involved in the production of English vowel sounds.

Differences based on the way of articulation are summarized by Skarnitzl and Rumlová (2019, p. 110) who find, based on the distinction of Czech vowel length, that three of the pairs of the short and long vowels are of the same quality, i.e. $/ \mathrm{a} /$ and $/ \mathrm{a}: /, / \varepsilon /$ and $/ \varepsilon: /, / \mathrm{o} /$ and $/ \mathrm{o}: /$, however difference emerges between the long and short high back vowels /u/ and /u:/. Similarly described are short and long high front vowels /i/ and /i:/, which is in direct opposition with the understanding of the same concept in English - vowel length is usually marked in long vowels, e.g. /i/:, but length itself is not considered that distinctive as there are more factors influencing the quality of English vowels. Melen (2010, p. 70) puts forward another argument regarding the realization of vowel length in English where he finds that there are three levels of duration based on consonant variation following the vowel, where Czech users do not distinguish between e.g. 'bid' and 'bit' or 'beat' and 'bead' and simply insert the Czech version sound 'i' - /i:/.

Another distinguishing factor proposed by Melen (2010, p. 15) is based on the fact that English vowels are generally more influenced by their consonant environment as well as their position in the syllable, word, rhythm or intonation, which is not applicable to Czech vowels as they are more independent of other surrounding sounds and factors.

The extent to which intelligibility is impeded by variation in vowel sound production is not easily gauged as sometimes the different realization of a sound is more a question of accentedness than comprehensibility as it is in the case of English and Czech diphthongs, for instance (Skarnitzl and Rumlová, 2019, p. 112).

Despite the fact that the English consonantal inventory is not as complex as its vowel system, there are still particular consonants which are generally difficult for Czech students.

The basic differences between Czech and English consonant sounds, as stated in Melen (2010,
 in the English system. Similarly, the sound /ts/ of Czech 'c' can only be found in some words of foreign origin (e.g. 'pizza') and cannot be confused with consonant sounds $/ \mathrm{t}+\mathrm{s} /$ as in 'outside' or 'cats'. In these cases, both consonants are produced separately. In contrast, the Czech system does not offer equivalents for the English sounds $/ \theta / / / \delta /, / \mathrm{w} /$ and 'dark l'/h/.

According to Skarnitzl and Rumlová (2019, p. 112) there are several problematic areas rooted in consonant sounds production based on those representatives of English consonant sounds not included in the Czech system. For example, dental fricative sounds such as $/ \delta /$ and $/ \theta /$ are very common in English - especially / $\delta /$ sound is often used in grammatical words and therefore important for learners of English. However, it is often pronounced incorrectly as Czech speakers tend to replace $/ \delta /$ with $/ \mathrm{d} /$ or $/ \mathrm{z} /$, and $/ \theta /$ is often articulated as $/ \mathrm{f} /$, $/ \mathrm{s} /$ or less often also /t/.

Melen (2010, p. 35) argues that another area of mispronunciation arises in the English sound $/ \mathrm{w} /$ which is often articulated as $/ \mathrm{v} /$ by Czech learners or even vice versa as proposed by Skarnitzl and Rumlová (2019, p. 112) where also an example of the word 'very' sounding as /weri/ is illustrated.

Another mispronunciation often occurs in the nasal consonant $/ \mathrm{y} /$. Even though $/ \mathfrak{y} /$ is present in both consonantal systems, in contrast to Czech, it has a distinctive function in English, such as /sın/ and /sıy/ (Melen, 2010, p. 36), Skarnitzl and Rumlová (2019, p. 112) assume that it is rarely used in Czech, e.g. in a place of assimilation as in 'banka' /baŋka/ and therefore often mispronounced by Czech speakers of English in words like 'singing' being realized as /sıngınk/.

Typically for English, voicing contrast in final positions is preserved as in 'dock/dpk/ compared to ' ${ }^{\mathrm{dog}}$ '/dpg/, while in Czech neutralisation of the voicing contrast is prevailing, e.g. 'spát' and 'spád' are both pronounced as /spa:t/.

Articulation of the voicing contrast is also different. /p/, /b/ and /s/ and $/ \mathrm{z} /$ are distinguished in Czech by phonetic voicing while voiceless plosives in English are aspirated in stressed positions as in 'Peter /phi:ta/ and as Pospíšilová (quoted in Skarnitzl and Rumlová, 2019, p. 112) indicates, even advanced Czech speakers of English usually aspirate less than would be ideal.

### 3.3. Typical Variations in Suprasegmental Features

In this section, types of deviations made by non-native speakers of English in areas of word stress, rhythm and intonation will be examined as they have been, suggested by Jenkins (2017, p. 39), often considered the most influential in terms of intelligibility by the majority of phonology authorities, however lacking the data supporting such claims seem to be in terms of evidence-based research.

