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Phonetic and Phonological Difficulties of Learners of Polish as a Foreign Language in Terms of Logopaedics and Glottodidactics

SUMMARY

The interest of foreigners in studying and working in Poland compels them to study Polish intensely and to master the phonetic and phonological sphere, which is the foundation for other language subsystems. More and more students studying Polish as a foreign language benefit from the help of a speech therapist, which has the specialist knowledge of articulation phonetics and has the ability to make sounds. The article presents a review on research on phonetic and phonological problems of foreigners learning Polish language from the perspective of two interdisciplinary and related sciences – speech therapy and Polish language glottodidactics. We discussed speech therapy procedures addressed to foreigners, which include diagnosis and therapy of speech defects or the improvement of the articulatory and prosodic sphere using glottodidactic and speech therapy methods.

Key words: phonetic and phonological problems in learning Polish as a foreign language, diagnosis of speech disorders, methods of pronunciation defect therapy, teaching pronunciation

INTRODUCTION

As a result of open borders, the ensuing increased migration movement of the citizens of the EU member states and the residents of non-EU countries, and, above all, in view of the number of foreigners who wish to study or work in Poland, the number of foreigners dwelling in the country is on the rise, alike the subsequent interest in learning the Polish language¹, whereby a particular empha-

¹ Polish is one of the most difficult languages in the world (especially for non-Slavic students), as evidenced by its phonological features: three groups of fricatives: [s], [z], [ɕ], [ʒ], [ʃ], [ʒ]

sis is placed on the principles of correct pronunciation. The clientele of speech therapists includes children of foreigners – be they bilingual or multilingual – who have encountered difficulties in acquiring Polish or learning it as a second or subsequent language. Furthermore, it is also with an increased frequency that logopaedists also serve adult foreign² customers who, in addition to being taught Polish by glottodidacticians (i.e. native speakers of Polish who teach the language as a second language), wish to focus in particular on the phonetic and phonological sphere of language acquisition, eliminating pronunciation errors and – in some cases undergoing a speech impediment correction process.

According to the statistics of the Office for Foreigners, the number of foreigners applying for temporary or permanent residence in Poland has been growing steadily since 2014. The statistics of 2017 show that the following nationals most often wished to live in the country: Ukrainians (who submitted 125,000 applications), followed by Belarusians (9,500), Hindu Indians (8,000), Vietnamese (6,400) and Chinese (6,000), as well as EU citizens: Germans (2,300), Italians (1,100), Bulgarians (800) and Romanians and the British (700 each), and others³.

It is currently estimated that the most numerous group of foreigners residing in Poland is constituted by Ukrainians and Russians⁴.

LOGOPAEDICS AND GLOTTODIDACTICS AS INTERDISCIPLINARY DISCIPLINES

Since the 1990s speech therapy has been recognised in Poland as an autonomous discipline, whose main subject is speech in all of its aspects (this opinion was also shared by the father of Polish logopaedics – Leon Kaczmarek).

However, speech therapy implements the developments of psychology, paedagogy, and, nowadays, it also employs the attainments of the dynamically

affricates [ʃ], [dʒ], [tʃ], [dʒ] [ʧ], [dʒ], consonant clusters, palatalisation (the “softening” of some harsher sounds by way of assimilation or lenition, i.e. a change in the place or manner of articulation of consonants) as well as morphological characteristics: nominal inflection, seven declension cases, tense aspect and multiple numeral forms (Turek 2011: p. 278). It seems, however, that the level of difficulty in acquiring any foreign language depends on the relatedness and cognitive and system-structural closeness of that language and the mother tongue, which is naturally and freely used by the student. This article presents the phonetic and phonological differences between a group of select languages, and, hence, this article features the symbols from the International Phonetic Alphabet to denote the corresponding Polish sounds (see: Fougeron, Smith, 1999).

² Adults are considered herein as individuals who have completed their secondary education and who are at least 17 years of age (this age threshold applies to high school graduates from Eastern Europe).

³ *Rośnie w Polsce liczba cudzoziemców*, <https://ekai.pl/rosnie-w-polsce-liczba-cudzoziemcow/> [accessed on 2.09.2018].

⁴ <https://migracje.gov.pl/statystyki/zakres/polska/> [accessed on 2.09.2018].

developing medical sciences, especially those of neuroscience or audiology, as well as linguistics, including applied linguistics together with psycholinguistics and sociolinguistics, i.e. the sciences operating on the threshold of linguistics and psychology or linguistics and sociology (Grabias, 2012, p. 31).

Adopting the concept elaborated by Stanisław Grabias regarding the essence of logopaedics, the subject of research in modern speech therapy, or „the science of biological language determinants and language behaviour” (ibidem, 2012, p. 36) is constituted by the following:

- prevention of undesirable conditions regarding speech development,
- diagnosing linguistic and communication competences and skills,
- aiding the development of linguistic and communication competences and skills in children within the biological and intellectual norm,
- diagnostics of various speech disorders in children and adults,
- a theoretical and practical description of speech disorders,
- programming and conducting speech disorder therapies,
- building a reference theory of language competence (ibidem, p. 39).

In addition to enhancing the performance, followed by assessing and building or rebuilding the cognitive competence, i.e. knowledge of oneself and the world, constructing or reconstructing a linguistic competence, which encompasses the „unconscious knowledge about grammatical rules for building sentences” and „spoken and possibly written composition of sentences” (ibidem, p. 37), as well as building or rebuilding communication competence, understood as the knowledge of linguistic-behavioural patterns specific to a given society (ibid.). Programming of a language is possible taking into account the biological capabilities of man, which include the following: physical hearing, phonemic hearing (the ability to distinguish between different speech sounds), prosodic hearing (the ability to distinguish between intonation, rhythm, accent and melody), „brain mobility and memory capacity” as well as „functioning of the peripheral nervous system, which is responsible for the muscles and bones of the speech organs” (ibidem, p. 38).

