

Orthoepy

of West Slavonic Languages

(Czech, Slovak and Polish)

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Introduction

The book in your hands deals with the literary pronunciations of three West Slavonic languages – languages which, despite their genetic and geographic proximity, differ from each other not only in phonic realisation of some phones and phone groups, but also in the manner in which their respective linguistic circles perceive literariness and the meaning of the term *orthoepy*¹ present in the title.

The authors of this text – one of the outputs of the project titled *Orthoepy of West Slavonic Languages*, supported by the International Visegrad Fund, focused their attention on these topics. This book is a joint effort of scholars from the Faculty of Education of the University of Ostrava, Faculty of Arts of Constantine the Philosopher University in Nitra, and Institute of Western and Southern Slavic Studies of the University of Warsaw, who possess experience not only with teaching the phonetic aspects of their native languages for both native and foreign students, but who also participate in improving the speech cultures in audial media, schools, theatre, and among employees of state institutions and people from commercial practice. They have applied their scholarly knowledge and practical skills in various activities carried out within the project – in workshops for students of all three participating universities aimed at practical pronunciation exercises (with a markedly positive response from students); in preparation of an exercise book used in the workshops and further applied in education at these facilities. In preparing this book, they also drew inspiration from the opinions of their colleagues from partner universities presented in professional colloquia, which provided space for discussions of the studied topic and resulted in valuable recommendations both for this text and for practical teaching activities.

The published project outputs (this monograph and the previously published exercise book²) touching on the contemporary orthoepic norm of Czech, Slovak and Polish languages will be beneficial to all who wish to improve their pronunciation: foreigners learning these languages, as well as native speakers. Publishing of pronunciation rules for these languages within a single volume (in a wider context and with a comparative aspect) can help both professionals dealing with this topic and university students, as well as public speakers in

¹ Differences in understanding of the term **orthoepy** (from Gr. *orthos*, i.e., correct, and *epein*, i.e., speak) in Polish context as opposed to Czech and Slovak is explored in Chapter 1 *Definitions of terms*.

² Kuldánová, Pavlína, Olšiak, Marcel, Hebal-Jeziarska, Milena. *Orthoepy of West Slavonic Languages – Practical Exercises. Workbook for practising standard Czech, Slovak and Polish pronunciation* [online]. Ostrava: University of Ostrava, 2020. Available at: <https://dokumenty.osu.cz/pdf/kcd/orthoepy/workbook-orthoepy-practical-exercises.pdf>.

various occupations (e.g., teachers, interpreters, television and radio hosts, etc.) and people working in business and commerce.

In addition to the currently valid orthoepic rules of the studied languages – presented in standalone chapters (3, 4, and 5), this monograph contains information on the history of codification efforts in Czechia, Slovakia, and Poland (Ch. 2), points out the current issues in contemporary Czech, Slovak and Polish pronunciation (Ch. 6), and, in the introduction (Ch. 1), it illuminates the fundamental terminology used in this discipline and its understanding in the individual cultures.

The readers can expand their knowledge by the conclusions drawn from the comparisons of partial topics dealt with in individual chapters. Certain differences noted between the languages are surprising, others well known, but all are interesting from a comparative standpoint:

- differences can be identified in the semantic contents of the central terms, such as *orthoepy*, *norm*, *codification*, and *literary language*, which are introduced in the contexts of national theories of language culture;
- differences can also be seen in the language policies of individual countries (in Czech Republic, language use is not governed by a language law, as opposed to Slovakia and Poland);
- codification of individual literary pronunciations took place under different political, social, and cultural conditions;
- ages and contents of the codified pronunciation norms vary;
- comparison of segmental phenomena (phones) repertoire and the rules of their articulation in stream of speech reveals both quantitative and qualitative differences – the same is true for the sets of suprasegmental (prosodic) devices: Czech and Slovak have a richer vocalic system than Polish, and, vice versa, Polish has a larger number of consonant sounds at its disposal;
- differences are also evident in some changes that take place when combining phones into syllables, words and collocations, e.g., assimilation and realisation of glottal stops; discrepancies are observable also in stress systems;
- and, notably, certain variation can be observed directly in the fundamental descriptions of the phonetic systems (i.e., in classification of certain phones) and in the need to use a higher number of symbols for the transcription of Polish pronunciation.

In the introductions of the three different language environments, the efforts to capture the contemporary pronunciation norm are rooted in relevant scholarly sources and results of the most up-to-date phonetic research. The last chapter reflects the authors' individual approaches to the research of the phonetic aspect of their native languages – and orthoepy in particular – and also introduces their original educational activities in this area. The result is a presentation of the most frequent deviations from orthoepic norm in each of the observed languages.

One further distinction needs to be noted – the chapters on Czech and Slovak pronunciations are focused more on the orthoepy in itself, while the chapter on Polish pronunciation is more “phonetic”, theoretical. This is due the fact that, in Poland, there exists a large number of handbooks dealing with practical realisation of phones, authored primarily by speech therapists and actors, however, no publication is available that would deal with differences in descriptions of Polish phones and cover the results of contemporary research, which is scattered across various journals. It is also not common in Poland for philological study programmes to incorporate pronunciation practicing following orthoepic rules – as opposed to the situation in Czechia and Slovakia; this can only be done as a part of lessons on phonetics, requiring high-quality theoretical foundations. Conditions in Czechia and Slovakia are different not only in regard of these foundations, but also in the number of available scholarly phonetic works and practical orthoepic handbooks. Therefore, the different “national” needs were taken into account in descriptions of individual language systems.

And to conclude, we would like to add one more (perhaps a little droll) explanation: “*Orthoepy is not orthopaedics!*” This confusion of terms is something that the authors had to deal with frequently during the project activities, explaining what it is they are dealing with. The readers of this book should be entirely clear on this matter, though.

Table of phonetic transcription symbols used in transcription of Czech pronunciation

Pavčina Kuldanová

For the phonetic transcription of the Czech language, a simplified, so-called Czech phonetic transcription, was chosen. It uses the common letters of the Czech alphabet (letters with diacritical marks); for those phones that do not have corresponding graphemes, these established symbols were selected:

Table 1: Phonetic transcription symbols used in transcription of Czech pronunciation

Symbol	Transcription example	Orthographic notation	Phone
ou̯, au̯, eu̯	[ženou̯, auto̯, euro̯]	<i>ženou, auto, euro</i>	diphthong
r̥, l̥, m̥	[vr̥t, vl̥k, osm̥]	<i>vrt, vlk, osm</i>	syllabic consonant
ř̥	[tř̥i]	<i>tři</i>	voiceless ř
ṭ, ḍ, ṇ̃	[ḍíṭe, ṇ̃it]	<i>dítě, nit</i>	soft ṭ, ḍ, ṇ̃
ɟ	[poɟim]	<i>podzim</i>	voiced variant of c
ʒ	[léʒba, ʒem]	<i>léčba, džem</i>	voiced variant of č
x	[xata]	<i>chata</i>	voiceless ch
ɣ	[abiɣ dal]	<i>abych dal</i>	voiced ch preceding voiced paired consonant
ŋ	[baŋka, taŋgo]	<i>banka, tango</i>	n preceding k or g
ɱ	[tramɱvaj, komɱfort]	<i>tramvaj, komfort</i>	m preceding v or f
ʔ	[kʔoknu]	<i>k oknu</i>	glottal stop
Other symbols used			
'	['slovo]	<i>slovo</i>	main word stress
˙	[˙česko ˙slovenská]	<i>československá</i>	secondary word stress

Table of phonetic transcription symbols used in transcription of Slovak pronunciation

Patrik Petráš

For the transcription of Slovak pronunciation, a system based on the use of regular letters of Slovak alphabet (with diacritic marks) has been chosen. For the phones that do not have corresponding graphemes, the following symbols are used:

Table 2: Phonetic transcription symbols used in transcription of Slovak pronunciation

Symbol	Transcription example	Orthographic notation	Phone(s) represented
ia, ie, iu, uo	[v _i ac, v _i em, č _i u, k _u oň]	<i>viac, viem, čiu, kôň</i>	diphthongs <i>ia, ie, iu, ô</i>
u	[pra _u da, že _u ou]	<i>pravda, ženou</i>	<i>v</i> or <i>u</i> in syllable-final position
w	[wz _w duch, šé _w dirigent]	<i>vzduch, šéfdirigent</i>	<i>v</i> and <i>f</i> preceding a voiced consonant
ɱ	[a _ɱ fora, ta _ɱ von]	<i>amfora, tam von</i>	<i>m</i> preceding <i>v</i> or <i>f</i>
i	[kra _i , meda _i la]	<i>kraj, medaila</i>	<i>j</i> or <i>i</i> in syllable-final position
3	[me ₃ a, prin ₃ vošiel]	<i>medza, princ vošiel</i>	<i>dz</i>
ž	[žem, pun _ž voňia]	<i>džem, punč vonia</i>	<i>dž</i>
r, l, ṛ, ḷ	[v _r t, v _l k, v _r tať, v _l ča]	<i>vrt, vlk, vrtať, vlča</i>	syllabic consonants <i>r, l, ṛ, ḷ</i>
ṭ, ḍ, ñ, ḷ	[ṭahá, ṭiež, ḍasno, ḍeň, ñuchať, ñiṭ, veľa, ḷes]	<i>ṭahá, tiež, ḍasno, deň, ñuchať, niṭ, veľa, les</i>	soft consonants <i>ṭ, ḍ, ñ, ḷ</i>
x	[xa _t a, dru _x pa _p iera]	<i>chata, druh papiera</i>	voiceless <i>ch</i>
ɣ	[dru _ɣ vína, vá _ɣ hučí]	<i>druh vína, Váh hučí</i>	voiced variant of <i>ch</i> , variant of the phone <i>h</i> preceding another <i>h</i>
ɳ	[ba _ɳ skí]	<i>banský</i>	<i>n</i> preceding <i>s, z, š, ž</i>
ɲ	[ba _ɲ ka]	<i>banka</i>	<i>n</i> preceding <i>k, g</i>
ɲ	[bro _ɲ chitída]	<i>bronchitída</i>	<i>n</i> preceding <i>ch</i> (both voiceless and voiced)
>n, >c	[ḍe>ní, su>cu]	<i>denný, sudcu</i>	geminate consonants
ʔ	[ʔa _ʔ teraz]	<i>a teraz</i>	stop