In contrast to other languages, where the rules of stress placement are less complex than in English, such as Finnish, Polish and Spanish with a relatively fixed stress pattern, English word stress is highly rule-dependent and Jenkins (2017, p. 39) explains that non-native speaker's difficulties arise also from the fact that there is a greater tendency in English to emphasize vowel duration than in other languages. Therefore, even if a speaker places word stress correctly, the vowel may not be made prominent enough and the word stress placement therefore perceived incorrect. Another problem area in terms of stress placement may appear to be with false friends - Jenkins (2017, p. 39) describes a situation where a Portuguese speaker of English pronounces the word 'television' with five syllables while placing stress on the final one.

However incorrect these examples might seem, Jenkins (2017, p.42) argues, that "the most serious word stress deviations of all" are probably those which affect nuclear stress placement, as in the example of the word 'alone' being pronounced as / 'elpn/ with stress on the first syllable, which causes not only word stress to be misplaced, but also the nucleus stress. Walker (2015, p. 36) explains that nuclear stress is crucial for dividing speech into "manageable and meaningful blocks of information" and that not adhering to it adequately can have a serious hindering result for intelligibility.

When rhythm and intonation are examined it becomes clear that deviations often result from the transfer of L1 rhythmic patterns and it is suggested by Wenk (quoted in Jenkins, 2017, p. 43) that the patterns from speaker's L1 might be overcome only at an advanced stage of proficiency. Another area of variety in intonation seems to be controversial as Jenkins (2017, p. 44) argues that what is known as 'attitudinal' function of intonation should be considered elusive, and therefore possible errors in expressing attitude through intonation should not be considered impolite or even offensive, let alone a mistake.

Moreover, she has come to an understanding that apart from a falling intonation in whquestions and rising intonation in yes/no questions, there is no other grammatical function of intonation. There are also other points made by Walker (2015, p. 42) who argues that not a high number of non-native speakers reach rapid speech comparable to natives who are able to produce around 350 syllables a minute, and therefore it would be even undesirable to apply
features of connected speech as these changes to connected speech at slower speeds might lead to unintelligibility.

### 3.3.1 Typical Variations in Suprasegmental Features of Czech Speakers of English

In contrast to non-adherence to typical standards where segmental issues are viewed as crucial for conveying accuracy (Lintunen et al., 2015), the objective of this section is to identify areas of pronunciation known to be the source of fluency in speech as well as problematic for Czech users of the English language.

One of the distinguishing factors of importance between Czech and English is influenced by lexical stress which is fixed on the first syllable without prominence marking in Czech, while in English, stress is highly contrastive and complex as it has been illustrated in previous parts of the thesis. Skarnitzl and Rumlová (2019, p. 113) interestingly emphasize the importance of mastering the placement of unstressed vowels as they tend to be reduced in English resulting in shorter duration and centralization towards the schwa/ $/ 2$. The reason why Czech speakers should be concerned with the realization of the / // sound is according to Skarnitzl and Rumlová (2019, p. 113) the major role that this factor seems to have in determining the nature of rhythm in English. This is also illustrated by Melen (2010, p. 74) in examples of disrupting the rhythmical pattern by Czech speakers in longer words such as 'considerable' or 'particularly'. However, Jenkins (2017, p.146) proposes an opposing argument when she finds it unnecessary "to weaken an unimportant item in order to highlight an important one, provided that the latter is adequately stressed" and she continues "British actors regularly fail to produce weak forms as do speakers of Scottish and South African English, without any consequent loss of intelligibility".

Šimáčková et al. (2014a) state that the speech of Czech speakers is often disrupted mainly by a large extent of glottalization of word-initial vowels which could be understood as L1 transfer as glottalization of word-initial vowels is a feature present in Czech (Šimáčková et al., 2014b), in contrast to native English fluent speech where linking is favoured if possible (p. 680) as linking (resulting in weakening of word boundaries) and glottalization (resulting in emphasizing word boundaries) need to be understood as opposite strategies.

Intonation is a feature of connected speech achieved by highly proficient Czech speakers of English and as Volín et al. (2015, p. 107) argue, a number of important functions is fulfilled by intonation, such as signalling major information in English in contrast to Czech where other linguistic means is employed for the same purpose - e.g. grammatical inflection. On the other
hand, Skarnitzl and Rumlová (2019, p. 114) suggest that intonation is of such importance in English due to its fixed word order, when compared to Czech, and that this is the reason why English relies heavily on melodic cues expressed in intonation. Melen (2010, p.75) argues that the reason for why Czech speakers might sound monotonous when speaking English are the intervals based on pitch movement (higher or lower), these intervals are often shorter when realized by a Czech speaker, supported by arguments proposed in Skarnitzl and Rumlová (2019, p. 114) stating that the pitch range has been found much wider in English than in Czech.

### 3.4 Segmental and Suprasegmental Features in Selected First Languages

The following section will introduce the most commonly noticed problem areas of segmental and suprasegmental features of pronunciation examined in relation to selected L1s of speakers in alphabetical order and with regards to those core pronunciation features which are considered the most fundamental in terms of intelligibility based on the ELF approach discussed later in the thesis.

