Foreign Language Pronunciation, from Theory to Practice

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By

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FOREWORD

Intelligible pronunciation in a foreign language is essential for successful communication. It does not only carry the meaning but also conveys something more about the speaker. Oral performance is the most critical aspect of communication, where speakers' knowledge of a foreign language is often evaluated based on their pronunciation. Speakers with good pronunciation are easier to understand even if their grammar is not without mistakes. On the other hand, speakers with excellent grammar might not be understood due to their poor pronunciation. According to Fraser (2001), speakers whose pronunciation is difficult to understand become more anxious, avoid speaking, experience social isolation, or worse employment opportunities. People are often judged based on their appearance and way of speaking, where pronunciation is the initial factor. Unjustly, people with worse pronunciation can be considered incompetent and uneducated. Generally, good pronunciation supports the self-confidence of speakers, makes them more pleasant communicators, and gives them more opportunities.

Pronunciation is the production of sounds which are used to convey meaning. It covers segmentals, which are particular sounds of a language, suprasegmentals, which go beyond the level of individual sounds (word stress, rhythm, sentence stress, intonation), and prosody (pitch, loudness, voice quality). Segmental and suprasegmental features can be analysed separately, but it needs to be remembered that they function in combination in speech, so they need to be integral in learning and practicing speaking. Even though segmental features are usually more focused on, it is suprasegmentals that have more impact on intelligibility. According to Kenworthy (1987, 13), intelligibility is "being understood by a listener at a given time in a given situation." A speaker is intelligible when the listener is able to recognise words and utterances. However, learners of foreign languages benefit from learning and practicing both – segmental and suprasegmental features.

Most languages have differences in segmental and suprasegmental aspects, and that is why teaching pronunciation from the beginning is vital, and the focus should be on these differences. For example, the Slovak language has numerous differences in segmental features, which can be already seen in

the amount, but more importantly, in their quality. The number of English phonemes is 44, and Slovak is 42. The biggest difference is in the amount and quality of vowels. There are 20 English vowel phonemes and 15 Slovak phonemes. The number of English consonant phonemes is 24, and Slovak is 27 (Ološtiak 2007). The different numbers clearly show that there cannot be equivalents in both languages. The different phonemes must be learnt as they are in the target language without looking for equivalents. If we look for equivalents or try to assimilate a foreign phoneme to a phoneme which is more natural to us, we might cause misunderstanding. The meaning of a word can be changed by changing phonemes. Kráľová (2011) researched the issues of contrastive phonology and collected common mistakes which arise from the substitution and assimilation of English phonemes to the Slovak ones. For example, the Slovak language does not have the phoneme /æ/, which is commonly assimilated by a Slovak speaker to /e/. Such assimilation causes that words like pan /pæn/, bad /bæd/ and had /hæd/ are pronounced as pen /pen/, bed /bed/, and head /hed/. It is obvious how this substitution can lead to misunderstanding. There are more monophthongs and all diphthongs that are different and need to be learnt accurately. Similar cases are also found with some consonants, e.g., an absent phoneme in Slovak /w/ is often substituted by /v/. In such cases, words like wet /wet/, whale /weɪl/, and west /west/ are pronounced as vet /vet/, veil /veɪl/, and vest /vest/. Because of such differences in the phonetic repertoire of languages (not only English and Slovak) it is essential to pay attention to teaching and training the correct phonemes with the aim to be intelligible and successful communicators.

However, suprasegmental features are just as important for successful communication, such as stress, rhythm, and intonation. Stress depends on pitch, prominence, loudness, duration, and vowel quality; with stressed syllables being on a higher pitch, louder, longer with full vowels (Roach 2009). English has variable stress, which is less predictable. Slovak (but also Czech, Hungarian, or Icelandic) has stress always on the first syllable of a word. For such speakers, it is difficult to distinguish the pronunciation and meaning of identical words like PREsnt/preSENT, REbel/reBEL, etc. Applying Slovak first-syllable stress pattern to English causes misunderstanding of many words. Lewis and Deterding (2018) emphasise that the quality of vowels (full versus reduced vowel quality) in syllables also contributes to possible misunderstandings. The English language has a stress-timed rhythm, which means that stressed and unstressed syllables alternate in regular intervals. Perception of stressed syllables in the rapid speech of native speakers might be difficult, and native speakers might find