The following symbols are also used:

- syllable carrying main word stress: 'slovo
- syllable carrying secondary word stress: 'polo, vodič
- word carrying sentence stress: *Zostal* 'doma.
- word carrying contrastive stress: *Zostal* ''doma.
- falling melody, conclusive cadence, falling semicadence: ↘
- rising melody, anticadence, rising semicadence: ↗
- non-rising semicadence: →
- raised non-rising semicadence: ↗
- short pause (intra-sentential): |
- longer pause (inter-sentential): ||
- symbol for linked pronunciation: ͡
- symbol for higher pronunciation style: *

Table of phonetic transcription symbols used in transcription of Polish pronunciation

Milena Hebal-Jezierska

In this chapter, a more complex symbolic system is used to record sounds. A description of each symbol is provided below. The symbol set does not represent a complete sum of the phonemes of the Polish language, but rather a set used in those parts of this book devoted to Polish pronunciation. In the table, apico-dental phones are described as dental and apico-alveolar as alveolar (according to Ostaszewska, Tambor, 2012). In case of the phones [ʒ] and [l], places of articulation according to Anita Lorenc (2018) are also provided. Examples of words containing softened voiceless phones were taken from Agnieszka Rosińska-Mamej (2014).

The author would like to express her gratitude for advice and recommendations to professor Jolanta Tambor.

a) Vowel symbol modifiers

tilde over a vowel – nasalisation of the vowel, e.g., ã, ã, õ, ã, ã, ã;

single dot over a vowel – rise in articulation, e.g., ê, ô;

two dots over a vowel – centralisation of articulation, e.g., ä, ö, ü.

b) Semivowel and consonant symbols

cedilla under a phone – desonorisation;

apostrophe next to a phone – softening;

acute accent over a phone – softness;

dot under a phone – alveolarity;

tilde over a consonant/semivowel – nasality

circumflex under a phone - semivowel;

dot over a phone – laryngeality.

Table 3: Symbols denoting semivowels

Symbol	Transcription example	Orthographic notation	Phone properties
ɯ	[ɯafka]	ławka	semivowel, oral, back, voiced
ũ	[avãũs]	awans	semivowel, nasal, back, voiced
ɯ̥	[pomysɯ̥]	pomysł	semivowel, oral, back, voiceless
ɯ̥'	[ɯ̥'ikent]	weekend	semivowel, oral, back, voiced, softened
ɪ	[ɪutro]	jutro	semivowel, oral, front, voiced
ĩ	[koĩsk'i]	koński	semivowel, nasal, front, voiced

Table 4: Symbols denoting consonants. The table is a set of symbols collected from the works of the authors cited in this publication. In some cases, it contains multiple symbols for a sound occurring in the same phonetic context. This is caused by the differences in sound classifications proposed by various researchers.

Symbol	Transcription example	Orthographic notation	Phone properties
b	[butka]	budka	voiced, bilabial, occlusive, hard
b'	[b'iskup]	biskup	voiced, bilabial, occlusive, softened
c	[car]	car	voiceless, dental, semioclusive, hard
c'	[c'is]	cis	voiceless, dental, semioclusive, softened
č	[čapka]	czapka	voiceless, alveolar, semioclusive, hard
č'	[č'ip]	czip	voiceless, alveolar, semioclusive, softened
ć	[ćästko]	ciastko	voiceless, prepalatal, semioclusive, soft
d	[dar]	dar	voiced, dental, occlusive, hard

d'	[d'inozaur]	dinozaur	voiced, dental, occlusive, softened
ḑ	[ḑževo]	drzewo	voiced, alveolar, occlusive, hard
ʒ	[ʒban]	dzban	voiced, dental, semioclusive, hard
ʒ'	[noz' i ʒén]	noc i dzień	voiced, dental, semioclusive, softened
ʒ̣	[ʒ̣iṣ]	dziś	voiced, prepalatal, semioclusive, soft
ʒ̥	[ʒ̥uma]	dżuma	voiced, alveolar/ postalveolar, semioclusive, hard
ʒ̥'	[ʒ̥'ip]	dżip	voiced, alveolar, semioclusive, softened
f	[fama]	fama	voiceless, labiodental, constrictive, hard
f'	[f'ilm]	film	voiceless, labiodental, constrictive, softened
g	[gus]	guz	voiced, velar, occlusive, hard
g̣	[g̣igant]	gigant	voiced, postpalatal, occlusive, soft
g'	[g'igant]	gigant	voiced, velar, occlusive, softened
x	[xata]	chata	voiceless, velar, constrictive, hard
x̣	[x̣iny]	Chiny	voiceless, postpalatal, constrictive, soft
x'	[x'iny]	Chiny	voiceless, velar, constrictive, softened
ɣ	[boydan]	Bohdan	voiced, velar, constrictive, hard
ɣ̣	[daɣ̣̌ana]	dach jana	voiced, postpalatal, constrictive, soft
ɣ'	[daɣ'̌ana]	dach jana	voiced, velar, constrictive, softened

k	[kot]	kot	voiceless, velar, occlusive, hard
ć	[kiść]	kiść	voiceless, postpalatal, occlusive, soft
kʹ	[kʹiść]	kiść	voiceless, velar, occlusive, softened
l	[las]	las	voiced, semiopen consonant, lateral, alveolar/postalveolar, hard
lʹ	[lʹis]	lis	voiced, semiopen consonant, lateral, alveolar, softened
ł	[myśl]	myśl	desonorised, semiopen consonant, lateral, alveolar, hard
łʹ	[wymyślʹće]	wymyślcie	desonorised, semiopen consonant, lateral, alveolar, softened
m	[mama]	mama	voiced, semiopen consonant, nasal, bilabial, hard
mʹ	[mʹila]	mila	voiced, semiopen consonant, nasal, bilabial, softened
ɱ	[pasm]	pasm	desonorised, semiopen consonant, nasal, bilabial, hard
ɱʹ	[ɱʹścićel]	mściciel	desonorised, semiopen consonant, nasal, bilabial, softened
n	[noga]	noga	voiced, semiopen consonant, nasal, dental, hard
ɳ	[poŋček]	pączek	voiced, semiopen consonant, nasal, alveolar, hard
ɳ	[pʹösɳka]	piosnka	desonorised, semiopen consonant, nasal, dental, hard

ń	[ńitka]	nitka	voiced, semiopen consonant, nasal, prepalatal, soft
ñ	[pleśń]	pleśń	desonorised, semiopen consonant, nasal, prepalatal, soft
ŋ	[baŋk]	bank	voiced, semiopen consonant, nasal, velar, hard
ŋ̃	[p'ösŋka]	piosnka	desonorised, semiopen consonant, nasal, velar, hard
ñ̃	[bañki]	bańki	voiced, semiopen consonant, nasal, postpalatal, soft
ŋ'	[baŋ'ki]	bańki	voiced, semiopen consonant, nasal, velar, softened
ṇ̃̃	[čosñkém]	czosnkiem	desonorised, semiopen consonant, nasal, postpalatal, soft
ŋ̃'	[p'ösŋki]	piosnki	desonorised, semiopen consonant, nasal, velar, softened
p	[pole]	pole	voiceless, bilabial, occlusive, hard
p'	[p'ik]	pik	voiceless, bilabial, occlusive, softened
r	[rak]	rak	voiced, semiopen consonant, trill, alveolar, hard
r'	[r'ikša]	riksza	voiced, semiopen consonant, trill, alveolar, softened
ɾ	[v'ɹätr̥]	wiatr	desonorised, semiopen consonant, trill, alveolar, hard
ɾ'	[p'ɹötɾ'kēm]	piotrkciem	desonorised, semiopen consonant, trill, alveolar, softened

ř			voiced, semiopen consonant, trill, laryngeal, hard
ř̥			desonorised, semiopen consonant, trill, laryngeal, hard
ř̥̌			desonorised, semiopen consonant, trill, laryngeal, softened
s	[sul]	sól	voiceless, dental, constrictive, hard
s'	[s'inus]	sinus	voiceless, dental, constrictive, softened
š	[šal]	szal	voiceless, alveolar, constrictive, hard
š'	[š'iša]	szisza	voiceless, alveolar, constrictive, softened
ś	[śl'imak, śostra]	ślimak, siostra	voiceless, prepalatal, constrictive, soft
t	[tom]	tom	voiceless, dental, occlusive, hard
t'	[t'ik]	tik	voiceless, dental, occlusive, softened
ṭ	[ṭšeba]	trzeba	voiceless, alveolar, occlusive, hard
v	[vata]	wata	voiced, labiodental, constrictive, hard
v'	[v'ixer]	wicher	voiced, labiodental, constrictive, softened
z	[zux]	zuch	voiced, dental, constrictive, hard
z'	[z'imbabve]	Zimbabwe	voiced, dental, constrictive, softened
ż	[żarno]	ziarno	voiced, prepalatal, constrictive, soft
ž	[žuk]	žuk	voiced, alveolar, constrictive, hard
ž'	[ž'igolo]	žigolo	voiced, alveolar, constrictive, softened

Certain phones that are articulated in approximately the same position in the oral cavity, e.g., *k*, and *g*, are labelled differently in Polish and Slovak, for example, the name “dorsal phones” corresponds to the Slovak label “velar phones”.