### 3.4.1 Arabic

Modern Standard Arabic (MSA) is currently on the sixth position among most widely spoken languages of the world and there are about 186 million native speakers who are linguistically divided by many regional varieties of their native language (Walker, 2015, p. 101).

There are several consonant sounds in Arabic without an equivalent in English such as $/ \mathrm{p} /$, therefore often replaced by $/ \mathrm{b} /$ which is the closest phoneme for Arabic, interestingly, male speakers tend to use /b/ in more cases than females, who, on the other hand, have been found to overgeneralize the use of /p/ (Salim and Al-Badawi, 2017). Another possibly problem causing consonant is the sound of $/ \mathrm{g} /$ which tends to be mispronounced as $/ \mathrm{q} /$ in areas belonging to North Africa or $/ 3 /$ e.g. in Egypt or Lebanon. Another non-standard consonant of Arabic is $/ \mathrm{t} /$ /, however adjacent sounds of $/ \mathrm{t} /$ and $/ \mathrm{f} /$ are found in Arabic words (Walker, 2015, p. 102). Salim and Al-Badawi point out that the ability to pronounce this consonant of English is dependent on the sex and social status of the speaker, as female speakers of more prestigiously perceived dialects tend to be more able to adopt the sound. /v/ occurs in a limited number of Arabic vernaculars in relation to loan words from French, such as 'villa', 'virage' and also 'vodka', but for most speakers, the sound might intervene with intelligibility (Walker, 2015, p. 103). The sound $/ \mathrm{y} /$ does not have any equivalent in any dialect of MSA however it can be
recognized in speech as a variant of $/ \mathrm{n} /$ when it follows $/ \mathrm{k} /$ (Salim and Al-Badawi) as in 'in kana’/ıjka:na/ meaning 'if he was' (Walker, 2015, p. 103).

Consonant clusters in initial and final positions do not seem to be problematic as long as the sound $/ \mathrm{p} /$ is not present - 'sport', for instance, except for dialects to a large extent distinguished from MSA where two-consonant clusters are possible. In these vernaculars, speakers tend to insert a vowel for smoother pronunciation (Walker, 2015, p. 103).

Compared to English, Arabic speakers use a change in word order to mark contrast, therefore nuclear stress might be shifted in English words and intelligibility compromised (Jenkins, 2017, p. 105).

### 3.4.2 Chinese

The Language considered standard in China is Mandarin with Cantonese and Hokkien being understood as dialects of the southern parts of the country without a written form (Walker, 2015, p. 103).

There are several problematic consonants affecting intelligibility in English, such as $/ \mathrm{t} / \mathrm{f}$, especially for speakers from Southern China and Taiwan and therefore the sound is often merged with /ts/ (Walker, 2015, p. 105). Xu et al. (2017, p. 21) state that there are no voiced fricatives in Chinese and therefore one of the most salient features of Chinese English is its replacement with /w/ and Walker (2015, p. 105) suggests that a strategy for overcoming this problem might be teaching speakers to use /f/, which is also not ideal but usually causes less misunderstanding than the use of $/ \mathrm{w} /$. Another characteristic feature is the substitution of $/ \mathrm{z} /$ by $/ \mathrm{dz} /$ or its complete omission in final positions and therefore a suggestion for the use of $/ \mathrm{s} / \mathrm{in}$ final positions is found beneficial by Walker (2015, p. 105). One of the most insurmountable obstacles for Chinese users of English seems to be the sound $/ 3 /$ and as Walker (2015, p. 105) points out, especially in the word 'usually' which is often pronounced as /jurəli/ even by highly proficient speakers. Xu et al. (2017) find that a high number of speakers vocalize the sound /I/, especially where a dark /l/ would be used, such as 'field' which becomes /fiod/ and Walker (2015, p. 106) mentions examples where /l/ is omitted completely as in 'wolf' or 'world'.

Interestingly, despite the fact that there are no consonant clusters present in Chinese, speakers do not seem to have problems with clusters in English, except for exceptional dropping of a consonant or inserting a vowel sound which can change the word 'mist' into 'mister' and therefore impede intelligibility, similarly, speakers tend to resort to the vowel distinction which occurs in Chinese and which does not have a contrastive function (Xu et al., 2017, p. 26) and
therefore, a lot of training is required in order to be able to distinguish between e.g. 'beat' and 'bit' (Walker, 2015, p. 107).

In terms of suprasegmental aspects - Chinese is a tonal language and therefore the inappropriate treatment of intonation may often cause misunderstanding (Walker, 2015, p. 107). Xu et al. (2017, p. 27) mention the practice that pronouns are often stressed by Chinese speakers - especially in a position of a final function word in order to signal the end of a sentence.

### 3.4.3 German

German, as one of the most spoken languages across the European Union, has a large number of dialects with Hochdeutsch being considered the standard form. With regard to consonants, there are not many problematic phonemes, except for $/ \delta /$ and $/ \theta /$ which are not usually hindering for intelligibility or overall understanding, in contrast to often occurring devoicing of final consonants such as ' $d$ ' pronounced as $/ t /$ or ' $k$ ' as $/ \mathrm{g} /$ (Hickey, 2014). The non-existence of voiceless plosives $/ \mathrm{p} /, / \mathrm{t} /$, /k/ might also cause problems, particularly in initial positions. Also $/ \mathrm{d}_{3} /$ is not present in German except for loan words and it is often replaced with $/ \mathrm{t} \mathrm{f}$ /, which can be trained on words like 'chin' and 'gin'.