it hard to understand the meaning of words with wrong stress placement. According to Kelly (2000), sentence stress creates a certain pattern in a sentence and provides a listener with important clues (emphasising important words) of the speaker's message. In contrast, Slovak (like Italian, French, or Hungarian) has a syllable-timed rhythm where an equal amount of emphasis is put on each syllable. Rhythm is consequently problematic for speakers of these languages. Stress in English sentences is essential, and incorrect use can cause a breakdown in communication. Intonation functions at the level of content and carries information about mood, attitude and can influence the meaning. Five tones (fall, rise, level, fall-rise, rise-fall) in English can express finality, invitations to continue, routine, boredom, agreement, limited agreement, approval, disapproval, surprise, doubt. Generally, questions have a rising tone, but wh-questions have a falling tone. For non-native speakers of English, this can be misleading, and if they use a rising tone in a wh-question, they might sound rude (Roach 2009). There are also other aspects of connected speech such as weak form words, assimilation, and elision, which are difficult for non-native speakers of English and can cause misunderstanding on either side of communicators.

However, there are many factors influencing successful pronunciation learning. Kenworthy (1987) names the most prominent factors that have a significant impact on pronunciation: native language of the learner, age of the learner, exposure to the target language, phonic ability of the learner, attitude of the learner, and motivation of the learner. Learners' first language can influence (positively and negatively) pronunciation in English. Language learners draw on the patterns of their first language and apply them in the foreign language (Kráľová 2011). Positive interference can be between related languages like Dutch and English, but negative interference appears when the two languages belong to different language families like Slovak and English. Age factor is closely connected to the critical age period (between 2 and 13), which allows children to intuitively pick up articulation, sounds, rhythm, and intonation. That is why the primary school teachers must have excellent pronunciation because they set examples, and their pronunciation is copied by their pupils (Reid 2020). Kráľová (2009) claims that even though the ability to create separate categories for foreign language sounds is decreasing from the age of six, however, even adult learners can create additional phonetic categories for new sounds which do not correspond to their mother tongue. The amount of exposure to the target language is a significant factor influencing pronunciation learning. Exposing learners to authentic spoken language can help in teaching pronunciation. Phonic ability is generally known as having a 'better ear' for

foreign language pronunciation (Kenworthy 1987), and it has been shown that a good phonemic coding ability can influence the ability to acquire a new sound system (Zybert and Stepien 2009). Positive attitude and motivation of learners can determine the learners' development of pronunciation. Students who are more concerned about their pronunciation in the foreign language usually do better in achieving correct pronunciation (Kráľová 2009). The mentioned factors significantly influence pronunciation learning. Foreign language teachers should acknowledge these factors because they allow them to understand issues in learners' pronunciation learning. At the same time, knowing these factors can positively influence their pronunciation teaching.

Only a few examples of misunderstandings caused by incorrect pronunciation have been mentioned here, but they indicate the importance of correct pronunciation and the importance of teaching pronunciation. Tench (1985) emphasises the need to create correct pronunciation habits from the start of foreign language learning because if the pronunciation is learnt badly, corrections at later stages can be frustrating and exhausting. It is problematic to unlearn automatically learnt mispronunciations, as it requires a lot of effort for speakers to focus not only on the content but also on correcting their bad pronunciation habits. Language teachers need to be aware that pronunciation is an inseparable part of English language teaching. Harmer (2005) recommends that pronunciation teaching can help to overcome intelligibility problems which are partially caused by speakers' first language patterns. Pronunciation practicing needs to be integrated into every lesson, and it requires constant attention in language teaching. Even though the native-like pronunciation used to be the goal of learners' pronunciation, nowadays it is generally accepted that the goal is to understand and to be understood. Effective intelligible communication is the goal of pronunciation teaching.

Even though it is generally known that pronunciation plays a vital role in foreign language communication, there is not enough emphasis put on teaching and practicing correct pronunciation. Scrivener (2011) believes that many teachers avoid teaching pronunciation because they are not confident enough about their pronunciation, or they claim that they do not have enough time. Gilbert (2008) agrees that teachers avoid pronunciation practice for various reasons, and if they teach pronunciation, then they usually bring boring and unrelated topics for language learners. According to Derwing (2010), teachers make very little effort in teaching correct pronunciation and limit their attention to pronunciation only when a student

makes a mistake. These findings of teachers avoiding and neglecting pronunciation teaching need to be changed because the importance of correct pronunciation is inevitable. This importance needs to be emphasised to future foreign language teachers in teacher training colleges. As Kelly (2000) says, pronunciation is not a separate skill but influences the communication skills of learners, and mistakes in pronunciation have a significant impact on the effectiveness of communication.