Label “prepalatal” refers to a phone articulated with participation of anterior palate. Label “postpalatal” refers to a phone articulated with participation of posterior palate.

1 Definitions of terms

In order to provide a solid footing in the discussed topic, we need to explain the understandings of the fundamental terms, which may differ across the subject languages: **literary language** and the terms related to its delimitation (**usage – norm – codification**), which are discussed within the **theory of language culture** and which reflect the current **language policies** of our countries.

1.1 Basic terminology in Czech linguistic context

Pavčina Kuldanová

Defining some of the fundamental – and contextually important – terms used in Czech linguistic landscape is not a simple task – this is due to isolectal stratification of the Czech national language (with functional and regional varieties, its variability), as well as to terminological ambiguity. This intricacy and the situation in Czech sociolinguistics and theory of language culture, which reflect the complexity of the Czech language situation, were addressed by e.g., Olga Müllerová and Jana Hoffmannová on the pages of the journal *Slovo a slovesnost* [Word and literature] (1997, p. 47): “*In the space between literary Czech and territorial dialects (...) vaguely move the concepts of colloquial Czech (potentially also colloquial style), common Czech, common spoken language, potentially also ‘middle class’.* The concepts of the *standard* and *non-standard* are perceived differently (...)”;³ some linguists equate the standard with literariness, others with colloquiality, still others include substandard phenomena in it; it merges with the common communication usage (cf. also Nekula, Šichová, 2017; Svobodová et al., 2011; and many others).

Iva Nebeská (2017a) also discusses the gradual blurring of varietal stratification: “The thresholds of literary Czech are unclear, there is a wide transitory zone between devices perceived as literary and those perceived as substandard. Literariness criteria have not been clearly delimited in the classical theory of literary language [i.e., in the theory of the Prague Linguistic Circle; P.K.], nor later; this deficiency has long been causing theoretical (and occasionally practical) issues. In different periods, it was bypassed most notably with the use

³ In original: “V prostoru mezi spisovnou češtinou a teritoriálními dialekty (...) se vágně pohybují koncepty hovorová čeština (ev. i hovorový styl), obecná čeština, běžně mluvený jazyk, ev. i ‘střední vrstva’. Různě se zachází s koncepty standardu a nestandardu (...)”.

of terms colloquial Czech, democratization of literary Czech, literary norm range, and the standard.”⁴

In the following lines, we try to illuminate the understandings of some of these concepts through the prism of scientific theory of literary language.

1.1.1 Literary Czech. Usage – norm – codification

The very first problem arises immediately – in defining what is literary, i.e., what is **literary Czech**. It is usually defined as a system of language means (richly stratified stylistically, functionally, and regionally) used nation-wide, primarily in written and spoken official communication, as a main and regulated variety of the national language, a cultural variety with a higher social prestige, which “fulfils also the integrative, national-representative, and culture-creating roles. It is codified in grammar books, dictionaries, spelling and pronunciation handbooks”⁵ (Nebeská, 2017a). The most frequent controversies in characterizing this national language variety, which stands above all other forms, are linked to its regulation, i.e., interventions, theoretical intercession on the language by professional authorities, institutional codification (Nebeská, 2017c).

Codification therefore represents the knowledge of the existing form of literary language, i.e., **norm**, and its recording in codification handbooks.

The **norm** of literary language (literary norm) has long been the pivotal term of the theory and practice of language culture (standing between **usage**, i.e., the set of language means used by the language community regardless of their being suitable or unsuitable, correct or incorrect, and **codification**). Literary norm includes the set of literary language means, which are perceived by most users as obligatory for particular communication situations; it is considered the criterion of **language correctness**, some phenomena are codified (recorded) in authoritative handbooks – codification thus reinforces the literary norm. “The norm is under the professional care of linguists, who can intervene in it by means of codification, support its stability, systemicity, and decide which variants belong in it and which do not”⁶ (Nebeská, 2017d). Codification handbooks are penned by collectives of academics (primarily tied to the Institute

⁴ In original: “Hranice spisovné češtiny jsou neostré, mezi prostředky pocíťovanými jako spisovné a prostředky pocíťovanými jako nespisovné je široké přechodné pásmo. Kritéria spisovnosti nebyla v klasické teorii spisovného jazyka ani později zřetelně vymezena; tento nedostatek dlouhodobě působí teoretické (a někdy i uživatelské) problémy. V různých dobách se překlentoval zejména pomocí termínů hovorová čeština, demokratizace spisovné češtiny, rozpětí spisovné normy a standard.”

⁵ In original: “plní i funkci integrační, národně reprezentativní a kulturotvornou. Je kodifikována v mluvnících, slovnících, pravidlech pravopisu a výslovnosti”.

⁶ In original: “Norma je předmětem odborné péče lingvistů, kteří do ní mohou pomocí kodifikace zasahovat, podporovat její ustálenost, systémovost a rozhodovat o tom, které varianty do ní patří a které nikoli”.

of the Czech Language of the Czech Academy of Sciences), who either only record the norm in these, or regulate the norm by them – this was addressed in greater detail by Jiří Kraus (2017): “Codification handbooks differ in whether their authors aim to describe the literary language (as is the case with higher language levels, in dictionaries and grammar books), or whether they intend to precisely regulate its use by means of these handbooks (particularly in orthography and pronunciation). The highest degree of codification obligatoriness in the Czech context is traditionally attributed to the *Pravidla českého pravopisu* [Rules of Czech orthography], the rules codified by this publication are made obligatory for the sphere of education and more generally also the public written communication by an annex of the Ministry of Education, Youth and Sport. Their upholding is usually understood as mandatory also in official administrative and legal documents, in mass media, publishing, etc. Conversely, those Czech linguists that adhere to the principle of so-called minimal intervention call for reduction and relaxation of language regulations, basing their stance on the fact that the phenomena seen as un-literary are entering the area of public communication and gaining prominence also in written communication, particularly under the influence of modern communication technologies.”⁷

The contemporary concept of literary Czech is thus based in the theory of literary language (theory of literariness), “the programme of professional care for the culture of literary language and the culture of expression”⁸, postulated by the Prague Linguistic Circle (Nebeská, 2017b). This concept is the topic in the following section.

1.1.2 Development of scientific theory of literary language and its culture

The theory of language culture was formulated by the members of the Prague Linguistic Circle (PLC) in the 1920s and 1930s and rooted itself in linguistics so firmly that we refer to it to this day – not only in Czech and neighbouring Slavic environments (including Slovak and Polish, see Subchapters 1.2 and 1.3), but throughout the world.

⁷ In original: “Kodifikační příručky se liší podle toho, zdali si jejich autoři kladou za cíl spisovný jazyk popisovat (tak je tomu u vyšších jazykových rovin, ve slovnících a gramatikách), nebo způsob jeho užití pomocí pravidel přesně regulovat (zejména v pravopisu a výslovnosti). Největším stupněm kodifikační závaznosti se v českém prostředí tradičně vyznačují Pravidla českého pravopisu, jejichž závaznost pro oblast školství a obecněji i veřejného písemného projevu je vyjádřena doložkou Ministerstva školství, mládeže a tělovýchovy. Jejich dodržování se obecně chápe jako závazné i v oficiálních textech administrativně právních, v masových médiích, nakladatelstvích apod. Naproti tomu čeští lingvisté, kteří jsou stoupenci tzv. minimální intervence, vyžadují oslabení a uvolnění jazykové regulace a zdůvodňují svůj postoj pronikáním jevů považovaných za nespisovné do oblasti veřejné komunikace, které sílí i v jazyce psaném, zejména pod vlivem moderních komunikačních technologií.”

⁸ In original: “programu odborné péče o kulturu spisovného jazyka a kulturu vyjadřování”.

Language culture was first introduced as relevant area of interest for linguistics by the PLC within the collective work *Teze předložené 1. sjezdu slovanských filologů v Praze r. 1929* [Theses presented on the occasion of the First International Congress of Slavists held in Prague in 1929], which were – in the words of Josef Vachek – “the first collective codification of the tenets of the Prague school”⁹ (Vachek, 1970, p. 67), the presentation of their functional-structural understanding of language. The topic of language culture makes up the contents of the ninth thesis, labelled *Význam funkční lingvistiky pro kulturu a kritiku jazyků slovanských* [Importance of functional linguistics for culture and criticism of Slavic languages], which starts with a definition: “Language culture is care that, in literary language – both written and spoken – those attributes are reinforced which are necessary for the special functions of such”¹⁰ (Vachek, 1970, pp. 57 – 58). Further on, these special functions are discussed in greater detail, including stability, aptness, and distinctiveness, and it is demanded that these be applied in pronunciation, orthography, vocabulary, syntax, and morphology; the thesis also touches upon colloquial language and care for language purity.