Spelling of ' $v$ ' and ' $w$ ' may cause problems for speakers as the sound $/ v /$ is most often represented by 'w' in German and therefore users tend to overuse the English/w/. Also, the sound $/ \mathrm{s} /$ might be distributed differently in initial positions and $/ \mathrm{z} /$ might be used instead. In terms of consonants clusters, German speakers do not seem to have any difficulties with their realization (Walker, 2015, p. 108-109).

Vowel length is distinguished in German, however English consonants are, compared to those of German, shortened before voiceless consonants and therefore German speakers need some practice in this area. Both Booth (2014) and Hickey (2014, p.2) point out the overgeneralization of German $/ \varepsilon /$ in places where $/ æ /$ would be used.

### 3.4.4 Greek

Greek is spoken by about 16 million people in Greece, Cyprus and also the USA, Australia, Germany and England where a high number of expatriate Greeks and Cypriots reside (Walker, 2015, p. 110). There are several equivalent phonemes in Greek as there are in English, however, aspiration where the sound $/ \mathrm{p} /$ appears in an initial position seems to be inadequate and therefore e.g. 'pin' is often realized to sound as 'bin', the same is found in the aspiration of $/ t /$ and $/ \mathrm{k} /$, there are, however, Greek words which can be used for demonstration of the right
realization of aspiration. Another phoneme which is not present in Greek is $/ \mathrm{t} \mathrm{f} /$ and is often substituted with $/ \mathrm{t} /$ and $/ \mathrm{s} /$, the right pronunciation of $/ \mathrm{t} \rho /$ can be illustrated on the example of Cretan dialect, where /tg/ can be found. Similarly, most Greek speakers find the sound /d3/ difficult to pronounce as it is non-existent in Greek and therefore there is a tendency to use /d/ and $/ \mathrm{z} /$. In case of the sound $/ \mathrm{s} /$ appearing in a position where it is preceded and followed by vowels, Greek speakers tend to pronounce $/ \mathrm{z} /$ instead. Difficult and intelligibility problem causing is also the sound $/ \mathrm{J} /$ as Greeks usually use $/ \mathrm{s} /$ so there is no difference between e.g. 'same' and 'shame'. Very problematic seem to be both sounds $/ \mathrm{w} /$ and $/ \mathrm{h} /$ and guidance is usually needed in order to help speakers produce these sounds. Typical for Greek speakers is also the tendency to change $/ \mathrm{s} /$ into $/ \mathrm{z} /$ in word such as 'smile'- where $/ \mathrm{m} /$ is followed by a vowel. Another example of difficulties with consonant clusters is $/ \mathrm{m} /, / \mathrm{n} /$ and $/ \mathrm{y} /$ which are often elided before voiced consonants - e.g. the word 'pounder' becomes 'powder' (Walker, 2015, p. 112-113).

Walker (2015, p. 113) also points out that short and long vowels are not distinguished in Greek and their length might be perceived as midway between short and long vowels of English, which is supported by Papachristou (2019, p. 6) who points out that Greek students do not differenciate between /I/ and /i:/ with the same pattern being repeated for most English vowels as the speakers have a tendency to produce their L1 vocalic sounds.

On the other hand, difficulties do not seem to arise for Greek speakers in stress placement as words are grouped very similarly to English and nuclear stress becomes shifted in order to change meaning (Walker, 2015, p. 113).

### 3.4.5 Japanese

Japanese can be contrasted with English in terms of fewer consonants and only five basic vowels with non-existent diphthongs in standard Japanese (Lesley, 2020, p. 18). As Walker (2015, p. 114) argues, Japanese is a language of open syllables, meaning that no consonant can appear without being followed by a vowel and therefore, Japanese speakers tend to add a vowel sound to every consonant other than $/ \mathrm{n} /$. This L1 transfer is expressed in adding vowel sounds $/ \mathrm{u} / \mathrm{or} / \mathrm{o} /$. Consonants which cannot be found in Japanese are $/ \mathrm{\delta} /$ often replaced with $/ \mathrm{z} /$ or $/ \mathrm{d} /$, English / $/$ / is typically substituted with /s/ or / $/ /$ (Lesley, 2020, p. 19). Consonant sound pronounced in English as $/ \mathrm{v} /$ is often pronounced as $/ \mathrm{b} /$ as it is not a phoneme of Japanese, similarly to $/ 3 /$, but its correct realization can be demonstrated on the ' j ' found between vowels as in 'niji' (rainbow) or 'kanojo' (she) which are mostly pronounced as / $3 /$. Japanese speakers are familiar with the sound $/ \mathrm{s} /$ as in 'sake', however it is often pronounced as $/ \mathrm{J} /$ before vowels
such as in 'sip' and 'seat' which then can be confused with 'ship' and 'sheet' (Walker, 2015, p. 117). Also typically problematic for Japanese users of English are /l/ and /r/ which are usually realized in a way that they both sound as Japanese /r/ - similar to both English /l/ and /r/ and therefore the perception of this sound by Japanese speakers is also problematic and can be illustrated on the difference between 'light' and 'right' and the Japanese word 'raito' which means either 'right' or 'light' (Walker, 2015, p. 117). Problematic seems to be also /w/ as it is pronounced in Japanese without lip-rounding (Lesley, 2020, p. 19) as in 'kawa' (river) different from e.g. 'wool' (Walker, 2015, p. 117).