The Common European Framework for Languages (CEFR 2001) also recommends teaching and practicing pronunciation from the initial stages of foreign language learning, especially from an early age. According to CEFR (2001), pronunciation is a key concept of phonological competences. It comprises knowledge of and skills in the perception and production of phonemes of the language, realisation of phonemes in particular contexts, phonetic features distinguishing phonemes, phonetic composition of words (syllables), sentence phonetics, stress and rhythm, intonation, phonetic reduction, strong and weak forms, assimilation and elision (Section 5.2.1.4). Phonological competence is also included in the description of communicative competence (Section 4.5.2), where linguistic competences (including phonological) together with sociolinguistic and pragmatic competences form communicative competences. The communicative language process includes phonological competences in execution and production. In general competences, the ability to learn (Section 5.1.4.2) focuses on general phonetic awareness and skills. It describes that learners of foreign languages need to acquire the ability to distinguish and produce unfamiliar sounds and prosodic patterns, to perceive and link unfamiliar sound sequences, and to clarify a continuous stream of sounds into a meaningful structure. Further recommendations are to expose learners to spoken utterances which are authentic (audio-recorded native speakers, video-recorded native speakers), to encourage learners to imitate teachers and native speakers from the recordings, phonetic drilling, ear training, tongue twisters, explicit teaching, phonetic transcription, reading aloud, etc. (Reid and Debnárová 2020).

It has been mentioned that pronunciation is an inseparable part of foreign language education, but there are several ways how to deal with pronunciation teaching in foreign language lessons. Kelly (2000) classifies lessons into three types. The first type is integrated pronunciation teaching, where pronunciation is a part of regular lessons. The second type is remedial or reactive pronunciation teaching, where pronunciation is taught when the situation requires it. The third type is pronunciation dedicated teaching, where specific features of pronunciation are taught and practiced. Similarly,

Harmer (2005) divides pronunciation teaching into three types. The first type can be described as the whole lesson being dedicated to pronunciation teaching and training; the second type as parts of a lesson focusing on pronunciation (discrete slot); and the third – integrated type, with components of listening and speaking activities and opportunistic teaching happening when the situation requires focusing on pronunciation. Teaching pronunciation with any of the mentioned types, preferably with the combination of all types, would be beneficial for learners of foreign languages.

The issue of age and learning pronunciation has already been mentioned, but it requires closer attention because the education system is organised according to the age of learners. Foreign languages are often taught from the primary school level and are taught throughout the whole schooling. However, many adults want to learn foreign languages, so they attend language schools learning foreign languages from the elementary level up to the advanced level. Pronunciation teaching varies significantly depending on the age of learners. Different teaching techniques, aids, and materials are suitable for individual age groups. Even though the CEFR (2001) proficiency levels are not directly associated with age, they are applied to education levels. Regarding school education, the proficiency levels according to CEFR (2001) are marked by the stages of primary, lower secondary, and secondary education.

The descriptor A1 is often associated with the end of primary education. Primary education generally concerns children between the age of 5/6 and 10/11. The A1 level, according to CEFR, is the "beginner" level, when learners can understand and get familiar with everyday expressions and fundamental phrases. Regarding pronunciation, CEFR (2001) specifies the A1 phonological competences of learners that they "can reproduce sounds in the target language if carefully guided …; can use the prosodic features of a limited repertoire of simple words and phrases intelligibly, in spite of a very strong influence on stress, rhythm, and/or intonation from other language(s) he/she speaks" (CEFR 2001, 136). Pupils of this age belong to the critical age group, which according to the Critical Period Hypothesis (Lenneberg 1967) allowed children up to the age of 13 to achieve native-like proficiency in a foreign language, specifically pronunciation (Loewen and Reiders 2011). Because of this ability, primary school pupils should be exposed to authentic spoken language as much as possible, and should be encouraged to imitate the teacher and native speakers from the recordings. Other suitable teaching techniques are drilling, ear training, tongue twisters,

singing, chants, rhymes, phonics, sound-colour charts, games, etc. (Reid 2016).

The descriptor A2 is connected with the end of lower secondary education, which prototypically begins at the age of 10/11 and ends at the age of 14/15. The A2 level, according to CEFR, is defined as "elementary," and a learner should be able to understand sentences and frequently used expressions, communicate in simple and routine tasks, and exchange information on familiar matters. Pronunciation of a learner in the A2 level "… is generally clear enough to be understood … Pronunciation of familiar words is clear … Pronunciation is generally intelligible when communicating in simple everyday situations … Prosodic features are adequate for familiar, everyday words and simple utterances" (CEFR 2001, 136). Adolescents show more inhibition regarding auditory discrimination and plasticity for language learning (Strevens 1991). They might be shy to produce unfamiliar sounds. However, they can explicitly learn about speech sounds, correct pronunciation, and rules of pronunciation. Suitable teaching techniques are minimal pair drills, ear training, reading aloud, recording learners' pronunciation, teaching sounds, quizzes, etc. (Reid 2016).