These initial formulations were elaborated in the anthology *Spisovná čeština a jazyková kultura* [Literary Czech and Language Culture], published in 1932, shortly after the influential lecture and debate cycle on these topics, by which the members of the Circle reacted to the language cultivation practice in the journal *Naše řeč* [Our Speech], namely its editor in chief Jiří Haller. In addition to Vilém Mathesius’ treatise *O požadavku stability ve spisovném jazyce* [On the necessity of stability in literary language], Bohumil Havránek’s text *Úkoly spisovného jazyka a jeho kultury* [The tasks of literary language and its culture], Roman Jakobson’s paper *O dnešním brusičství českém* [On contemporary Czech purism], Miloš Weingart’s contribution *Zvuková kultura českého jazyka* [Sound culture of the Czech language], and a treatise on literary and poetic language by Jan Mukařovský, the anthology also contains the *Obecné zásady pro kulturu jazyka* [General principles of language culture], which represent the core foundation of the introduced theory.

In the introduction of the *General principles...*, it is written: “The culture of literary language is understood as the conscious cultivation of literary language; this can take place: 1. by theoretical linguistic work, 2. language schooling, and 3. writer praxis”¹¹ (Havránek, Weingart, 1932, p. 245). The authors then state that the proposed principles pertain to point

⁹ In original: “prvou soubornou kodifikací zásad pražské školy”.

¹⁰ In original: “Kultura jazyková je péče o to, aby byly v jazyce spisovném, a to jak v knižním, tak i hovorovém, posilovány ty vlastnosti, kterých vyžaduje speciální funkce spisovného jazyka.”

¹¹ In original: “Kulturou spisovného jazyka rozumíme vědomé pěstění spisovného jazyka; to se může dít: 1. teoretickou prací jazykovědnou, 2. školskou výchovou jazykovou a 3. spisovatelskou praxí.”

no. 1, i.e., theoretical linguistic work, which efficiently influences the literary language and can help or hinder it. It can help by contributing to the literary language being suited to its functions as well as possible. This can be done by “1. supporting the constancy (stability) of the literary language, and 2. supporting its functional contrasts (differentiation) and stylistic richness; a necessary condition for both is perfecting the theoretical knowledge of the contemporary literary language, i.e., its existing norm”¹² (Havránek, Weingart, 1932, p. 245). On approximately twelve small format pages, the individual aspects of this basic delimitation are elaborated; the foundation for knowledge of the contemporary literary language norm is primarily the “average literary practice of the preceding fifty years”,¹³ supplemented by “language awareness” of the intellectual circles on the literary language and their “verbal language practice”¹⁴ (Havránek, Weingart, 1932, pp. 246 – 247). Principles of normative theoretical interventions in the areas of orthography, pronunciation, morphology, syntax, and vocabulary are set out, intended to lead to stabilization of language; the principles supporting functional and stylistic richness of the literary language are also proposed. In the treatise *Úkoly spisovného jazyka a jeho kultura* [The tasks of literary language and its culture] by Bohuslav Havránek, who is perceived as the main creator of the theory of language culture alongside Vilém Mathesius, the general principles pertaining to the literary language and its culture are elaborated in detail; Havránek’s text begins with a definition of culture of a literary language (in a similar vein as in the *General principles...*), ending in a note on the aim of “this conscious cultivation of the literary language”, which “cultivates the language and language culture in those, who use such in practice”¹⁵ (Havránek, Weingart, 1932, p. 32); Havránek also concludes the treatise with a comment on the importance of language users: “Language theoretician can merely support the language culture (...), only those who speak and write in the literary language can realise language culture and cultivated language”¹⁶ (Havránek, Weingart, 1932, p. 84).

From the primary sources provided, it can be concluded that the **classical (original) idea of language culture** pertained only to the literary language, since it was the literary language that was reserved for fulfilling tasks related to cultural and organisational social life; the terms usage – norm – codification were set out; literary practice of the last five decades, and the

¹² In original: “1. podporou ustálenosti (stability) spisovného jazyka a 2. podporou jeho funkčního rozlišení (diferenciace) a jeho stylistické bohatosti; nezbytnou podmínkou pro obojí je co nejdokonalější teoretické poznání současného spisovného jazyka, totiž existující jeho normy”.

¹³ In original: “průměrná literární praxe jazyková za posledních padesát let”.

¹⁴ In original: “jazykovou praxí ústní”.

¹⁵ In original: “tohoto vědomého pěstění spisovného jazyka” (...) “kultivovaný jazyk a jazyková kultura u těch, kteří jazyka spisovného v praxi užívají”.

¹⁶ In original: “Kulturu jazykovou (...) může teoretik jazyka jen podporovat; realizovat kulturu jazykovou a kultivovaný jazyk mohou jenom ti, kdož spisovným jazykem píší a mluví.”

language awareness of the literary norm among the intellectual circles and their speech practice were chosen as the basis for the norm; codification, popularization, curricular and extracurricular language education were considered important tools of language cultivation.

In the following years (particularly after WWII), the theory of language culture extended beyond the literary language, language system and the resulting state of language – the process of communication entered the limelight; speech culture (culture of language communication, expression) was delimited alongside language culture. The difference between these is given not only by the opposition of *langue* and *parole*, but also by the fact that the character of language culture is mostly institutional (language dictionaries and codification handbooks are approved and published by prestigious institutions), while culture of communication is partaken in by essentially all language users, chiefly those whose public speeches influence the most the contemporary language use and the users' stances on language – teachers, media workers, editors, publishers, writers, translators, politicians, etc. (Kraus, 2004, pp. 128 – 129).

The **tasks of the contemporary theory of language culture** were neatly formulated by Jiří Kraus, who delimited four areas of its interest (in Karlík, Nekula, Pleskalová, 2002, p. 238; cf. also Kraus, 2004, p. 139):

1. The state of the national language means, particularly of its functionally and stylistically most developed, literary variety.

2. Development and cultivation of expressive means of the literary language through dictionaries, textbooks, orthographic and pronunciation rules and recommendations, etc.

(The success of this activity is dependent on good proficiency and respect for the contemporary language usage and stances that the users hold towards the language, its real developmental changes. In these stances, conservative and progressive viewpoints, openness and closedness to foreign-language influence, different degrees of tolerance, etc. frequently meet in a conflicting manner.)

1. State and quality of speech in various areas of public and private communication in written form.

2. Cultivation and development of expressive abilities and habits that users apply in various areas of public and private communication.

On the basis of the list provided, it is evident that the emphasis is placed not only on the cultivation of language as a system (in spirit of opinion that the quality of language is a reflection of the cultural level of the society using it), but also on the cultivation of its speech realisation, practical manifestations both spoken and written.

A **shift in understanding the theory** can be illustrated even more pointedly by naming the basic characteristics deemed the most important in the classical period and today.

Classical theory accentuated (according to Havránek, Weingart, 1932):

- literary language; langue; it delimited the terms usage – norm – codification (with the norm of literary language being the focus of attention); literary practice of the last fifty years, and the literary language awareness among the intellectual circles and their speech practice were considered to form the basis for the norm; literary language used in speech – functional colloquial language; codification and popularisation activities, and curricular and extracurricular education are important tools for language cultivation; rational, economical-instrumental approach to language was employed; efforts to strengthen the prestige of the literary language (within the national cultivational programme), creation of conversational style (the style of social conversation).

On the other hand, contemporary theory deals with:

- not only the literary language, but also other national language varieties (relation of standard and substandards); parole; culture of language and culture of expression; contemporary (“postmodern”) rejection of norms, critical perception of codification (prescriptivism) can be observed; changes in understanding of verbal practice (communication substandardisation); focus on common Czech (promoting of common Czech at the expense of the literary form); important role is played by the “language survival” – stances of people towards language, they are not indifferent to it, their abilities, habits and emotional states are reflected in their language use; interdisciplinary perception of language culture, development of new disciplines (sociolinguistics, psycholinguistics), formation of text linguistics – interest in higher levels of text formation.

An important factor here is the **period context** – in both cases, theory is developed in the context of newly formed countries, with different social and ideal backgrounds.

The original theory of the PLC:

- emerges after the breakup of Austria-Hungary and formation of the new Czechoslovak state (1918), in the period of “overcoming the feeling of national minuscule”¹⁷ (Daneš, 2009, p. 10); a purely rational approach to language is cultivated as a reflection of “disinclination to an emotionally lofty nationalistic ardour”¹⁸ (Daneš, 1996, p. 21) among the members of the Circle; the theory was a reaction to purism and its evaluation of language means correctness based on the principle of historical purity and folkishness – the new approach to language – synchronic and functional – was applied in opposition to this; it tied into the contemporary domestic and global intellectual movements and influences, notably to Josef Zubatý, Václav Ertl and his theory of a good author, Grigoriy Vinokur, Masaryk’s realism.