In terms of consonant clusters, Japanese speakers often break the intelligibility of words by inserting vowel sounds into the clusters as in 'breakfast' which is pronounced /burekkufasuto/ (Walker, 2015, p. 117).

Vowel system is distinctive for English and Japanese expressed in a way that Japanese students tend to pronounce English long vowels twice as long as their short counterparts based on L1 transfer of the same practice (Walker, 2015, p. 117). The absence of diphthongs in Japanese does not seem to threaten intelligibility, however emphasis on weakening the diphthong ending is recommended (Lesley, 2020, p. 20).

The different sentence structure tends to be realized in unnecessary pauses breaking the flow of the speech in English as Japanese is syllable-timed language (Lesley, 2020, p. 21) and stress placement is also found to cause intelligibility problems as Japanese users tend to stress pronouns and other function words (Walker, 2015, p. 118).

### 3.4.6 Polish

Polish is a member of the West-Slavic language family, notably similar to e.g. Czech or Slovak with its pronunciation being predictable from spelling. There are several differences between the phonetic systems of both languages - e.g. the lower number of Polish vowels (there are six short vowels) which leads to a tendency of Polish speakers to L1 vowel transfer to English pronunciation (Rojczyk and Porzuczek, 2019, p. 11), and as Walker (2015, p. 121) argues it might therefore be difficult for Polish learners to hear vowel length contrast.

There are many Polish equivalent sounds to English phonemes, however, there are several which might cause some complications regarding intelligibility, such as aspiration of $/ \mathrm{p} /, \mathrm{tt}$ and $/ \mathrm{k} /$ in initial positions of the words before vowels (Rojczyk and Porzuczek, 2019, p. 11) and Walker (2015, p. 122) suggests that aspiration might be illustrated on differences between e.g. Polish 'Piotr' and English 'Peter', or Polish 'kort' and English 'court'. Another consonant sound perceived as problematic might be $/ \mathrm{g} /$ - which is present in Polish before $/ \mathrm{k} /$ as in
'tankowac' or $/ \mathrm{g} /$ as in 'tango' where it is pronounced together with either $/ \mathrm{k} /$ or $/ \mathrm{g} /$ and therefore it needs to be suggested that pronunciation of e.g. 'sting' and 'stink' is not identical in English (Walker, 2015, p. 122). Rojczyk and Porzuczek (2019, p. 14) also mention devoicing of word-final stops and Walker (2015, p. 121) supports their argument by pointing out that there is also a tendency to devoice fricatives and affricates and gives examples of words 'cap' and 'cab' or 'of' and 'off 'sounding identical for that reason and it is also important to emphasize that Poles have a tendency of devoicing final consonant clusters so practice is usually needed as in 'rubbed' or 'words' (Walker, 2015, p. 122).

The number of consonants is lower compared to the English system with six non- nasal vowels (Rojczyk and Porzuczek, 2019, p. 11) and two nasal vowels, with all vowels being short and of the same length in all contexts and therefore a lot of effort might be necessary to achieve the appropriate English vowel length. Also, the shortening of vowels before word-final voiceless consonants is not present in Polish and e.g. 'back' and 'bag' might therefore sound the same, without any contrast in vowel duration (Walker, 2015, p. 123). In addition, Rojczyk and Porzuczek (2019, p. 12) mention that Poles might assimilate the vowel /æ/ by the Polish vowel sounds $/ \varepsilon /$ and $/ \mathrm{a} /$.

The general rules for nuclear stress placement are similar in both languages, however Polish speakers at lower levels of English proficiency tend to make pauses more often, including short grammatical words. Changes in word order in order to achieve emphasis can be made (Walker, 2015, p. 123).

### 3.4.7 Russian

Russian is the most widely spoken of the Indo-European East Slavic languages, with two recognized standard varieties - Moscow and Petersburg. Pronunciation of Russian closely reflects spelling which often causes mispronunciation in English (Walker, 2015, p.127). There are significant differences between the two languages and the non-existing equivalent sounds often lead to substituting English sounds with Russian speakers' L1 sounds (Akhmetova, 2020, p. 31).