Glottodidactics as an academic discipline was created as an aftermath of the linguistic inquiries undertaken with the aim of developing issues of practical methodology of teaching foreign languages. It has now been practiced in Polish academic centres for over fifty years, whereby the linguist and Germanist Ludwik Zabrocki is deemed to be the „father” of Polish glottodidactics. To this day, linguists are pondering the definition of foreign language didactics, also its scope of research, and the complexity and multifacetedness of its subject of interest, which forces the researchers of glottodidactic phenomena to adopt an interdisciplinary approach in the analysis and description of study problems (Jaroszevska, 2014, pp. 52-54).

For the purposes of this article, I hereby adopt the definition of „glottodidactics” as derived from the *Dictionary of Foreign Language Teaching (Słownik dydaktyki języków obcych*, Szulc, 1997, p. 53) and understood as a paedagogical discipline that deals with “the process of mastering a foreign language in a controlled manner”. As an interdisciplinary discipline, it draws experience from other sciences: that of theoretical and applied linguistics, psycholinguistics, psychology, sociolinguistics, sociology, speech physiology, acoustics, as well as that of logopaedics⁵.

Glottodidactics is a discipline dealing with didactics and methodology of foreign language teaching, whose main goal is to develop communication competence⁶, i.e. the ability to acquire and transfer information employing a given language system in specific situations. Skilful use of the language system means mastering individual language subsystems, i.e.: the phonic one, the graphic one, as well as the lexical and grammatical ones, which in the further stage of learning leads to the development of the following language skills: the receptive ones – listening and reading comprehension, and the productive ones: speaking and writing, and thus allowing for free and unimpeded communication. Therefore, in order to be able to communicate in a foreign language, one must acquire linguistic competence / skills, i.e. one must employ linguistic means, as well as gain the capacity to read and create properly constructed expressions and sentences in accordance with the principles of the given language (Lipińska, Seretny, 2003, pp. 15-17; see: Komorowska, 2002, p. 9).

The common subject of speech and glottodidactic reflection is precisely the development of linguistic competence / proficiency (cf. Świstowska, 2011:, p. 93), i.e. the programming of a native or foreign language in the mind of a

⁵ A. Jaroszewska writes more comprehensively about the concept of glottodidactics, its subject, history of its creation in Poland and terminological disputes (2014, pp. 52-66).

⁶ In linguistics and speech therapy, the concept of „linguistic communication” occasionally referred to as „linguistic interaction” or „discourse” defines the behaviour that occurs in external speech, resulting in the creation of a text in the form of sound (secondarily expressed in graphic or gesture form), owing to which communication within a particular social group becomes possible. The behaviours occurring in external speech are preceded by behaviours in internal speech, which are also referred to with the term of cerebration, which consists of the text created in the speaker’s mind. Linguistic communication is not possible without the cognitive communication activities arising in the interlocutor’s thoughts, owing to which a person acquires knowledge about the world and about themselves, or without any quasi-communication activities that organise the acquired knowledge in order to pass it onto other communication participants. Thanks to participation in social life, the man learns about the functioning of the communication system, acquiring communication competence and mastering interactive skills, which development enables the understanding of relationships between the participants of social life and allows them to pursue their own intentions (Grabias, 2012, pp. 16-17).

person acquiring or learning a given language⁷. If foreigners learning Polish experience an issue with the reception and production of the Polish language in terms of its particular subsystems, a logopaedic approach may be justified, as well as the approach applied to the perception and implementation of their mother tongue among native speakers with speech disorders. Linguists also emphasise the proximity of speech therapy and glottodidactics in view of the methodology which is based on the achievements of neuroscience or psycholinguistics. Logopaedic undertakings aimed at improving the performance (pronunciation) of foreigners learning Polish can significantly facilitate the process of acquiring / learning Polish (cf. Świstowska, 2011, p. 94).

PHONETIC PROBLEMS OF LEARNERS OF POLISH AS A FOREIGN LANGUAGE

Many glottodidacticians still share a conviction that (Świstowska, 2011, p. 94; Czempka-Wiewióra, Graboń, 2017, pp. 150, 153-154) speech therapist's assistance is most effective in improving the phonetic-phonological system of students learning Polish as a foreign language⁸. The proper perception of speech

⁷ The reflection on the development of linguistic competences differentiates two types of language acquisition: acquisition itself – which is associated with high brain plasticity detectable from the age of 2 to adolescence that enables one to master one's native tongue naturally and without any effort, and learning – occurring around the period of adolescence, which is associated with the “switching” of other brain functions and their subsequent location in the left hemisphere of the brain – and thus entailing a different and more complex way of learning a foreign language (Klein, 2007). With regard to neuroscientific findings, it is suggested to initiate the process of a second language acquisition at the age of 4-5, whereby the period between 4 and 8 is considered to be the most favourable for learning a foreign language (Brzeziński, 1987). J. Arabski also explores this issue to a wider extent (1996, pp. 64-87).