Levels B1 and B2 relate to the end of secondary education, which is the age of 18/19. B1 proficiency level is "intermediate," which means that the learner can understand standard conversations encountered at school, work, leisure, etc., and can describe experiences, events, and ambitions, and give explanations on opinions and plans. B2 level is called "upper intermediate," and the learner can understand complex text from concrete and abstract texts, can interact fluently and spontaneously and can explain the advantages and disadvantages of various points of view (CEFR 2001). Pronunciation at the B1 level should be "generally intelligible, can approximate intonation, stress at both utterance and word level" (CEFR 2001, 136). A learner at the B2 level should "use appropriate intonation, place stress correctly and articulate individual sounds clearly" (CEFR 2001, 136). Learners from the age of 14 to 19 are also shy to produce unfamiliar sounds, and their ability to monitor own pronunciation, notice, and correct own errors is weakened (Strevens 1991). Explicit teaching of segmentals and suprasegmentals, phonetic training, sound charts, recording one's own pronunciation, reading aloud, minimal pair drills, lip reading, etc., are suitable teaching techniques for this age group (Reid 2016).

Piccardo (2016) claims that phonology as an aspect of language pedagogy has been an under-researched area. The articulatory phenomena and

difficulties connected with the phonological features of speakers of foreign languages have been researched extensively by phoneticians and linguists, but research focusing on the principles of teaching pronunciation has been neglected. This publication has the ambition to fill the void. The publication *Foreign Language Pronunciation: From Theory to Practice* covers a complex area from native language interference in learning foreign languages, factors influencing pronunciation, research in learning and teaching foreign language pronunciation, and most importantly, foreign language pronunciation pedagogy. The authors of this publication are experienced teachers and researchers in teaching foreign languages, specifically in teaching English pronunciation. Based on numerous own and other research studies, the authors managed to extend the topic and apply all findings to the effective acquisition of foreign language pronunciation. The authors embraced this very complex topic very eloquently, and I strongly recommend this publication to scholars in foreign language pronunciation pedagogy.

Eva Reid

INTRODUCTION

Learning a foreign language significantly contributes to the complexity of human cognitive and social development. Communicative skills are the focus of today's foreign language pedagogy, and pronunciation is among the most important factors in the acoustic-auditive type of communication.

Language pedagogy, though, pays little attention to the acoustic level of language; if pronunciation drills occur, they do so regardless of the communicative importance of individual phenomena. Foreign language is typically learned in conditions of artificial language contact via the mother tongue of the learners. Because of such an indirect method, the mother tongue becomes quite distinctively enforced in foreign language communication.

A generally accepted guiding principle of foreign language acquisition is the recognition of identity. That is why we believe that a functionally adequate comparative analysis of native and foreign language phonic systems (including theoretical prediction of interference phenomena) is essential in teaching foreign language pronunciation. The ultimate pronunciation level reached by non-native speakers demonstrates certain intra-group tendencies despite significant inter-individual differences, which may be effectively applied in language pedagogy.

The intralingual analysis thus becomes a point of departure for interference research. Interference is understood to be a dynamic phenomenon contributing to the process of language development of individuals. That is why relationships within the system and its surroundings – extralingual links of interference – are also taken into consideration; descriptive linguistic methods are accompanied by procedures of other scientific areas (specifically sociolinguistics, psycholinguistics, and language pedagogy).

Both personal experiences as learners and teachers and the results of concerned research studies confirm the fact that most adult learners permanently speak a foreign language with an accent despite changes in other language-level competences; it occurs despite the considerable

interlingual variability of the final phonic performance of non-native speakers.

Foreign language pronunciation is in many aspects a highly specific phenomenon as the element of individuality plays a much more important role than in other language levels. Due to the specificity of the phonic level of language within the whole language system, the theoretical and applied linguistics are linked in an unusually direct manner. The research into foreign language phonic competence variables is thus rather complicated but at the same time extremely fascinating.

Therefore, the main purpose of this book is to give foreign language users a complex knowledge base for the foreign language pronunciation system so that they can approach the pronunciation work with confidence. The book aims to fill the gap in the current literature by focusing on this complex phenomenon from linguistic and pedagogical points of view in both synchronic and diachronic perspectives.

CHAPTER 1

NATIVE AND FOREIGN LANGUAGE PRONUNCIATION

Language Interference

Language interference as a linguistic phenomenon varies in terms of its content. In a broad sense, it is defined as the mutual influence of languages at individual language levels. The theory of foreign language teaching distinguishes positive and negative transfer, and interference in a narrow sense is understood as a negative transfer of **native language** (L1) to the learning of a **foreign language** (L2).