There are several consonant sounds possibly causing difficulties in intelligibility, such as $/ \mathrm{g} /$ where final devoicing often occurs when Russian learners speak English, or it is produced as $/ \mathrm{\gamma} /$ in initial positions which might impede understanding. Another sound considered problematic is /b/ which in Russia is fully devoiced at the end of words and devoicing should be eliminated. Sounds /p/, /t/, /k/ are usually aspirated in English, however there is a tendency of Russian speakers not to aspirate them (Walker, 2015, p. 128). In addition, $/ \theta /$ is often
substituted with $/ \mathrm{s} /$ and $/ \delta /$ with $/ \mathrm{z} /$ as in 'thought' pronounced $/ \mathrm{sat} /$ or 'with' as $/ \mathrm{viz} /$, which also illustrates that phoneme $/ \mathrm{w} /$ is pronounced as $/ \mathrm{v} /$ (Akhmetova, 2020, p. 26). Cosonant $/ \mathrm{d} 3 /$ does not exist in Russia, however it appears as a cluster and when speaking English, a very short schwa is usually inserted by Russian speakers (Walker, 2015, p. 128).

English vowel system is considered more complex than Russian in terms of number but also length distinction or tension as Russian vowels are more uniform (Walker, 2015, p. 129), Akhmetova (2020, p. 25) illustrates that the vowel /u:/ as in 'who' is rarely pronounced as long as its realization as $/ \mathrm{u} /$ is more prevalent in Russian speakers' pronunciation.

In terms of nuclear stress placement, there is usually not a problem with stress placement for Russian speakers (Walker, 2015, p. 130).

### 3.4.8 Spanish

Spanish is a language spoken both in Spain and parts of South America, with the Castilian Spanish considered the standard dialect. Sounds $/ \mathrm{t} / \mathrm{f}$, /f/, /n/n, and $/ \mathrm{l} /$ are equivalent or near equivalent to English sounds, there are however several other sounds which vary from English and cause problems for Spanish speakers in terms of their production and intelligibility. Typically, /p/, /t/, /k/ usually lack aspiration. Spanish /b/ is similar to its English counterpart in words like 'basta' (enough), however 'b' between vowels is pronounced as a fricative sound $/ \beta /$ non-existent in English, which might lead to mispronunciation of certain English words (Walker, 2015, p. 131). /d/ in Spanish can be pronounced as / $/ /$ in 'Madrid' in the final position, or 'lado' (side) where it appears between vowels. Similarly, /g/is pronounced as English /g/in some words e.g. 'gana' (earns) but as $/ \mathrm{y} /$ in others, e.g. 'pago' (I pay). Problematic is also the sound $/ \mathrm{v} /$ which is not present in Spanish and therefore a sound between $/ \mathrm{v} /$ and $/ \mathrm{b} /$ is produced instead, similarly to $/ \mathrm{m} /$ being produced as $/ \mathrm{n} /$. Another sound initially unfamiliar to Spanish speakers is $/ \mathrm{w} /$ which can often be pronounced as $/ \mathrm{g} /$, however it can be illustrated on words like 'puerta' (door), where it appears naturally and then /w/ can be achieved if lip-rounding is sufficient (Walker, 2015, p. 132).

In case of consonant clusters which begin with /s/ sound followed by a consonant or consonants, an additional vowel is inserted as in 'eSpain' and in case of clusters in medial positions or final positions, deletion is often present, resulting in e.g. 'nests' and 'next' sounding as 'nes' (Walker, 2015, p. 133).

Fox et al. (1995) conclude that there is a larger number of contrastive vowels in English than in Spanish (5 vowels) and Walker (2015, p. 133) points out that the duration of Spanish vowels is longer than a short English vowel but shorter than long English vowels, with
diphthong being too short, and therefore the difference in vowel length is also perceived as difficult to hear for Spanish speakers (Fox et al., 1995).

Correct placing of nuclear stress is usually problematic for L1 Spanish speakers of English as they often produce unnecessary pauses and often a 'second' nucleus is placed even if the appropriate stress has already been placed in the word (Walker, 2015, p. 133).

This section illustrated varieties emerging in English pronunciation of speakers from different L1s. Pronunciation features in terms of consonants, vowels, consonant clusters and nuclear stress placement are considered pivotal for intelligibility, and the most problematic aspects for each L1 were described.

## 4 CORE NORMS FOR INTELLIGIBILITY IN PRONUNCIATION

> 'Then you should say what you mean', the march hare went on. 'I do, ' Alice hastily replied, 'at least - I mean what I say - that's the same thing, you know.'

'Not the same thing a bit!' said the Hatter. 'Why, you might just as well say that "I see what I eat" is the same thing as "I eat what I see!",
Lewis Carrol, Through the Looking Glass, Chapter VII

With the previous chapter outlining features in which speakers of English as their L2 may vary from the standard patterns of pronunciation based on the English phonetic system introduced earlier in the work, the purpose of this section will be to revisit the contexts based on which English pronunciation can be understood in terms of what is considered an error or a naturally occurring variation leading to establishing core features needed for preservation of mutual intelligibility.

The ways in which pronunciation is perceived in terms of ESL, EFL and ELF may vary, however it might be argued that there is at least one common goal shared by all approaches to pronunciation and that is the goal of being able to make oneself understood by others.