⁸ M. Świstowska (2011, p. 94) emphasises the fact that learning the pronunciation of the Polish language is closely related to learning the correct spelling, since the principles of Polish orthography are based on phonetic rules. However, this thesis is not entirely true, as the rules governing Polish writing are also influenced by the following factors: morphological and historical principles, which in turn lead to a number of differences between spelling and pronunciation. The phonetic rule understood as „pronounce it just as you write it, write it just as you pronounce it” finds its legitimacy in words such as: *kot, mama, Ewa* (*cat, mom, Ewa*). The morphological principle applies to the writing of some words and their forms differently than they are pronounced. Such a notation serves to preserve the relationship with other morphological forms of the same word or with cognate words, although in pronunciation – as a result of assimilation and simplifications of articulation – this notation becomes “blurred”. For example, despite the assimilations and simplifications of articulation, the spelling of the words: *bez* (*without* or *lilac*) or *łyżka* (*spoon*), pronounced successively as: [bes], [wɨjka] allows to maintain the morphological and semantic relationship with other inflective forms of these words or with cognate words: [bes] – *bzu, bzem, bzowy* (noun and adjectival forms of *lilac*) or [wɨjka] – *łyżek, łyżeczka, łyżeczowanie* (spoons, teaspoon, spooning). The spelling

sounds and their articulation is needed for effective communication, i.e. to understand the message received and to successfully convey one's own message. Although the correct pronunciation is of superior importance with respect to the remaining language skills, according to the teachers of Polish as a foreign language (Tambor, 2010, p. 32; cf. 2012a; 2012b; 2014; Seretny, Lipińska, 2003, p. 31, 2006; Czempka-Wiewióra, Graboń, 2017, p. 149), teaching pronunciation still occupies a marginal place in the glottodidactic process and is limited to just the first few lessons related to learning the Polish alphabet and the phonic implementation of the Polish sounds at the very onset of the didactic process. Teaching pronunciation consists mainly in the implementation of the mimicking technique derived from the auditory-verbal method, i.e. it entails repeating new sounds after the teacher and getting used to the way of speaking practiced by the given teacher, which, as a consequence, may impede the understanding of other native speakers of Polish (Dąbrowska, Dobesz, Pasięka, 2010, p. 84; cf. Świstowska, 2011, p. 98; Czempka-Wiewióra, Graboń, 2017, p. 149)⁹.

of the prefixes *bez-*, *roz-*, *od-*, *nad-*, *pod-*, *przed-*, *w-* does not take into account the differences in their pronunciation, so they are written in the following forms: *bezpieczny* [bɛspjɛʧɲi], *rozpartły* [rospartɫi], *odpisać* [otɲisatɕ], *nadpłata* [natɲwata], *podskórny* [pɔtskurni], *przedpokój* [ɲɛɲɔɲokuj], *wsypać* [ɲsɲɔɲɛ]. The historical principle is limited to distinguishing the characters *rz* and *ż*, *u* and *ó*, *ch* and *h* and it is primarily based on the historical processes of language development, geographical variations in pronunciation, and on the sources of loanwords (see Markowski, Wichrowska 2007: p. 11, cf. Malinowski 2011: p. 279). This applies, for example, to the spelling of words such as: *chór*, *chrzest*, *dużo*, *góra*, *harcerz*, *historia*, *każdy*, *król*, *krzyż*, *który*, *mżawka*, *rzeka*, *skóra*, *wyżyna*, *żmija*, *żona* (*choir*, *baptism*, *a lot*, *mountain*, *scout*, *history*, *everyone*, *king*, *cross*, *drizzle*, *river*, *skin*, *highlands*, *viper*, *wife*) etc. Next to the phonetic, morphological and historical principle, there is a fourth one – a conventional one – which regulates, e.g. the use of a capital letter at the beginning of some words, including the compound spelling of the particle *nie* (with nouns, adjectives, adjectival adverbs) or separate spelling (with verbs), or the compound or separate spelling of prepositional phrases (see Markowski, Wichrowska 2007: p. 11). Difficulties with Polish pronunciation observed in various groups of foreigners pertain to the decoding of sounds written with appropriate graphic characters, e.g. the sound [ʃ] corresponds to two characters in *cz*, and the sound [ɟ] corresponds to *dż*, which thus leads to an incorrect implementation of assimilation in terms of voicing in words such as: *wszystko*, *zszyć*, *przyjaciel*, *liczba*, *podstawa* (*everything*, *to sew up*, *friend*, *number*, *basis*) or to problems with the proper implementation of sounds corresponding to the character *ę*, *ą* in various contexts, for exar[ɟ] in words such as: *kąt*, *bąk*, *węgiel*, *wewnętrzny* (*angle*, *bumble-bee*, *carbon*, *internal*). Mistakes made by learners of Polish as a foreign language may also result from discrepancies between pronunciation and spelling, and from basing the spelling on pronunciation, which often leads to unnatural “literal” implementations. The nature of the Polish graphematic system as well as the phoneme-grapheme and grapheme-phoneme relationships were described by Ewa Wolańska in the monograph *The Graphematic System of Contemporary Polish Language Compared to Other Writing Systems*, Warsaw 2019.

⁹ There is still a widespread stereotype which perceives a speech therapist as a professional who deals only with the sound layer of the language. However, the task of a logopaedist is also to diagnose and undertake therapeutic interventions in various speech disorders that are characterised by the non-development of linguistic, communication and cultural competence or the loss of such

The more different the phonetic and phonological system of a given mother tongue of the learner, the more difficult it is going to be for them to acquire the pronunciation of the Polish language. Psycholinguistic research provides the information on the fact that mastering the pronunciation of a foreign language to the same extent as that of the native language is possible only until the age of seven¹⁰.

Later on in life, speech sounds are already absorbed through the prism of the phonetic and phonological features of one's own language (Brown, 1983, p. 101; cf. Świstowska, 2011, p. 94). This fact is also associated with the phenomenon of interference, which consists in transferring pronunciation habits from the native language in the case of an emission of similar sounds, when they get instinctively replaced with sounds similar in terms of articulation and audition to the sounds of the native tongue (Tambor, 2010, p. 33; see Majewska-Tworek, 2005b, pp. 160-161).

Glottodidactics claim that articulation difficulties shared by foreigners learning the Polish language may be common to all students or may depend on their native language (Lipińska, Seretny, 2003, p. 31; Tambor, 2010, p. 34; Świstowska, 2011, p. 94). Phonetic and phonological problems of learners of Polish are still up-to-date in glottodidactic literature (Lipińska, Seretny, 2003; Majewska-Tworek, 2001; 2005a, 2005b, 2006, 2010; Waclawek, 2007; Tambor, 2010; Świstowska, 2011; Turek, 2011).