Current theory:

- develops after a change in political-economic and social circumstances following November 1989, dissolution of Czechoslovakia, and formation of independent Czech Republic (1993); since 1990s, period disrespect for norms, dislike of norms and authorities are evident; prescriptive and descriptive efforts take contradictory positions;¹⁹ expectations of literary Czech awareness and of expansion of its functional application to the entire language area fail to come to fruition (in the shifted social climate, spontaneity is preferred to the conscious use of literary Czech); a gap between codification tools and language practice is slowly being reduced (Karlík, Nekula, Pleskalová, 2002, p. 486).

¹⁷ In original: “překonávání pocitu národní malosti”.

¹⁸ In original: “nechutí k citově nadnesenému vlasteneckému horování”.

¹⁹ Dismissive stances towards the theory of language culture and prescriptive character of codification started to manifest with greater intensity in 1960s and 1980s–1990s and are still alive today (including the efforts to promote common Czech ever since 1960s, which became successful only after the regime change in 1990s, in the period of a shift away from norms). These tendencies are represented by e.g. Sgall, Čermák, Hronek, Cvrček and Vyberal and culminated in the Cvrček’s “concept of minimal intervention” – who also published the book *Mluvnice současné češtiny* [Grammar of contemporary Czech language] (Cvrček, V. et al. *Mluvnice současné češtiny 1. Jak se píše a jak se mluví*. Prague: Karolinum, 2010) in this spirit, describing language not “as it should be, but as it really is”, i.e., the contemporary usage; scholarly discussions that started after publishing of Cvrček’s works in 2008 and 2010 clearly showed weak points of this concept (primarily resulting from the failure to apply a premeditated scientific approach to the description of Czech in *Mluvnice*... and the lack of representativeness of the corpus material – particularly the spoken communication corpora used that do not represent the entire language area of Czechia and Moravia).

1.1.3 Sound culture. Orthoepy

The previously mentioned social, cultural, and language development is, naturally, reflected also in one of the aspects of language culture – **sound culture**. It is an area more closely dealt with in a scientific manner and described in greater detail since the end of WWII (with the rules of literary pronunciation also codified later, in the latter half of the 20th century). As a result of the technological and scientific development, a boom in audio media took place, research options were perfected, but the basic requirements for cultivated speech sound in public spaces stayed the same. This is well testified by the look at the understanding of sound culture of the literary language among the Prague Linguistic Circle.

Their views on sound culture as an inseparable part of language culture were mentioned in passing in the paper *Obecné zásady pro kulturu jazyka*²⁰ [General principles of language culture] and elaborated in greater detail in Miloš Weingart's thesis *Zvuková kultura českého jazyka* [Sound culture of the Czech language] in the anthology *Spisovná čeština a jazyková kultura* [Literary Czech and Language Culture]. It is the most extensive text of the entire anthology, in which the author minutely analyses different aspects of the sound system of language; in our opinion, his approach to the requirements of this constituent of language culture has not lost a bit of its topicality.

In the thesis' introduction, Weingart lists the uses of literary language perceived not by sight but by hearing, i.e., use of spoken language in special functions, within which he mentions the following: reading aloud any literary text, speech of teachers and pupils in schools, public lectures, judicial and administrative proceedings, public speeches in political and economic life, official military speeches, religious speeches, reading of works of literature, theatre, sound film, literary speech reproduced via radio broadcasts and gramophone records.

Weingart then briefly formulates the general characteristics of the contemporary “new culture period” and compares it with the culture period of the 19th century, which his period follows up on. Subsequently, in standalone chapters, he explains his understanding of the term sound culture,²¹ elucidates the history of scholarly interest in this area of language (from Jan

²⁰ “The basis of the literary pronunciation is to be found in the pronunciation of the intellectual circles speaking the literary language, not the folk pronunciation of any of the dialectical wholes, not excluding the folk pronunciation of any of the prominent centres, such as that of Prague; (...) Literary pronunciation needs a developed functional stratification on the basis of various purposes of language communication (...). Alongside a normalised, correct pronunciation of a literary language, it is, however, also necessary to consistently take care of its sound refinement (euphony, callilogy)” (Havránek, Weingart, 1932, p. 251).

²¹ Here he includes three aspects: 1. correct pronunciation (at that time without distinguishing between orthoepy and orthophony), 2. Perfecting of the sound component of language use (using the terms “euphony” and also older Durdík's term “callilogy”, to which he gives new meaning contents), 3. voice technique of voice and art of elocution (cf. Weingart, 1932, pp. 168 – 170).

Hus to his day); most importantly, however, he provides detailed orthoepic rules and principles of correct voice techniques and elocution.

He also attempts to answer the question “what is today’s state of sound culture of the Czech language”, stating that “sound culture of literary Czech is imperfect, to wit, we can talk of such only in extraordinary cases”²² (Weingart, 1932, p. 160) and he illustrates this statement with an evaluation of speech of selected speaker types in various environments: rhetoric in the Parliament and in public life in general, school environment (students and teachers), radio (speakers of various professions, writers, and other intellectuals), actors (in theatres, in sound film, and in radio).

Today’s understanding of **orthoepy** as an inseparable part of a complex language culture can be introduced along the views of Marie Krčmová (2017) as follows: orthophony – that is, a study of proper forming and sound of phones – is also a part of orthoepy (i.e., literary pronunciation); orthophonic principles delimit the stance towards regional, dialectal, and social variations in phones and individual realisations.

Orthoepy *sensu stricto* incorporates in it the rules for proper use of orthophonically formed phones in the stream of speech (in phone combinations, words), as well as the principles of proper stressing (in words and sentences), logical segmentation and modulation of continuous speech. The rules of literary pronunciation have a codification status in Czech language, that is, they serve as a generally accepted and binding norm. In setting out the orthoepic rules, it is at first necessary to “as fully as possible know the real norm, i.e., the existing state of pronunciation in public speeches, including the awareness of such. The norm among the users of literary language in the cultural centre is to be taken as the basis, the norms of other centres is to be taken into account in pronunciation doublets.”²³ This norm crystalized in the Czech environment only in the 20th century; “only the formation of the society-wide sphere of cultivated spoken communication, which takes place with the development of the communication technologies, gradually created a situation in which it was necessary to describe and codify this norm, so that it would serve as a guidepost for future users of this variety of the national language. In earlier periods (since 19th century), a similar need appeared in stage speech, but the result had not had a national status”²⁴ (Krčmová, 2017).

²² In original: “zvuková kultura spisovné češtiny je nedokonalá, ba že o ní můžeme mluvit vlastně jen ve výjimečných případech”.

²³ In original: “co nejúplněji poznat reálnou normu, tj. existující stav výslovnosti ve veřejných projevech včetně povědomí o něm. Za základ se bere norma nositelů spisovného jazyka v kulturním centru, k normě dalších center se přihlíží ve formě výslovnostních dublet.”

²⁴ In original: “teprve vznik celospolečenské sféry kultivovaných mluvených projevů, který nastává s rozvojem sdělovací techniky, vytvořil totiž postupně i situaci, v níž tuto normu bylo nutno popsat a kodifikovat, aby byla

For Czech language, a resolution to the relation of pronunciation and spelling norms is also important, since these influence each other. In case of domestic words, it is possible to, without much trouble, “link a proper pronunciation to a written form (of course, this does not work in the reverse direction), in case of loanwords, however, this is possible only occasionally; and finding and formulating rules is difficult in this area. Therefore, explanations of the two groups tend to be divided into individual works, or at least into individual sections of a work”²⁵ (ibid.; this solution was chosen also for this publication in the Subchapter 3.5). At the same time, it is important to be aware of what message types require observing the codified pronunciation – Czech orthoepic rules are valid for “literary speeches prepared beforehand and emotionally neutral; in spontaneous, albeit public, speeches, these rules are to be applied less strictly. Additionally, literary pronunciation is stylistically differentiated, recognized are the basic (neutral) pronunciation style, select (careful, ceremonial, explicit), and perfunctory (common, implicit). Beyond the threshold of the literary language, there is negligent pronunciation, significative, or dialectal; all of these are considered cases of substandard pronunciation”²⁶ (ibid.).

1.1.4 Language policy in Czechia

To conclude this section, it is appropriate to mention that, when comparing period-dependent approaches to the theory of language culture, a comparison of **period language policies** is also on the table. After its formation in 1918, the Czechoslovak Republic had to deal with the issues of co-existence of at least two languages – Czech and Slovak, which was also reflected in its legislature. In the constitution of February 1920 (in force until 1948) and in the language law, the denominators Czechoslovak nation and Czechoslovak language were used and the so-called Czechoslovak was defined as the state majority language, which comprises two languages – Czech and Slovak. The position of Czech was stronger than that of Slovak; even weaker were those of languages of large German and Hungarian minorities, not to mention languages of smaller minorities. These questions (along the stratification of the national language and the

orientací pro další uživatele této podoby národního jazyka. Ve starších dobách (od 19. stol.) se podobná potřeba jevila u jevištní řeči, ale výsledek celonárodní postavení neměl.”

²⁵ In original: “k psané podobě přiřadit správnou výslovnost (naopak to ovšem neplatí), u slov přejatých to však je možné jen někdy a nalezení pravidel a jejich formulace jsou obtížné. Proto se výklady o obou skupinách slov oddělují do samostatných prací, nebo alespoň do samostatných oddílů práce jediné.”