Uriel Weinreich (1953, 1) defines interference as "those instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language, i.e., as a result of language contact." Einar Haugen (1956) speaks of three various levels of diffusion of one language system into another – from zero to complete integration, with interference positioned inbetween the two extremes.

We understand language interference as a deviation from the synchronic norm of a foreign language under the influence of a native language. We distinguish **interlingual interference** errors due to which two language systems (the native and the foreign one) get into conflict and **intralingual interference** errors originating within the foreign language system itself. It is an individual who is the centre of language contact realization, which is why language interference is a meeting point of two language competences and language performances arising from them.

In the 1950s, the theory of interference became a basis for the *Contrastive Analysis Theory* (Weinreich 1953), which emerged from the *Second Language Acquisition* behaviouristic concepts. *Second Language Acquisition*'s basic premise was that the L1 to L2 interference caused all errors in foreign

language production. However, Eugène Brière (1966) was the first to recognize that the structuralist comparison of L1 and L2 phoneme inventories cannot explain all errors of an L2 non-native speaker. Contrastive analysis is thus often criticised on the following accounts:

a) contrastive analysis predicts but does not explain the errors;
b) it does not explain phenomena that do not belong to the first nor second language system;
c) it does not take into consideration the stylistic variants in communication;
d) it only describes the performance level of a non-native speaker in a static manner.

Later, the contrastive analysis theory branched into two streams. Contrary to the "strong" stream (Lado 1957), the "weak" stream (Wardhaugh 1970) did not attempt to predict problems in a foreign language; it only explained the causes of the recorded errors. Such an approach signals the beginning of analysing speakers' errors in a specific speech situation. It also contributed to a significant finding on interference, which became to be one of the numerous causes of errors in a foreign language performance rather than the only cause.

The combination of two approaches to the research of foreign language production by non-native speakers, specifically the *System Analysis* (Lado 1957) and the *Error Analysis* (Weinreich 1953), compensates for some of their deficiencies. *Error Analysis* is not able to depict the interlingual aspects of generating utterances in L2, while *System Analysis* is not able to disclose correlations between interlanguage on the one hand and source and target languages on the other. We believe it is essential to distinguish between langue and parole since the difference between the two systems does not automatically provide a reason for breaking the norm. Differential description of languages should therefore represent a departing point for research of such a dynamic phenomenon as phonic competence in L2 certainly is. When studying the unique phenomena realized at a speech level, it is necessary to anchor the research in the universal phenomena at a language level.

Fred Eckman (1977) modified the theory of *Contrastive Analysis* and introduced the *Markedness Differential Hypothesis* which is an attempt to explain why some phonemes are easier to acquire than others. He claims that a language phenomenon A is more marked than phenomenon B when

the presence of A in the language implies the presence of B, but the presence of B does not imply the presence of A. Eckman (1977) formulates the basic theses of his theory as follows:

a) A learner will find difficult those L2 phenomena that differ from L1 phenomena and show more markedness than in L1.
b) A relative degree of difficulty of an L2 phenomenon that shows more markedness than in L1 corresponds to the relative degree of its markedness.

Later, the research of language interference elicited the opinion that most errors in foreign languages are caused by intralingual interference. It is the *Markedness Differential Hypothesis* which could eventually signal the solution to the polemic. Typological markedness, which is gradually incorporated into the theory of foreign language learning, is thus justified.

The typology of language interference can be approached from several perspectives, even though strict categorization is often inappropriate. The relationship of individual language systems is the most frequent typological criterion. It differentiates the interference into:

1. interlingual,
2. intralingual,
3. combined (intralingual-interlingual).

The intervention at individual language levels categorizes interference into:

1. acoustic,
2. morphological,
3. lexico-semantic,
4. syntactic,
5. ortographic.

Some authors (e.g., Veselý 1986) differentiate evident interference, which is an obvious violation of foreign language norms, and latent interference, characterized as using expressions which are analogical in native as well as foreign languages instead of expressions which are L2 specific. In such cases, the norm is not violated; the result of such use is the loss of discourse idiomaticity.

A specific interference category within language systems is cultural interference. It is manifested especially at the lexical level because of poor knowledge of the country's language and characteristics; the user knows only one cultural context and uses it to code and decode the foreign languages as well.

The questions of interference are also frequently dealt with in psycholinguistics. From the point of view of interference acting mechanisms, psycholinguistics understands it as a proactive process – material acquired earlier negatively influences the material acquired later – or as a retroactive process – phenomena acquired later negatively influence the usage of similar phenomena which the individual acquired earlier.