I present and comment on the outline of phonetic and phonological problems of learners of Polish as a foreign language on the basis of various breakdowns and juxtapositions elaborated by Polish-language glottodidactics researchers, which also include brief characteristics of the implementation aspects of selected ethnic languages of learners of Polish as a second language (see Lipińska, Seretny, 2003; Tambor, 2010; Świstowska, 2011; Turek, 2011).

PHONETIC AND PHONOLOGICAL DIFFICULTIES OF NON-SLAVIC STUDENTS OF POLISH

Reflections of Polish-language glottodidacticians (see Lipińska, Seretny, 2003; Tambor, 2010; Świstowska, 2011; Turek, 2011) provide information on

a skill set. The speech therapist deals with the development of the language and all its subsystems: phonetic-phonological, morphological, syntactic and lexical-semantic one.

¹⁰ Other researchers define the threshold of the inability to master the phonetic structure of a foreign language around the age of 12-13 years, in which period lateralisation of the hemispheres occurs, i.e. their functions are determined, which consequently leads to the main focus on the reception of the sounds of ethnic language speech and the perception of the speech sounds of another language only through the prism of the sounds of its own language (Arabski, 1996, pp. 64-87; cf. Lipińska, Seretny, 2003, pp. 29-30).

how in most cases of non-Slavic foreigners, the vast majority of difficulties in the reception of Polish and pronunciation of the language are caused by the need to distinguish between the following vowels: the mid-front one [ɛ], the high one [i], the high front one [i] and their confusion during articulation. Phonological differences between phonemes /e/, /y/, /i/ are difficult for foreigners to grasp. One can also observe in the learners of Polish language certain issues in emitting the sound equivalents of the letters *ę* and *q* in various contexts. These difficulties pertain in particular to applying a different pronunciation of those sounds in positions before a fricative consonant and in plosive positions, and a divergent one when these sounds precede affricates and plosive consonants. Furthermore, the issues also entail the correct realisation of the graphic denotations of *ę* and *q* in inter-word connections¹¹.

Foreigners find it challenging to distinguish between the following three groups of consonants: dental: [s], [z], [ʃ], [ʒ], postalveolar [ʃ], [ʒ], [tʃ], [dʒ] and alveolopalatal [ɕ], [ʑ], [tɕ], [dʑ]. Furthermore, they also struggle to grasp the differences between affricates and fricatives. Additionally, they experience great difficulties in distinguishing between opposing sounds, such as [ɰ] to [u] and [j] to [i], as well as between oppositions such as voicing and voicelessness, or hardness – softness. What also proves to be troublesome is the correct pronunciation of consonant clusters such as: [tʃ], [pʃ], [xʃ], [kʃ], [stʃ], [spʃ], [sxʃ], [skʃ], [zz], [zdʒ], [zbʒ], [zgʒ], [ɕtɕ], [ʑtʑ] or the production of gemination, i.e. double sounds which are found, for example, in the words: *wanna*, *winna*, *lekko* (*bathtub*, *wine*, *lightly*). Foreigners articulate gemination with a single sound¹².

¹¹ The glottodidactic literature (see Świstowska, 2011, p. 95) emphasises the issues foreigners are experiencing with „synchronous and asynchronous pronunciation of nasal vowels in various positions within a word and in inter-word connections”. This statement may lead to an erroneous identification of synchronous pronunciation with monophthongic one and asynchronous pronunciation with diphthongic one. Moreover, the majority of native Polish speakers do not emit synchronously the sounds, whose written counterparts are letters *ę* and *q*, in the position before a fricative. This is proven by instrumental research on the normative pronunciation of Polish sounds (Lorenc 2016). The research conducted by phoneticians shows that nasal vowels, which are denoted in writing by the characters *ę*, *q*, are implemented poliftongically and usually asynchronously in the position before the fricative and in the absolute final position. When surrounded by other sounds, the sounds *ę* and *q* are pronounced as combinations of an oral vowel and a nasal plosive consonant. The implementation of nasality is therefore typically consonant and is usually associated with a nasal consonant (see Dukiewicz, 1995, pp. 28-30, 32-34; Lorenc, 2016, pp. 324-331). Therefore, the difficulties of learners of Polish as a second language result not only from articulation difficulties, but also from the complicated rules of correct Polish pronunciation which are not always consistently implemented in this respect by the Poles themselves. Deviations from the normative pronunciation also apply to Poles who professionally deal with voice emission (cf. Nowakowski, 1997).

¹² Glottodidactic literature (Świstowska, 2011, p. 95) often reiterates the statement of „incorrect, short, synchronous production of gemination” when describing phonetic problems of learners

Polish is a mid-consonant language while English or German, for example, are vowel languages. There are considerably more vocal elements in both languages, and they are often characterized by the number of times or the proper arrangement of the lips. As noted by glottodidacticians (see Lipińska, Seretny, 2003; Tambor, 2010; Świstowska, 2011; Turek, 2011), the aforementioned opposition of voicing – voicelessness poses a difficulty when intra-word and inter-word assimilations occur due to this feature and when voicing is lost in the absolute final position. Another problematic issue is presented by grasping the difference between the Polish velar fricative [x] and its laryngeal production specific to English or German. What also proves to be straining for foreigners is the articulation of the alveolar-gingival Polish trill [r] that differs from its gingival approximation [ɹ] (in native speakers of American English) or the lingual [ʀ] produced by native speakers of German. For native speakers of English, Polish constant word stress and logical sentence stress also pose difficulties to the native speakers of English.