²⁶ In original: “spisovné projevy předem připravené a citově neutrální, ve spontánním, byť veřejném projevu se dodržují méně striktně. Navíc je spisovná výslovnost stylově diferencována, rozlišuje se styl výslovnosti základní (neutrální), vybraný (pečlivý, slavnostní, explicitní) a zběžný (běžný, implicitní). Za hranicemi spisovného jazyka je výslovnost nedbalá, náznaková nebo výslovnost nářeční; ve všech takových případech jde již o výslovnost substandardní.”

theory of functional systems) were among those that interested the linguists in the interbellum period. Following WWII, national composition of the society changed, there was a significant decrease in the number of German speakers, whose language was previously a major competitor of Czech and Slovak, and these changes were reflected also in the constitutions of 1948, 1960, 1968, 1991, and 1992. Current Czech language policy operates without a language law and without a defined term “state language” (it is a result of language law in the spirit of the Constitution of December 1992), it is exercised by a monolingual, single-nation state, does not need to determine itself against a foreign language (German), does not have to fight for the position of a stronger language; from this point of view, Czech language is in a stable language situation (Bogoczová, in Svobodová et al., 2011, pp. 59 – 62; cf. also Bogoczová, 2021). Language policies of Slovakia and Poland are applied in a rather different manner, as the following subchapters illustrate.

1.2 Basic terminology in Slovak linguistic context

Patrik Petráš

In this section, we describe the understanding of the terms literariness and literary language in the Slovak linguistic context. We point out the position of literary language in different concepts of the national language stratification. The terms usage – norm – codification are linked to the topic of literariness; it is thus appropriate to provide an explanation of these terms here. In Slovak scholarly literature, a certain diversity can be observed, particularly in regard to the understanding of norm. Therefore, we elucidate multiple authorial approaches to this term. We also pay attention to the language culture, which includes these delimited terms. Subsequently, we deal with sound culture and defining of orthoepy as a study of literary pronunciation. The subchapter concludes with a characteristic of the language situation and language policies in Slovakia, which significantly contribute to the present and future status of the literary language in Slovak society.

1.2.1 Literary Slovak. Usage – norm – codification

As Juraj Dolník (2010, p. 10) notes, the theory of literary language (and language culture in general) in Slovak and Czech language contexts originates with the Prague Linguistic Circle (PLC), the members of which were in a scholarly dispute with puristically-thinking interveners in Czech language. In the PLC, literary language was contrasted with folk language (ibid, p. 23).

Šimon Ondruš (1987, p. 55) writes about the three basic varieties²⁷ of the national language, in our case Slovak, considering the **literary language** the most cultivated and functionally differentiated national language form. The other two forms are **geographical** and **social varieties**.

The currently valid codification handbook for the field of Slovak pronunciation, *Pravidlá slovenskej výslovnosti* [Rules of Slovak pronunciation] (Kráľ, 2009) define literary Slovak as “official, society-wide communication tool that is binding in official communication in the entire territory of the Slovak Republic and for all of its inhabitants (...)”²⁸ (ibid., p. 17).

At the same time, it has to be noted that the literary language is lexically and syntactically differentiated into functional styles. Ondruš (1987, p. 56) states that, while in the past, the belletristic style was at the pinnacle of functional styles; with the economic and scientific-technological development, “scientific style, alongside with journalistic and administrative styles move to the forefront”²⁹ (ibid.). Despite the fact that he made this observation already in 1980s, we assume that the situation, as far as the hierarchy of functional styles workload is concerned, is more or less the same, with the distinction that the colloquial style is also gaining prominence today.

According to Ľubomír Kralčák (2015, p. 79), “in the basic social-communicative opposition, literary form stands in opposition to colloquial form, which is made up of varieties with both literary and dialectal foundations”.³⁰

These facts led to a need of a more precise differentiation of national language forms. The foundations of such new concept were laid by Ján Horecký (1981, pp. 118 – 119), which, alongside the **literary form** of the national language, sets out the **standard**, **substandard**, and **dialectal form**. In addition to this stratification, the author also delimits the language of artistic literature, which he considers a highly specific form of the national language, albeit one that is hard to define. This form, however, is highly important for existence and development of a national language.

Horecký’s theory shares similarities with that of Ondruš. He is also aware that “social differentiation and layering in the hierarchy of the literary language’s functional styles result in

²⁷ Translator’s note: In discussions of language stratification, the Slovak scholars do not use the terminology uniformly, variably preferring the terms *útvár*, *forma* – form, or *nárečie* – dialect for geographic and social varieties; we are predominantly using the term variety in translation, but maintain slight variation in use for more transparent demarcation of the different approaches.

²⁸ In original: “úradný, celospoločenský a v oficiálnom styku záväzný nástroj dorozumievania na celom území Slovenskej republiky a pre všetkých jej obyvateľov (...)”.

²⁹ In original: “sa dostáva na popredné miesto odborný štýl so štýlom publicistickým a administratívnym”.

³⁰ In original: “v základnej sociálno-komunikačnej opozícii stojí spisovná forma oproti hovorovej forme, ktorú tvoria útvary, majúce spisovný i nárečový základ”.

a differentiation of the norm of literary language as a whole”³¹ (Ondruš, 1987, p. 56). The author thus sets out the so-called **substandard norm of the literary language** (which he equates with the colloquial style of the literary language, which, however, allows for some elements of geographical and social varieties), **standard norm of the literary language** (binding in schools, media, etc.), and the so-called **superstandard norm of the literary language** (required in artistic style of theatre plays, etc.). The artistic poetic speech exists outside of the general norm of the literary language in this concept as well.

In relation to the discussed topic of the national language stratification, it can be also stated that Ján Kačala (2021, p. 23) talks about two contradictory forms of being of the national language, i.e., literary language and the set of local dialects. According to the author, the listed forms of being are characterized by “having their own language norm, or alternatively language norms and mutual coexistence and influence under the conditions of the given nationwide language variety, but primarily a different social status in the given community, different functions and a different extent or manner of use”³² (ibid.). Alongside these forms of being, the author further distinguishes incomplete varieties of the national language, where he includes various sociolects (chiefly slangs), interdialects, urban speech, and substandard form of the national language (ibid., p. 24).

It is necessary to more closely characterize the differences between the literary language as one of the forms of the national language and the standard form of the national language. Horecký (1981, p. 119) states that the “literary form of the Slovak language (...) is characterized by total observing of the codified rules and definitions. It is, or rather, it should be the exclusive form of communication in schools, mass communication channels and in the language of scholarly literature.”³³ It is evident that the author sees the **relevant criterion of literariness in adherence to the codified form of language**. Elsewhere, Horecký also addresses the relation between literary and standard forms of language: “A rather dynamic relation exists between the literary and the standard forms. Standard form takes the basic expressive means from the literary form, as the literary form is primarily used in educational process and mass

³¹ In original: “sociálna diferenciácia a prevrstvovanie v hierarchii funkčných štýlov spisovného jazyka má za následok aj diferenciáciu celkovej normy spisovného jazyka”.

³² In original: “jestvovaním vlastnej jazykovej normy, prípadne jazykových noriem a vzájomným spolujestvovaním aj ovplyvňovaním sa v podmienkach daného celonárodného jazykového útvaru, ale najmä rozdielnym spoločenským postavením v danej pospolitosti, rozdielnymi funkciami a rozdielnym rozsahom či spôsobom používania”.

³³ In original: “spisovná forma slovenského jazyka (...) je charakterizovaná celkovým dodržiavaním kodifikovaných pravidiel a poučiek. Je, resp. mala by byť formou výlučne používanou v škole, v masových komunikačných prostriedkoch i v jazyku odbornej literatúry”.

communication (less in spoken form than in written)”³⁴ (Horecký, 1979, p. 224). He adds: “On the other hand, many elements of standard form cross over into the literary form and revitalize it. In the current language situation, it is possible (...) to consider this standard form the foundational and the most common realization of the national language”³⁵ (ibid.). Since Horecký stated the aforementioned fact about the standard form of the national language being its most widespread form as early as in 1979, we can assume that, for the contemporary language situation, this is even more prominently characteristic. Dolník points out that this prevalence of the standard form is related to the “dominance of its spoken form, which is characterized by a more relaxed norm”³⁶ (Dolník, 2010, p. 22).

We have already hinted at the fact that the difference between the literary and the standard form of the national language lies in the methods of their realisations. Both forms of the national language have written and spoken modes, but in each form, a different mode is dominant: written for literary form, spoken for standard form. In contrast, Horecký (1981, p. 120) observes that the substandard form is almost exclusively realised in spoken communication.

In comparison with the previously characterized approaches, Daniela Slančová and Miloslava Sokolová (1994, pp. 225 – 227) use the term **variety** and write about a **literary variety**, which they characterize as national, codified and prestigious. On the other hand, **common (standard) variety** is uncoded and more prominently regionally differentiated into western Slovak, central Slovak, and eastern Slovak variants. Substandard varieties are so greatly regionally differentiated that entirely standalone western Slovak, central Slovak and eastern Slovak substandard varieties can be recognized. The authors include non-systematic socially bound semivarieties (slangs, jargons, argots, professional speech) in **dialectal varieties**. They stress the degree of normalisation of the mentioned varieties: “Language norms of the literary variety are less dynamic, less flexible and variable than norms of common and substandard varieties, since they are bound by a stronger influence of social and communication norms in situations in which the literary variety is predominantly used. At the same time, they are bound by codification, which generally lags behind the norm. (...) The norms of the common

³⁴ In original: “Veľmi živý vzájomný vzťah je medzi spisovnou a štandardnou formou. Štandardná forma berie základné vyjadrovacie prostriedky zo spisovnej formy, lebo spisovná forma sa prednostne využíva vo vyučovacom a vzdelávacom procese a v masových komunikačných prostriedkoch (v hovorenom slove menej než v písanom).”