In terms of orthodox ESL or EFL understanding of pronunciation, any deviation from the standard would be perceived as an error hindering intelligibility and needing correction. In terms of EFL, however, where the goal is not an absolute adherence to the way native speakers sound, the priority seems to be to provide the speaker with teachable tools essential for successful communication by establishing core features needed for mutual phonological
intelligibility, as many aspects prioritised by EFL/ESL approaches are learnable outside the classroom through exposure to the language (Jenkins, 2017).

By the analysis of her research data, Jenkins (2017, p. 123) was enabled to identify those features of English pronunciation that often cause breakdown in communication, which then allowed her to devise the empirically based Lingua Franca Core (LFC) where the most important aspects for successful communication are listed. The items where error elimination is crucial for communication are individual consonant sounds, consonant clusters, vowels and nuclear stress placement, all based on the focus of her study on the extent to which phonological features responsible for communication breakdown were most recurrent.

Another aspect of her study mentioned in Walker (2015, p. 38) was the identification of non-core pronunciation features which are: the omission of dental fricative consonant sounds typical for English $/ \theta / / \delta /$ and also dark $/ I /$, exact vowel quality, pitch movement, word stress and stress-timing, vowel reduction and weak forms and certain aspects of connected speech like linking, assimilation and coalescence typical for rapid speech. How variations from both core and non-core LFC features influence speech was exemplified in the previous chapter and an overview of LFC features including a comparison with traditional EFL/ESL syllabus is presented in Appendix 1.

There has long been a controversial debate about whether segmental or suprasegmental aspects of speech should be considered more important in terms of comprehension and overall intelligibility. Walker ( 2015 , p. 27) argues that it is crucial to acknowledge differences in language processing for speakers at lower levels of proficiency and natives or high-proficiency speakers of English. Lower level speakers employ bottom-up processing while listening, meaning that their dependence on the actual individual sounds they hear is great and any deviation may cause a complete breakdown in communication. Native speakers and high proficiency speakers, on the other hand, use top-down processing which means that they are able to use information that might not be in the words they hear, but they can draw upon other linguistic or extra-linguistic clues to access the actual meaning, even when an error in pronunciation has occurred. As such, this theory according to Jenkins (2017, p. 135) "represents an almost complete reversal of current phonological orthodoxy" as it seems to provide justification for arguing that suprasegmental errors have a rather less serious effect on intelligibility than do segmental errors (Jenkins, 2017, p. 136).

Based on the description of how pronunciation may vary from the English phonetic system provided in other parts of the thesis, the aim of this section was to summarize those pronunciation aspects speakers of English should consider most essential in order to be able to
make themselves intelligible in any communicational context. Whether a speaker wishes to strive for mastering other aspects of pronunciation might be then left to the individual speaker's discretion based on his or her informed decision and their personal learning objectives and motivation.

## CONCLUSION

There are many factors influencing the success or failure of communication, starting with the speaker's and listener's willingness to understand and make themselves understood, and going beyond how the basic units of speech are produced. This work attempted to link and summarize what are often perceived as complex aspects that contribute to the understanding of the English language as a communication tool, a modern lingua franca.

Grounded in the description of the English phonetic system and the examination of its possible variations, an analysis of how speakers of English on both an international and Czech scale behave phonologically has been provided, while it has also been outlined that speaking and learning English does not always mean adhering to the version of standard English as it is understood in terms of native speaker use, simply because variation and change are an inevitable part of human existence.

English has changed lives of thousands of people over the course of its historical spread and vice versa, users of English are now reciprocally changing English to fit their needs in the globalized world, which should not be automatically condemned as an inferior version of native speaker English, but on the contrary, it might be perceived as an opportunity for a common language that may serve as a resource for mutual understanding and acceptance.

It has been argued throughout the thesis that there are as many individual varieties of English as there are its speakers, with the idea that the awareness and understanding of different World Englishes is essential for the speaker's ability to make an informed decision about what their purpose of using English is and set their learning objectives accordingly.

There are situations where native-like English, or striving for the goal of achieving it, is perfectly relevant, as well as there are situations where speakers are not interested in any particular variety of English, as their primary goal is to be able to communicate their needs while simply resorting to the essential aspects of English necessary for intelligibility as it has been proposed in the thesis - the Lingua Franca Core.

Practicing teachers of English might have found that what is taught does not always equal what is learnt, and therefore they have already been applying the core features for intelligibility in terms of pronunciation as the reality of teaching and learning is often different from prescribed curricula, and with classroom time being limited, it is not always possible to successfully teach all aspects of pronunciation. Therefore, common sense is employed, and pronunciation goals become the result of a consensus based on a dialogue between the student
and the teacher, as learning is always a matter of the student's abilities, priorities and most importantly, motivation.