Romance languages, which include French, Spanish and Italian, are also languages with a varied number of vowels compared to Polish¹³. Native speakers of French who learn Polish substitute a half-open [w] with the [u] vowel because the first one is not present in their language. They replace the Polish nasal vowel [ɔ̃] with the nasal vowel [ã], and they articulate the Polish gingival [r] as the uvular [ʀ], that is, according to the rules of their own pronunciation. There is also no phoneme /x/ in French. In view of the differences between the written recording and the pronunciation of the French language, the French – imitating the orthophonic rules of their own language – bypass the articulation of many vowels, especially those in final word positions, or reduce consonant clusters. They also transfer the prosodic rules from their own language onto Polish while employing the word stress on the last syllable, and they use an ascending intonation in affirmative statements. The Italians, on the other hand, are struggling with the Polish sounds of the postalveolar group, which they tend to produce in a palatal manner, as governed by the Italian orthophony¹⁴. Native speakers of Spanish struggle with the articulation of the Polish bilabial consonant [b], which, according to the rules of

of Polish as a foreign language, which is rather ambiguous and misleading, as it does not specify monosyllabic production or production with the so-called prolonged occlusion, which is acceptable and quite common in Polish.

¹³ There are 5 vowels in Spanish, and therefore less than in Polish (cf. Martínez-Celadrán, Fernández-Planas; Carrera-Sabaté 2003: pp. 255-259), and 7 in Italian, whereby the opposition between /e/ ~ /ɛ/ and /o/ ~ /ɔ/ exists only in the stressed syllables (cf. Rogers, d'Arcangeli, 2004, pp. 117-121).

¹⁴ In Italian, whenever the sounds: [ç], [çʃ], [ʃ], which correspond to the letters: *c*, *g*, *sc*, appear before the vowels [i] or [ɛ], these sounds are pronounced softly: [çʲ], [çʃʲ], [ʃʲ] (see Zawadzka, 1993, p. 12).

the Spanish orthophony, they produce as [b] at the beginning of the word, and as a fricative [β] in the middle of the word. They also experience difficulties with the proper pronunciation of the Polish labiodental consonant [v], which they produce as a bilabial consonant [b] at the beginning of the word (cf. Martínez-Celdrán, Fernández-Planas, Carrera-Sabaté, 2003, pp. 255-259).

Chinese, Japanese and Korean are vowel languages which means that vowels constitute more than 30% of the inventory of the phonemes (Majewicz, 1989, 54, 66), and features such as length and intensity differentiate the meaning of words depending on their length and the volume of their production. These languages do not have many of the Polish consonants, nor the consonant clusters so widespread in Polish whose correct pronunciation proves rather challenging to the inhabitants of East Asia. There is no phoneme /r/ in these languages. This phoneme is instead substituted with the phoneme /l/ or an intermediate phoneme between /r/ a /l/, as is the case in the Japanese language. Therefore, the above-mentioned languages do not feature any phonological opposition /r : l/ of the type present in Polish. Apart from the specific word intonation, which is influenced by the length of the pronounced syllables, there is no sentence accent in these languages, and the intonation in various types of sentences tends to be descending.

PHONETIC-PHONOLOGICAL DIFFICULTIES OF STUDENTS WHO ARE NATIVE SPEAKERS OF SLAVIC LANGUAGES

In glottodidactics of the Polish language (see Lipińska, Seretny, 2003; Tambor, 2010; Świstowska, 2011; Turek, 2011) it is unanimously believed that the difficulty posed by Polish to students whose native language is Czech, Slovak, Slovenian, Serbian, Croatian, Bosnian, is the lack of sound length, i.e. the lack of differentiation between the lengths of sounds or syllables. Constituting yet another problematic issue is the pronunciation of the three clusters of dentalised syllables and consonant groups, e.g. in the following words: *rozstrzelać*, *szorstki*, *szorstcy*, *sprzet*, *chrześcijanin*, *rozszczelnić*. The difference between the Polish language and other Slavic languages pertains mainly to morphology, and in the phonetic and phonological aspect – also to the word accent. Polish is a language in which the word stress is constant and mostly paroxitonic (it falls on the penultimate syllable of the word). In Czech and Slovak, the accent is dynamic or permanent and initial, in Slovenian, Serbian and Croatian, it is tonic or dynamic and mobile, whereas in Bulgarian, Russian, Belarusian and Ukrainian – it is dynamic and mobile.

The phonetic problems faced by the most numerous East Slavic group of foreigners residing in Poland who speak Russian and/or Ukrainian as their mother tongues, include the following:

- different implementation of the same vowel depending on the accented or unstressed position;
- strong labialisation of the vowel [ɔ];
- problems with the articulation of sound equivalents of the letters *ę* and *q* in various contexts, in particular distinguishing their pronunciation between the position before a fricative consonant and in the final position in the word from the position before affricates and plosive consonants, as well as graphic characters *ę* and *q* in inter-word connections;
- difficulties with the articulation of the Polish vowel [w], which is replaced with the sound [l] or [ɥ]¹⁵;
- problem with the pronunciation of soft sounds [ɛ], [z], [tɕ], [dʑ] as softened [sʲ], [zʲ], [tɕʲ], [dʑʲ] and the sound [ɣ] as a softened [ɣʲ] as well as combinations of sounds [ʃɣ] as [ʃɣʲ];
- problems with the word accent, which for the East Slavs is movable and changes the meaning of the word.