³⁵ In original: “Na druhej strane však mnohé prvky zo štandardnej formy prechádzajú do spisovnej formy a osviežujú ju. V súčasnej jazykovej situácii možno (...) práve túto štandardnú formu pokladať za základný a najrozšírejší prejav realizácie národného jazyka.”

³⁶ In original: “aj s dominanciou jej hovorenej podoby, ktorá sa vyznačuje uvoľnenejšou normou”.

variety and the substandard varieties are more relaxed even in comparison with dialectal norms (...)”³⁷ (ibid., p. 227).

In this regard, Ľubomír Kralčák (2015, p. 81) talks about functional intervarectal expansion, which manifests perhaps most prominently in the expansion of the communication sphere of the literary language, chiefly by replacing “traditional function of the dialect as a communication tool in common everyday communication by the literary language, or, more precisely, by the standard variety”³⁸ (ibid.).

In relation to the topic of literariness, or of literary language, it is necessary to characterize the terms **usage** – **norm** – **codification**. In order to help understand the relations between these, it is the most suitable to start from the explanation of **norm**, which can be generally characterized as a set of certain rules and criteria regulating our behaviour (Findra, 2013, p. 17). Ján Findra talks about language (grammatical), stylistic and communication norms. In the **language norm**, “language rules applicable in a certain specific period of development of the language and society are anchored. If these are codified, they become socially binding. Language users then make decisions of the axis correct – incorrect”³⁹ (ibid.). According to Findra, the **stylistic norm** is based on the fact that principles of language means choice and use deemed socially appropriate and binding in respective communication spheres become relatively stabilized in the course of development of language and its users’ communication practice. Even though stylistic norms are also socially binding and functionally constant, unlike the language norm, they are relatively more relaxed, the sender is here making decisions on the axis appropriate – inappropriate (ibid., pp. 17–18). **Communication norm** counts on application of the previous two norms, but, at the same time, is related to the norm of social behaviour. Findra defines communication norm as “a set of standardised rules which became stabilized due to the repeated application of certain textual procedures in differentiated spheres of social life and work and in relatively similar communication situations”⁴⁰ (ibid., p. 18).

³⁷ In original: “Normy spisovnej variety sú menej dynamické, menej pružné a variabilné ako normy bežnej a subštandardnej variety, pretože sú viazané silnejším pôsobením sociálnych a komunikačných noriem v situáciách, v ktorých sa spisovná varieta prevažne využíva. Zároveň sú viazané kodifikáciou, ktorá všeobecne zaostáva za normou. (...) Normy bežnej variety a subštandardných variet sú voľnejšie aj v porovnaní s nárečovými normami (...)”.

³⁸ In original: “tradičnej funkcie dialektu ako dorozumievacieho nástroja v bežnej každodennej komunikácii spisovným jazykom, presnejšie štandardnou varietou”.

³⁹ In original: “sú ukotvené zákonitosti jazyka platné v istom konkrétnom období vývinu jazyka a spoločnosti. Ak sú kodifikované, stávajú sa spoločensky záväznými. Používateľ jazyka sa potom rozhoduje na osi správne – nesprávne.”

⁴⁰ In original: “súbor štandardizovaných pravidiel, ktoré sa ustálili opakovaným uplatňovaním istých textotvorných postupov v diferencovaných sférach spoločenského života a práce a v relatívne podobných komunikačných situáciách”.

In the following explanations, we use the term norm with the meaning of language norm as understood here.

Ján Kačala defines language norm as “a set of means and rules valid in a language system, which are considered generally accepted, and thus generally valid and binding, in a given society in a given language development period”⁴¹ (Kačala, 2021, p. 25).

In the *Pravidlá slovenskej výslovnosti* (Kráľ, 2009, p. 21), language norms are defined “as a request or pressure arising from social practice – from social environment. It is a pressure (subconsciously felt need, as well as utility) to use established language means in an established manner (to respect language norms, or codification) and communicate uniformly across the entire society.”⁴² In the quoted text, it is also stated that the language norm is characterized by both stability and flexibility. While the language norm is not immutable, it needs to be sufficiently stable. In this regard, a principle of so-called **flexible stability of language**⁴³ is referenced. “Stability is a precondition for user confidence, flexibility allows gradual changes in accordance with shifts in language needs and the internal order (system) of the language without having to perceive variations as errors”⁴⁴ (ibid., p. 22). In the codification handbook of the Slovak pronunciation, it is also stated that “the linguistic theory resists frequent norm changes, as these could cause uncertainty among language users and language norm fluctuation. Language norms (...) subsequently over longer periods adapt to observed language changes that arose and generally became fixed in the cultivated language practice. It can be concluded that, in the literary language, in singular points, there is a certain natural and permanent tension between codification and changes that are becoming stabilised in language practice (i.e., language usage), or between the codification and the norm, the latter of which also takes usage into account”⁴⁵ (ibid.)

⁴¹ In original: “súbor prostriedkov a pravidiel platných v jazykovom systéme, ktoré sa v danom spoločenstve a v danej etape jazykového vývinu pokladajú za všeobecne prijaté, a teda za všeobecne platné a záväzné”.

⁴² In original: “ako požiadavka alebo tlak, ktorý vychádza zo spoločenskej praxe – zo spoločenského prostredia. Je to tlak (podvedome pociťovaná potreba i užitočnosť) používať ustálené jazykové prostriedky ustáleným spôsobom (rešpektovať jazykové normy, resp. kodifikáciu) a dorozumievať sa v celej spoločnosti jednotne”.

⁴³ The requirement of the flexible stability of the language norm was postulated by Vilém Mathesius within the framework of the Czech theory of literary language developed at the turn of 1920s–1930s by the Prague Linguistic Circle (Mathesius, 1932, pp. 14 – 31).

⁴⁴ In original: “Ustálenosť je predpokladom istoty používateľov, pružnosť umožňuje postupné zmeny podľa meniacich sa jazykových potrieb a v súhlase s vnútorným poriadkom (systémom) jazyka bez toho, aby sa istá (každá) variácia pokladala za chybu.”

⁴⁵ In original: “jazykovedná teória sa bráni častým zmenám noriem, lebo tie by mohli byť príčinou neistoty používateľov jazyka a príčinou rozkolísania jazykových noriem. Jazykové normy (...) sa dodatočne a v dlhších etapách prispôbujú pozorovaným jazykovým zmenám, ktoré vznikli a ktoré sa už všeobecne ustálili a prijali v kultivovanej jazykovej praxi. Z toho vyplýva, že v spisovnom jazyku je v jednotlivinách prirodzene a trvalo isté napätie medzi kodifikáciou a ustáľujúcou sa zmenou v jazykovej praxi (jazykový úzom), resp. medzi kodifikáciou a normou, ktorá však prihliada aj na úzus.”

A complex publication on the theory of literary language (with regard to literary Slovak) provides the following definition of language norms: “Language norms are currently or potentially codified standardisations of forms, their meanings and their combinations and suprasemantic attributes of language units, in which there are accumulated the collective needs and interests correlating with the norms’ functions; therefore, the motivation for their respecting is fixed within them, providing a regulative force in a given society”⁴⁶ (Dolník, 2010, p. 101). Dolník also differentiates between the so-called **ideal norm** and the **real norm**. He defines the ideal norm as a functionally determined system of standardisations with a regulative force, “matching the idealized notion of realization of language system and language use”⁴⁷ (ibid., p. 105). He notes that it is this norm that traditionally serves the function of the fundamental evaluative criterion for public speeches in Slovak language environment. He also reminds, however, that the natural literary Slovak is tied to the real norm, which has been cultivated by a differentiated language community. In this regard, Dolník also points out the term flexible stability, which represents the adaptability of the norm to changes in language practice. Unlike the ideal norm, the thresholds of differentiation and flexibility of the real norm are not decided simply by the part of the language community made up of the so-called cultivated language users, but rather all the language users. The real norm incorporates all the elements belonging into the ideal norm, as well as elements that spread into and became stabilized in the language practice as alternatives to certain elements of the ideal norm (ibid., pp. 105 – 106).

Usage represents the language habits that arise as a result of standardisations, Dolník therefore characterizes it as a “functionally determined system of standardisations”⁴⁸ (ibid., p. 107). The author further explains that both the real literary norm and usage are typified by natural acceptance of standardised language structures, but they differ from each other by the fact that a sociolinguistically significant portion of literary language users decides what belongs in the real literary norm, while that which has been standardised outside of this circle of users belongs in usage. Usage and real literary norm are, according to Dolník, in a relation of privative opposition: usage includes elements of the real literary norm, but also standardised elements outside of the norm’s scope (ibid. p. 108). He notes, however, that the term usage is also used in Slovak sources with different meanings (e.g., literary usage, publishing usage...). He

⁴⁶ In original: “Jazykové normy sú aktuálne alebo potenciálne kodifikované štandardizácie foriem, ich významov a ich kombinácií a suprasémantických príznakov jazykových jednotiek, v ktorých sú akumulované kolektívne potreby a záujmy korelujúce s funkciami noriem a teda je v nich zafixovaná motivácia ich rešpektovania, ktorá v danej societe nadobudla regulatívnu silu.”