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Appendix 1: Kachru's three concentric circles of English
(WALKER, Robin. Teaching the pronunciation of English as a Lingua Franca. New York: Oxford University Press, 2010, p. 2)


Appendix 2: A comparison of the English as a foreign language and English as a lingua franca pronunciation core feature targets

(WALKER, Robin. Teaching the pronunciation of English as a Lingua Franca. New York:

Oxford University Press, 2010, p. 62)

|  | Traditional EFL syllabus (native speaker oriented) | ELF syllabus <br> (oriented towards international intelligibility) |
| :---: | :---: | :---: |
| I Consonants | All sounds | All sounds except for the dental fricatives, $/ \theta /, / \delta /$, and dark /l/ |
|  | Rhotic or non-rhotic/r/ | Rhotic/r/ only |
|  | BrE or AmE intervocalic/t/ | BrE intervocalic/t/ |
|  | Aspiration of $/ \mathrm{p} /, / \mathrm{t} / \mathrm{l} / \mathrm{k} / \mathrm{in}$ word-initial position | Aspiration of $/ \mathrm{p} /, / \mathrm{t} /, / \mathrm{k} /$ in word-initial position |
| 2 Clusters | Important in all positions Elision of/t/ and/d/ only for advanced learners | Important at the beginnings and in the middle of words. Elision of $/ \mathrm{t} /$ and $/ \mathrm{d} /$ for all learners |
| 3 Vowels | Quality - all vowels and diphthongs as close as possible to the chosen native-speaker standard accent | Quality - L2 variation acceptable if consistent |
|  | Quantity - length as a characteristic of each vowel | Quantity - r) long-short contrasts; 2) shortening effect of voiceless consonants important |
| 4 Schwa and vowel reduction | Essential to word stress and rhythm | Not desirable. Can reduce intelligibility |
| 5 Word stress | Very important | Not important |
| 6 Stress-timing | Very important | Not important |
| 7 Weak forms | Essential for stress-timing | Not desirable. Can reduce intelligibility |
| 8 Connected speech features | Elision, assimilation, coalescence, and linking essential for stress-timing | Not important. Can reduce intelligibility |
| 9 Nuclear stress | Important, but mainly for upper-intermediate or advanced levels | Essential |
| ı Tone | Essential for indicating attitude and grammatical structure | Not important |

## Resumé

Tato bakalářská práce se zabývá výslovností rodilých a nerodilých mluvčích anglického jazyka ve světovém měrítku. Na základě definování jednotlivých pojetí světového anglického jazyka jsou odvozeny převládající výslovnostní cíle odpovídající kontextu anglického jazyka jako rodného jazyka, druhého či cizího jazyka a anglického jazyka v pojetí lingua franca moderního světa. Za účelem ilustrace výslovnostního standardu je popsán fonetický systém anglického jazyka, na jehož základě jsou odvozeny nejčastější odchylky ve výslovnosti mezinárodních mluvčích sdůrazem na odchylky rodilých českých mluvčích, a dále jsou definovány základní aspekty výslovnosti, jejichž ovládnutí je nutné za účelem dorozumění se.

## ANOTACE

| Jméno a příjmení: | Nikola Macková |
| :--- | :--- |
| Katedra: | Ústav cizích jazyků |
| Vedoucí práce: | Mgr. Jana Kořínková Ph.D. |
| Rok obhajoby: | 2021 |


| Název práce: | Výslovnost rodilých a nerodilých mluvčí anglického jazyka |
| :---: | :---: |
| Název v angličtině: | Pronunciation of Native and Non-Native Speakers of English |
| Anotace práce: | Tato bakalářská práce se zabývá výslovností rodilých a nerodilých mluvčí anglického jazyka ve světovém měřítku. Na základě definování jednotlivých pojetí světového anglického jazyka jsou odvozeny převládající výslovnostní cíle odpovídající kontextu anglického jazyka jako rodného jazyka, druhého či cizího jazyka a anglického jazyka v pojetí lingua franca moderního světa. Za účelem ilustrace výslovnostního standardu je popsán fonetický systém anglického jazyka, na jehož základě jsou odvozeny nejčastější odchylky ve výslovnosti mezinárodních mluvčí s důrazem na odchylky rodilých českých mluvčí a dále jsou definovány základní aspekty výslovnosti, jejichž ovládnutí je nutné za účelem dorozumění se. |
| Klíčová slova: | Výslovnost, výslovnostní odchylky, srozumitelnost, světový anglický jazyk, rodilý mluvčí, nerodilý mluvčí |
| Anotace v angličtině: | This thesis focuses on pronunciation of native and nonnative speakers of the English language in terms of English as a lingua franca of the globalized world. Most common varieties in pronunciation of different L1s are described with varieties in pronunciation of Czech speakers of English being emphasized and compared to the British standard |


|  | phonological system of the English language and as a result, <br> core norms pivotal for intelligibility are defined. |
| :--- | :--- |
| Klíčová slova <br> v angličtině: | Pronunciation, pronunciation varieties, intelligibility, World <br> Englishes, native speaker, non-native speaker |
| Přilohy vázané v práci: | 2 |
| Rozsah práce: | 41 |
| Jazyk práce: | Angličtina |