DIAGNOSIS OF LOGOPAEDIC ISSUES OF LEARNERS OF POLISH AS A FOREIGN LANGUAGE

As observed by Czempka-Wiewióra and Graboń (2017, pp. 150-151), it occasionally happens, however, that a foreigner seeking help from a speech therapist, in addition to typical pronunciation errors, resulting from a phonetic interference of their native language, may simply have a speech impediment also in their mother tongue. This impediment may be caused by any of the following factors: lack of speech fluidity, abnormal bite, dental anomalies, alongside the anomalies in the structure of the speech apparatus, cleft palate, hearing loss, or other emission disorders resulting from various medical conditions, e.g. neurological ones. Such disturbances in the language production sphere may manifest themselves in phenomena such as: a lisp, rhotacism, voiced-to-nonvoiced dyslalia, nasal speech etc. What is crucial for a speech therapist dealing with a foreigner is their ability to distinguish between a mere pronunciation error and a speech impediment. The first one is “a deviation from the adopted pronunciation norm and it results from ignorance, bad habits or customs”, which is moreover sequential to imitating incorrect patterns (Jastrzębowska, 1998, 75), and in the case of foreigners – reproduction

¹⁵ The letter *ł* which is nowadays a graphic realisation of the [w] sound in Polish originally corresponded in Polish to the [ɥ] sound which is also reflected in its phonetic transcription ([ɥ] vs [w]). Slavic languages feature the [l] sound. East Slavic languages (e.g. Ukrainian) also feature the sound [w] (semi-vowel [u]), although its phonological features are slightly divergent from those of a Polish sound (see *Comparison of Modern Slavic Languages. Phonetics and Phonology*. Ed. I. Sawicka, Opole 2007).

of pronunciation errors of native speakers of Polish. A speech impediment, on the other hand, is manifested by elision, substitution or deformation of the sound(s) of speech and is a consequence of the concurrence of internal factors, e.g. phonemic hearing disorders, irregularities in the anatomical structure of articulatory organs, paralysis of the paths that innervate speech organs (*ibidem*). As is often-times emphasised by linguists (Węsierska, 2014, p. 124; cf. Czempka-Wiewióra, Graboń, 2017, p. 153), the speech problems of foreigners can be difficult to pinpoint, as learners of Polish usually speak more slowly and use simple syntactic structures. In addition, diagnosing disorders that are strictly of logopaedic nature is hindered by phonetic interference from native languages, which appear in statements of learners of Polish as a second language (Note: U.C.P).

Establishing a logopaedic diagnosis¹⁶ and programming therapy can contribute to eliminating the cause of a speech impediment (also with the help of specialists other than speech therapists) and improving the communication competence of a foreign patient.

A modern speech therapy examination ought to include the following elements:

- a) the diagnosis, which includes description, i.e. the study of interactive skills (pronunciation, the knowledge of the language, conceptual structures, the implementation of a dialogue and narrative statements), as well as the interpretation, i.e. analysis of the results of specialist tests, family history, differential diagnosis and case recognition;
- b) therapy programming, including the goals of speech therapy, the strategies, the methods and the general organisation of the therapeutic work;
- c) therapeutic procedure, which entails the organisation of stages and their individual assessment, the selection of support means, record keeping, verification of diagnostic hypotheses, and program modification (Grabias, 2012, p. 58)¹⁷.

As noted by Czempka-Wiewióra and Graboń (2017, p. 155), a full logopaedic diagnosis is possible when a foreigner speaks Polish at least at a B1¹⁸ level,

¹⁶ Speech therapists emphasise the fact that a logopaedic diagnosis should be the result of observation, interviews, language tests, as well as psychological, pedagogical, neurological, audiological, orthodontic and phoniatic examinations (Jastrzębowska, Pelc-Pękala, 2003, p. 310).

¹⁷ Jastrzębowska and Pelc-Pękala (2003, p. 310) consider a logopaedic examination to be complete if it entails the following: problem definition, interview, observation, indicative speech examination, condition of the articulatory apparatus, as well as of the swallowing and respiratory function, indicative hearing examination, including phonematic hearing, auditory memory, kinesthesia, fluency of speech prosody, voice emission, praxis and gnosis, indicative lateralisation study, establishing the hypotheses, basic logopaedic examination pertaining to the understanding, speaking, reading and writing skills, specialist examination and verification of hypotheses.

¹⁸ The Common European Framework of Reference for Languages (CEFR) contains the

which allows the speech therapist to conduct an interview with the patient. The authors wish to sensitise the reader that observation and indicative examination of speech should be conducted on the basis of the language material known to the learner. Moreover, they believe that language errors appearing in the utterances of the examined person are adequate to their level of linguistic advancement and, as such, they should not be evaluated. Therefore, before conducting a speech therapy diagnosis, it is worth finding out which program is implemented at the Polish language course in which the learner participates and which teaching materials are used by them. Prior cognisance of the level of linguistic advancement and the acquired learning materials of the client will help avoid any misunderstandings in communication between the speech therapist and the foreigner and it will aid in establishing a reliable logopaedic diagnosis (note by U.C.P.). Glottodidactics emphasise that the result of a phonemic hearing examination may depend on the knowledge of the vocabulary used in the study (Czempka-Wiewióra and Graboń, 2017, p. 155). Therefore, it is important to choose a language material that will be adapted to the level of language knowledge of the learner.

The problem in drawing up a full speech therapy diagnosis, however, may lie in the difficulties in performing specialist tests of a foreigner in Poland or in the inability to translate them into Polish (*ibidem*).

BOOSTING THE PRONUNCIATION SKILLS OF FOREIGNERS BY MEANS OF SPEECH THERAPY METHODS

M. Świstowska (2011, p. 98) notes that the advantage of speech therapists over Polish language teachers in terms of improving the articulation skills of learners of Polish as a second language is their ability to evoke sounds. They can employ methods of evoking speech sounds, such as the technique elaborated by J. Cieszyńska (2003), which engage the senses of: sight, hearing and touch, alongside the method of manual sound tracking developed by E. Wianecka (2008) (which is addressed primarily to children with autism and Asperger's syndrome), that will demonstrate the differences in the arrangement of speech organs when articulating sounds similar to those appearing in the student's native tongue¹⁹.

following description of the level of language proficiency at level B1: „A person using a language at this level understands the meaning of the main points of clear standard input contained in unambiguous standard utterances regarding familiar matters regularly encountered in work, school, leisure, etc. They can deal with most situations likely to arise while travelling in an area where the language is spoken. They can produce simple and coherent spoken and written texts on topics that are familiar or of personal interest to them. They can describe personal experiences and events, plans, projects, as well as dreams and hopes for the future” (quoted from: Lipińska, Seretny, 2003, p. 19).