A psycholinguistic view of learning a foreign language (e.g., Jakobovits 1970) operates with the terms of stimulus (s) and reaction (r), or with the concept of convergent structures ($s1 \neq s2 \rightarrow r1 = r2$), divergent structures ($s1 = s2 \rightarrow r1 \neq r2$) and unrelated structures ($s1 \neq s2 \rightarrow r1 \neq r2$). Opinions on the impact and extent of positive and negative transfer within these structures are not homogeneous, and we must keep in mind that two different language systems will never have identical stimuli and reactions.

Phonic Interference

Weinreich (1953) distinguishes three categories of interference within the phonic level: phonic, phonotactile, and suprasegmental. At the level of phonic segments, he differentiates four basic interference types:

1. **under-differentiation of phonemes** – blending of foreign language phones, the parallels of which are not distinguished in the native language;
2. **over-differentiation of phonemes** – layering of phonological distinctions of the native languages onto the foreign language phones where they do not belong;
3. **reinterpretation of distinctions** – differentiation of foreign language phonemes on the basis of features which are secondary in the foreign language but primary in the native language;
4. **phone substitution** – replacing foreign language phonemes with native language phonemes which are identified as the same, but differences exist in their realization.

The first three types of interference concern characteristics relevant to both L1 and L2, while the fourth type, phone substitution, also concerns synchronically redundant features which become relevant when switching the phonologic system. This categorization corresponds to the terms of dephonemisation, phonemisation, and transphonemisation (Haugen 1956).

William Moulton (1962) distinguishes the following errors according to the level of abstraction:

1. phonological mistakes (concerning solely phoneme substitution),
2. phonetic mistakes,
3. allophonic mistakes,
4. distribution mistakes.

Evelyn Altenberg and Robert Vago (1983) step beyond la langue; they define four basic types of pronunciation problems based on a joined contrastive analysis of two language systems and error analysis:

1. interference mistakes – on the differentiation between phonetic and phonological transfer. The first type corresponds to Weinreich's (1953) phone substitution, the second one to the reinterpretation of distinctions;
2. the application of the so-called unmarkedness rule which exists neither in L1 nor L2. This case is viewed as the influence of the "inborn" language structure rules or of natural phonological processes;
3. mistakes arising from the so-called letter pronunciation;
4. idiosyncratic mistakes, including, e.g., an incorrect generalization of the phone equivalent of an orthographic symbol.

Vladimir Mach (1971) distinguishes mistakes of perception and reproduction. Within the reproduction category, he recognizes two levels of communicative error, with the first one observed in mistakes that cause an inauthentic phonic form of the utterance, while the second one identified when mistakes change the meaning of the utterance. He classifies the causes of pronunciation mistakes according to their origin:

1. differences in phonological oppositions (correlation in L2 has no equivalent in L1):
   a) the result is phone under-differentiation in L2,
   b) the result is the identification of L1 and L2 phonemes;

2. differences in phoneme combinations;
3. differences in neutralizing rules:
   a) the result is over-differentiation,
   b) the result is under-differentiation;
4. differences in phonic realization of allophones;
5. differences in suprasegmental features;
6. differences in graphic representation of phonemes.

Zdena Kráľová (2011) classifies pronunciation mistakes according to two basic criteria: the cause of occurrence and the language level affected. The cause of occurrence distinguishes the mistakes into:

1. interference mistakes:
   a) interlingual,
   b) intralingual;
2. non-interference mistakes.

According to the language level affected by the mistakes, Kráľová further distinguishes:

1. lingual mistakes – affecting some of the language levels:
   a) phonic – affecting phonic language level:
      aa) paradigmatic – arising from the associative relations of phonemes within the language, including under-differentiation and over-differentiation of phonemes (Appendix A), reinterpretation of distinctions, and phone substitution.
      ab) syntagmatic (or plurisegmental) – concerning linear (phonotactile) relations of phone segments (Appendix B);
      ac) suprasegmental errors – affecting the prosodic language phenomena;
      ad) idiosyncratic errors – caused by the graphic system impact on the phonic realization of elements;
      ae) combined errors – caused by the simultaneous impact of several phonic factors.
   b) extraphonic – affecting other than phonic language level:
      ba) lexico-semantic errors,
      bb) morphological-syntactic errors,
      bc) orthographic errors,
      bd) combined errors.

2. extralingual errors – arising from extralingual reality.
   a) physiological errors – linked to anatomical features of the speaker or the listener, such as speech disorders;
   b) psycholingual errors – arising from personality features of the speaker or listener, such as their emotional states, internal motivational factors, etc.;
   c) sociolingual errors – influenced by the type of communication situation, relationships, or social characteristics of the communication participants;
   d) combined errors – originating from the effect of several extralingual factors simultaneously;
   e) accidental errors – caused predominantly by a speaker's accidental slip of the tongue.