¹⁹ However, employing the method of manual sound tracking may require a certain degree of intuition. In many cultures, crossing the most intimate proxemic sphere (which does not exceed 15

Speech therapists find themselves more inclined to make use of articulation diagrams, labiograms, X-rays and rhythm gestures in imaging the proper speech articulation. Logopaedists armed with a superior knowledge of voice emission methods or methods used in stuttering therapy find it easier to help foreigners learn the prosodic aspects of Polish pronunciation: the right accent, intonation, and rhythm of speech. The techniques used by speech therapists employ exercises containing visual, auditory and motor stimuli which render learning Polish more effective (Świstowska, 2011, p. 99).

Constituting an interesting enhancement of the process of teaching not only pronunciation, but also other subsystems of the Polish language, may be the use of musictherapeutic or logorhythmic methods and techniques, which is quite widespread in the therapeutic approach of many speech therapists, as such methods can serve to activate, relax and develop communication and creativity of the learners of Polish as a second language²⁰.

In their publication entitled *Diagnosis and Speech Therapy in Teaching Polish as a Foreign Language*, Czempek-Wiewiór and Graboń (*Diagnoza i postępowanie logopedyczne w nauczaniu języka polskiego jako obcego* 2017, pp. 156-158) propose a pattern of logopaedic proceeding aimed specifically at foreigners. The authors suggest conducting a phonemic hearing examination using the “Twin Words” test developed by Liliana Madelska, *Test for the Assessment of School Maturity in Terms of Perception and Pronunciation Skills in Multilingual Children* (*Test do badania dojrzałości szkolnej w zakresie percepcji i wymowy*

cm/6 in) is reserved only for the most intimate relationships, e.g. family members. Not every student – be they adult or under-age – will be willing to accept an interference of a logopaedist/teacher – a speech therapist – into their internal or external sphere. Such contact of the speech therapist with the patient in the method of manual sound tracking manifests itself by touching (by the logopaedist) of those parts of the student’s face which play a role in the articulation process (the area around the mouth, the mouth itself, the tongue, the cheeks, the chin, etc.). This may arouse a feeling of discomfort in the student-patient. In Polish culture, as well as in many other cultures, e.g. in the culture of Western, Central and Eastern Europe, the teacher’s contact with the student is usually limited to maintaining a distance in the social zone, which ranges from 1.2 meters to 3.6 meters (47 in to 140 in). Naturally, certain situations occur in which both the teacher and the student have to exceed their own personal spheres thus reducing the distance between them (up to 45 cm/17 in). Nonetheless, it is a rather rare occurrence when exceeding the personal sphere takes place during the first meeting with the therapist.

²⁰ Music therapy and logorhythmics are young disciplines of science whose purpose is to employ music for therapeutic, relaxation and educational purposes. Scientific research shows that music plays a poignant role in the physiological, emotional, cognitive, motor and social development of a person, while it can also affect the adaptation and plasticity of the brain, thus impacting the ability to learn foreign languages. Moreover, it has been noted that individuals familiarised with the rules of music have greater language skills and are more capable at assimilating other language systems since they are able to distinguish between different sounds, including speech sounds. Therefore, some music therapy and logorhythmic exercises can be included in the logopaedic therapeutic and didactic process.

dzieci wielojęzycznych Madelska, 2010), while they advise that an evaluation of linguistic functioning ought to be performed by means of a survey of speech skills elaborated by I. Michalak-Widery (2009) *Speech Therapy Screening Test for Children and Adolescents (Logopedyczny test przesiewowy dla dzieci i młodzieży)*, or using a test developed by I. Michalak-Widera and K. Węsierska (2012) *Speech Screening Test for Preschool Children (Test do badań przesiewowych mowy dla dzieci w wieku przedszkolnym)*²¹. However, Czempka-Wiewióra and Graboń fail to pay attention to a highly poignant fact pertaining to working with adults, which is an age-appropriate approach of a speech therapist to their patient, i.e. one which avoids infantilisation of the logopaedic activities aimed at mastering the speech of a given language as closely as possible to the reference patterns. The questionnaire and the test proposed by the researchers are mainly intended for children and contain visual and verbal materials intended for the youngest patients. Therefore, the key task of a speech therapist in working with a foreigner is to select such language and visual material that is adequate not only to their age, but also to the social status of the student-patient. It ought to be added here that the unreflective use of ready-made surveys for children's speech testing in the case of assessing adult speech can discomfort an adult student and discourage them from continued learning. It is therefore vital that speech therapists use their own logopaedic questionnaires when working with adult foreigners, which contain photos of real objects, people and situations which are familiar to the adult experience.

The authors of the logopaedic procedural scheme intended for foreigners (Czempka-Wiewióra and Graboń 2017, pp. 156-158) further postulate conducting an assessment of the condition and efficiency of the articulatory apparatus of the patient (the tongue, the lips, the lower jaw, the palate, the occlusion, the dentition) using the tests proposed by B. Ostapiuk (2005). In the light of the latest speech therapy research (cf. Borowiec, 2018, pp. 1039-1062), the assessment of the structure and functioning of the articulatory apparatus could be carried out according to a scheme which would take into account the studies of the functions of the orofacial system which affect its anatomical structure and, consequently, the articulation as well²².

²¹ There are many tools on the logopaedic market which are designed to study the pronunciation of children. However, the only standardised tool for assessing the articulation of the youngest patients is the *100-Word Articulation Test (100-wyrazowy test artykulacyjny)* developed by E. Krajna (2015).

²² According to A. Borowiec (2018, pp. 1052-1053), an examination of orofacial functions should include the following: 1) an assessment of motor patterns in the following functions: a) resting position of the orofacial system, b) swallowing; 2) an assessment of muscular system efficiency: a) vertical movement, b) tongue efficiency (lengthening, lowering to the chin, raising the tongue crown when rolled up in a "tube" and when cupped like a "spoon"; 3) an assessment of temporomandibular joint function, 4) an assessment of body posture, 5) an assessment of the occlusion for functional and morphological interdependencies.

Undoubtedly, the diagnostic procedure proposed by Czempka-Wiewióra and Graboń (2017, pp. 156-158) is a comprehensive methodological operation, but one that is also extremely time-consuming. It is thus worthwhile to modify certain individual steps of this process, adapting them to the level of knowledge of Polish of a given foreigner. Indeed, a spontaneous speech can already serve us the opportunity to effectuate a preliminary assessment of the phonation-respiratory, prosodic and articulatory spheres, as well as of the motor skills of the speech organs of the examined person, whereas over the course of a regular conversation, we will be able to indicatively check phonemic hearing and examine the general comprehension levels. It should also be emphasised that the therapeutic process also requires an individual approach.

In assessing the phonetic and phonological problems of foreigners learning Polish as a second language, it is also important to take into account the ortho-phonetic capabilities and phonetic interference of learners who are speakers of different native languages, for which the speech therapist will need the knowledge of the interference of these languages with the Polish language. It is desirable for a diagnostician to have the ability to perform the assessment in both languages; indeed, it should be strived for. (Łuniewska et al. 2015, p. 41).

A PROPOSAL OF LOGOPAEDIC AND GLOTTODIDACTIC EXERCISES IN TEACHING FOREIGNERS THE CORRECT PRONUNCIATION OF THE POLISH LANGUAGE

The presented types of exercises aid us in overcoming phonetic and phonological difficulties of learners of Polish as a foreign language and are based on methods developed by speech therapists and glottodidactists (Tambor, 2010, pp. 47-50; Majewska-Tworek, 2010). These include the following:

- showing the arrangement of speech organs on articulation diagrams, palatograms (which is vital for palatal sounds), labiograms (especially for labial sounds, labiodental sounds and vowels) and creating one's own labiograms;
- showing with one's hands the position of the tongue in relation to the hard palate, gums and teeth in the case of articulation of dentalised consonants;
- observing the arrangement of the articulatory organs before a mirror;
- recording oneself, listening to the recording and comparing it with the reference pronunciation;
- distinguishing between voicing and voicelessness by touching the teacher's neck with the palm of one's hand at the height of the larynx (unless

- it causes the student to feel a certain discomfort; note by U.C.P.), and then touching one's own neck (feeling the vibration and tension occurring when articulating voiced sounds);
- evoking a trill, gingival [r] in a mechanical way²³ (by tapping the frenulum with a finger during the pronunciation of the sound [ʒ] or phonetically - by alternating repetition of the dental [t] and gingival [ʀ]);
 - pronunciation of [w] by puckering one's lips as if for a kiss, blowing or whistling;
 - pronunciation of [v] by biting on the lower lip;
 - fixation of the evoked sounds in syllables, logotomes and words;
 - naming the items shown in the picture (words that contain a problematic sound);
 - naming pictures using paronyms, i.e. words that differ in one sound; pointing to pictures after hearing one of the pair of paronyms;
 - using grammatical methods in learning to differentiate the final-position vowels [ɛ], [i], [i] (adjectives in neuter and singular form and in plural in non-masculine gender ending in vowel [ɛ], while masculine-gender singular adjectives end with [i] but when following the consonants [k], [g], they end with [i]);
 - listening to audio recordings and repeating words, sentences and texts extracted from these recordings;
 - reading poems, prose texts, lyrics containing a given sound / given sounds that prove problematic for learners;
 - composing words from syllables;
 - composing a word string, in which the new word begins with the sound, with which the previous one ended;
 - solving crosswords with words that contain the problematic sounds;
 - composing dialogues and short stories that contain as many words as possible with a given syllable;
 - drawing objects whose names begin with a given sound.

When suggesting phonetic and phonological exercises aimed at correcting speech impediments or improving pronunciation, such didactic modalities should be adapted to the needs of the specific person learning Polish as a foreign language, namely, to the specific phonetic issues experienced by that person, as well as to their linguistic skills, their level of mastery of the Polish language, their age, social background and educational needs. An elaboration of logopaedic and

²³ All situations of exceeding the proxemic distance within the intimate sphere of the student-patient require their prior consent. In the case of using mechanical methods of inducing sounds and in order to reduce any possible discomfort, it is advisable that the speech therapist should first demonstrate the given activities on themselves. Then, the student should repeat this action on themselves.

glottodidactic interactions should be preceded by a thorough analysis of the phonetic interferences typical of the native tongue of the foreign patient in question.

CONCLUSION

The similarity between teaching one's native tongue as a foreign language or native one pertains to the structuring of the language system in the student's mind and, as such, it constitutes an interesting experience for both glottodidacticians and logopaedists. The tasks of both groups of specialists are laden with extreme responsibility, as they deal with programming the language that encompasses the culture and reality of a given society. Speech therapists, who have the opportunity to professionally improve the pronunciation of foreign learners of Polish, motivate them to develop linguistic competence and enhance the communication skills of foreigners with native speakers of Polish. Furthermore, appropriate logopaedic activities have an impact not only on the comfort of using Polish by the treated foreigners, but also on their attitude towards the Polish language as such and to the Polish culture as a whole. Thus, speech therapy assistance is a useful and desirable activity in the entire glottodidactic process.

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