There is no clear conclusion in today's linguistics as to what is more difficult for a language learner in the foreign language: L2 phenomena that have no equivalent in L1 or phenomena that are similar in L1 and L2. Two opposing opinions exist:

a) differences are easier than similarities;
b) similarities are easier than differences.

Many authors do not think the source of significant interference errors is to be found in a situation where L1 phenomenon does not have an L2 equivalent. Hans Wolff (1950) claims it is easier to acquire a phoneme non-existent in L1 as the similarity supports negative transfer. He supposes that new L2 elements become acquired gradually as L1 elements have been acquired. Similar elements thus undergo interference (specifically phonic substitution) most frequently.

These claims are confirmed by the experimental results of Altenberg and Vago (1983), who assert that the dominant role in the phonic substitution is taken by the phonic similarity of elements. On the other hand, many linguists (e.g., Brière 1966) maintain a stance that the more an L1 phenomenon resembles an L2 phenomenon, the easier it is for the learner. According to the varied markedness hypothesis, only the L2 phenomena that have higher phonological markedness than analogous L1 phenomena are difficult (Eckman 1977). Robert Stockwell and Donald Bowen (1965) add a pragmatic aspect to the theoretical analysis: they also consider the functional load of the phenomena.

The analysis of systemic (intralinguistic) factors has been the focus of significant attention within linguistics. Distinguishing interference from the point of view of langue and parole is found to be unimportant by some authors as they find the difference of systems to be an inherent reason for breaking the norm. In our opinion, a differential description of language should only function as a point of departure for the research of interference, which is a highly dynamic phenomenon. Nevertheless, when researching a unique phenomenon manifested at the level of speech, it is vital to rely on the general phenomena found at the level of language.

Theoretical prediction of interference phenomena is unavoidable when analysing specific foreign language discourse. However, not all potential forms of interference become obvious in speech, and not all errors are necessarily interference errors. The speaker confronts a foreign language through a prism of their own system in the same way as acoustic information travels through the filter of the articulatory experience of the hearer. Kráľ and Sabol (1989, 184) claim a successful communication presupposes only a slight deviation from the pronunciation experience of the decoder.

Information can be qualified as comprehensible when decoded by a recipient in the same manner as it was coded by the sender. Factors disturbing communication can be present in all its components. Pekarovičová (1996) distinguishes four types of communication barriers in foreign language interaction:

1. physical (noises),
2. knowledge-based (information and code),
3. interactive (social and psychical),
4. transcultural.

Kamiš (1996) considers two categories of code barriers:

1. inherent (linguistic),
2. adherent (biological and psycho-social).

When studying phonic interference elements in an acoustic-auditive type of foreign language communication, the barriers concerning the sender's communicative code are most relevant as they cause a disturbance in communication on the side of the recipient.

Errors arising because of interference (**interferemes**) do not share an identical communication value. Veselý (1986) distinguishes the degrees of interference errors according to what extent they disturb the communication process:

1. first-degree interferemes are in direct conflict with the language norm but do not inhibit understanding;
2. second-degree interferemes complicate the understanding of the message;
3. third-degree interferemes lead to misunderstanding.

Olsson (1977) distinguishes two levels of message mediation between a non-native speaker and a native speaker:

1. ambiguity or complete loss of understanding on the recipient's side;
2. "foreign-sounding" pronunciation in more or less understandable communication.

Kráľová (2011) classifies communication errors into four functional degrees:

1. the recipient decodes the information correctly, but a possibility of incorrect coding exists;
2. the recipient is unable to decode the information immediately, but semantic reconstruction is enabled by the preceding or following context;
3. the recipient decodes different information than that coded by a sender;
4. the recipient is unable to decode any information.

Within his four types of interference, Weinreich (1953) considers the degree of communication risk. He claims phoneme over-differentiation is irrelevant to the native speaker. Similarly, phone substitution poses minimal risk to communication. The reinterpretation of differences can but does not have to cause misunderstanding; to the contrary, insufficient phoneme differentiation almost always causes disorientation in communication.

Analyses of non-native speakers' foreign language production (Kráľová 2011) confirm that communication misunderstandings are attributed more to **phonological errors** (e.g., phoneme substitution, loss, or addition) rather than **phonetic errors** (e.g., enforcing the mother tongue articulation basis).

Phonological errors often interfere in the word distinction, which is why the contextual or situational reconstruction of the utterance is less probable.

Despite the high real frequency of interlingual interference errors in a non-native speaker's foreign language utterance, there is a significant influence of intralingual interference errors on creating communication noise. At the same time, suprasegmental phenomena appear to be more relevant in communication than segmental ones (Kráľová 2011).

Kráľ and Sabol (1989, 54) maintain that "when listening to normal (non-pathological) speech, the listener does not perceive phones, sounds, or allophones. It is phonemes only that are perceived. However, when a speech act deviates from neutral ("normal") speech, the phonic system becomes deformed, i.e., orthoepic norms are disturbed, and the listener perceives these peculiarities, perceives some phones, or rather allophones or speech sounds after their reclassification."

The language instinct of a native speaker interprets from the obtained acoustic material what their language system finds significant. A native speaker, however, is also able to understand other forms of language than their own. Signal redundancy, a situational and linguistic context that can work well on words, sentences, or even on a higher level, enables sufficient understanding even if speech is deformed.

Perception is often supported by **the phonotactile structure** of a word, i.e., the native speaker's knowledge of possible sound combinations in specific locations within words and a general tendency of the listener to systemic and reconstructive processing. Communication failures arise when signal information cannot be reconstructed (and supplemented) by such mechanisms (Kráľ and Sabol 1989, 37).

Not every error that arises in a foreign language utterance is an error of interference. Not all potential errors are manifested in a specific utterance. Not all errors made are perceived by the listener, and not all disturb communication with the same intensity. An analysis needs to uncover not only linguistic but also extralinguistic links focusing specifically on the events endangering the success of communication. Pronunciation errors are of various magnitudes and degrees of deviation between the outgoing and incoming information. An inventory of recorded errors, regardless of their relevance to understandability and acceptability of the discourse, thus cannot be taken as a reliable indicator of foreign language performance quality.

CHAPTER 2

FOREIGN LANGUAGE PRONUNCIATION FACTORS

Attention of substantial size has been paid within the fields of linguistics and language pedagogy to the analysis of systemic (lingual) as well as nonsystemic (extra-lingual) factors of foreign language competence. Beginning with the classic study by James Asher and Ramiro García (1969), a plethora of papers studying the variables influencing the process of acquiring the phonic system of a foreign language have been published within the past five decades.

Human beings possess potencies for acquiring a foreign language; these are determined by physiological and psychical functions as well as by the influence of the linguistic and extra-linguistic environments. Segalowitz (1997) considers three basic preconditions of individual differences in foreign language competence:

1. flexibility in operating the language system;
2. sensitivity to conditions in the process of communication;
3. coping with interference influences on language systems.

Most probably, there is no discrete set of factors representing a variety of specific performances. Countless determinants of foreign language competence and the causes of their variability play roles. In individuals, these variables may combine in various ways and with varying effects. On the other hand, individuals may show certain consistencies. Measurement, quantification, diagnostics, and prediction of influences create essential sources for developing strategies of ability or skill development.

The componential analysis of foreign language phonic competence and performance can be approached from the experience of learning and teaching a foreign language, from the scientific analysis of the phonic system, and from the activity itself. A difference between the two basic

terms needs to be stressed at this point: for various reasons, language acquisition and language learning are frequently interchanged or are not distinguished in publications and in teaching practice. Language acquisition is a natural and spontaneous process of acquiring knowledge and skills in the natural environment, while language learning is a conscious and intentional process of gaining knowledge and skills in an artificial environment.

Apart from the influence of individual and supra-individual attributes, the individual differences in the effectiveness of foreign language acquisition are also influenced by special foreign language abilities. Unquestionably, the so-called language-gifted person is characterised by many dependent and independent language skills and abilities. According to Malíková (1993), the core of foreign language abilities comprises:

1. phonematic hearing;
2. verbal memory;
3. grammar thinking.

The identification and evaluation of these features has a significant impact on the process of teaching and learning foreign languages. Because there is a substantial number of individual variables, it is highly problematic to define a finite correlation. Language development of an individual comprises lingual as well as extra-lingual factors that enrich the system with subjectivity and variability, yet they cannot be ignored and avoided in a real language existence.

A communicant (a multi-lingual individual) is at the centre of language contact, which is why researching foreign language competence cannot be limited to a contrastive analysis of two language systems. Individual factors influence one another and condition the communication effect to a smaller or larger extent. When comparing the effect of factors on individual layers of the phonic level, Kráľová (2010) found out that segmental errors were mostly caused by interlingual factors, while the existence of suprasegmental errors was conditioned by extra-lingual factors. This is confirmed by the fact that suprasegments are universal human-wise phenomena more significantly influenced by the extra-lingual environment than segments.

It is to a certain extent paradoxical that the stated research subject is mostly L2 competence while the practical focus is on the L2 performance. It is a