⁴⁷ In original: “zodpovedá idealizovanej predstave o realizácii jazykového systému a používaní jazyka”.

⁴⁸ In original: “funkčne determinovanú sústavu štandardizácií”.

generalises this varied use of the term by a meaning “language habits bound to certain users and certain communication situations”⁴⁹ (ibid., p. 109). Kačala (2021, p. 32) talks separately of literary usage, which is principally correlative with the language norm, but is not as strict in its observing. The author generally understands the term as referring to such language practice, in which the speaker “does not aspire to the need to express themselves in a literary manner and to observe the literary norm; it is therefore that type of common speech practice, which is not subject to evaluation of the literariness criterion”⁵⁰ (ibid.).

After clarifying the relation of norm (ideal and real) and usage, we can focus on the definition of **codification** as the highest degree of language institutionalization within the triad of usage – norm – codification. In the *Pravidlá slovenskej výslovnosti* (2009, p. 22), it is defined as “officially (institutionally) approved and generally binding description of language norms”.⁵¹ Kačala defines the codification of literary language as “a scientific description of means and rules of the literary language carried out by a responsible scholarly institute, approved of by a relevant governmental body and made available via officially valid codification handbooks”⁵² (Kačala, 2021, p. 29).

According to Dolník (2010, p. 162), a norm is an attribute of all language varieties, but **norm of a literary language** is subject to **institutional** interventions on the basis of scientific observation thereof. The author defines codification as an officialization of “explicitly described norms of a literary language as a social institution. Via officialization, norms of literary language gain the status of official regulations; this officially confirms their social severity and, at the same time, the prestige of the literary language, and thus its collective value”⁵³ (ibid. pp. 162 – 163).

In Slovakia, codification is institutionalized, that is, its mandate is assigned by an official institute. On the webpage of the Ministry of Culture of the Slovak Republic,⁵⁴ it is stated: “The obligatoriness of codification is declared by a central state administration body; in Slovakia, this is the Ministry of Culture of the Slovak Republic, which is the central state administration

⁴⁹ In original: “jazykové zvyklosti viazané na istých používateľov a na isté komunikačné situácie”.

⁵⁰ In original: “neaspíruje na potrebu vyjadrovať sa spisovne a dodržiavať spisovnú normu, je to teda taká bežná rečová prax, ktorá nepodlieha meraniu kritériami spisovnosti”.

⁵¹ In original: “oficiálne (inštitucionálne) schválený a všeobecne záväzný opis jazykových noriem”.

⁵² In original: “vedecký opis prostriedkov a pravidiel spisovného jazyka pripravený zodpovednou odbornou inštitúciou, prijatý príslušnou štátnou ustanovitzhou a sprístupnený v oficiálne platných kodifikačných príručkách”.

⁵³ In original: “explicitne zobrazených noriem spisovného jazyka ako sociálnej inštitúcie. Oficializáciou nadobúdajú normy spisovného jazyka status úradných smerníc, čím sa úradne potvrdzuje ich spoločenská vážnosť a súčasne prestížnosť spisovného jazyka, a teda aj jeho kolektívna hodnota.”

⁵⁴ Kodifikovaná podoba štátneho jazyka [Codified from of the state language] [online]. Available at: <https://www.culture.gov.sk/posobnost-ministerstva/statny-jazyk-narodnostne-mensiny-a-zahranicni-slovaci/statny-jazyk/kodifikovana-podoba-statneho-jazyka/>. [cit. 10. 8. 2021].

body in charge of the care for the state language.”⁵⁵ The Ministry of Culture approved the codified form of the state language that is contained in these codification handbooks: *Pravidlá slovenského pravopisu* [Rules of Slovak orthography] (2013), *Krátky slovník slovenského jazyka* [Concise dictionary of the Slovak language] (2020), *Pravidlá slovenskej výslovnosti* [Rules of Slovak pronunciation] (2009), and *Morfológia slovenského jazyka* [Morphology of the Slovak language] (1966).⁵⁶

1.2.2 Language culture and cultivation of literary language

Another area where the terms usage – norm – codification are relevant is the **language culture**. According to Kačala (2021, p. 39), dimension of language culture is among the basic constituents of the concept of the contemporary literary language. The author also stresses the polysemy of the term language culture across the linguistic output. Kačala also talks about the attempts to terminologically separate the culture of language and language culture. Such an approach can be found in Král’ (1990, p. 26), who defines **culture of language** as a “process, degree and state of perfecting language, in a broader sense also a result that is reflected in the elaboration (differentiation) and flexible stability of its means”.⁵⁷ The author also reminds that the culture of language as a process is only observable across longer time periods (ibid.). He then defines **language culture** as a “quality of language practice of a society and, at the same time, period picture of language obtained by an evaluative generalization of the state (quality) of use of language means in practice, i.e., in speech”⁵⁸ (ibid, p. 27 – 28). Language culture can be understood also as a study, specifically “study of perfecting speech”⁵⁹ (ibid., p. 28). According to Král’, language culture is influenced by the following factors: culture of language (of greater significance are the elaboration and availability of language norms), language education, language awareness, and the cultural level of society (ibid.).

Kačala (2021, p. 39) reminds that, from the contemporary literary language standpoint, from among the multitude of understandings of language culture, the one that is important is the purposeful care for scientific research, for cultivation, and for a high level of knowledge

⁵⁵ In original: “Záväznosť kodifikácie vyhlasuje orgán ústrednej štátnej správy, u nás je to Ministerstvo kultúry Slovenskej republiky, ktoré je ústredným orgánom štátnej správy na úseku starostlivosti o štátny jazyk.”

⁵⁶ Dokument č. MK-3620/2021-110/6659 [Document no. MK-3620/2021-110/6659] [online]. Available at: https://www.culture.gov.sk/wp-content/uploads/2019/12/kodifikovana-podoba-vyhlasenie-2021_.pdf. [cited 10. 8. 2021].

⁵⁷ In original: “proces, stupeň a stav zdokonaľovania jazyka, v širšom zmysle je to aj výsledok prejavujúci sa v rozpracovanosti (diferencovanosti) a pružnej ustálenosti jeho prostriedkov”.

⁵⁸ In original: “úroveň jazykovej praxe spoločnosti a súčasne dobový obraz jazyka získaný hodnotiacim zovšeobecnením stavu (úrovne) používania jazykových prostriedkov v praxi, t. j. v reči”.

⁵⁹ In original: “učenie o zdokonaľovaní reči”.

and use of the literary language, as well as high level of curricular and extracurricular education. That is, literary language is, in author's opinion, cultivated by scientific research of the entirety of the national language, by codification activities in the area of literary language, wide and intentional cultivated use, and language-cultural and language-educational activities.

Dolník (2010, p. 18) prefers the understanding of language culture shaped by Alois Jedlička (1979, p. 13), who includes language phenomena (language culture proper) and speech phenomena, or phenomena of language manifestations (speech culture). Both areas can be further differentiated into culture as a state (quality of language and of speech) and culture as an activity (cultivation of language and of speech). Dolník (2010, p. 18) further notes that while the object of the culture of language is literary language, culture of speech is not limited to literary language manifestations. Dolník (2010, p. 113) separately defines the culture of literary language as "a state of assimilatory normalcy in the accommodation-assimilation process, in which this language variety is permanently situated".⁶⁰ Cultivation of literary language is then represented by activities supporting the state of assimilatory normalcy, which correlates with the degree of development and democratization of the literary language (ibid.). According to Kralčák (2015, p. 53), cultivation of literary language in the latter half of the 20th century started to be perceived as a basic starting point for the theory of literary language and language culture. He further stresses that entangling of the two theoretical concepts (theory of literary language and theory of language culture) was programmatically declared at the conference on culture of literary Slovak, which took place in Smolenice in 1966. In the paper from this conference by Jozef Ružička *Problémy jazykovej kultúry* [Problems of language culture] (1967), there appears an understanding of connection of language culture and theory of literary language providing a unified basis for a cultivating approach to language, its users, and language practice. Language cultivation expected two approaches: the so-called language refining (mainly codification), and language education (language counselling, language criticism, promotion). Kralčák (2015, p. 53) also states that this served as a foundation on which the tasks of Slovak prescriptivist linguistics were based on in the following decades. At the same time, however, since 1990s, a sociolinguistic basis for research and theory of language starts to form alongside the traditional understanding of theories of language and language culture. This approach observes language phenomena not only from the language-structure point of view, but also from the social-communicative one.

⁶⁰ In original: "stav asimilačnej normálnosti v akomodačno-asimilačnom procese, v ktorom sa tento jazykový útvar permanentne nachádza".

As Horecký (2001, p. 28) points out, criteria for evaluating language means are sought after chiefly in the system and the norm. This means that the main criterion is their conformity with the norm and system – conformity with the valid codification frequently being found sufficient. Horecký states, however, that “the basic criterion in evaluating (...) is appropriateness, suitability of the means used, degree to which they allow for a correct understanding of the discourse. Therefore, the primary criterion in evaluating the quality of language means needs to be their communication adequacy”⁶¹ (ibid., p. 29).

1.2.3 Sound culture and Slovak orthoepy

The **sound culture** of literary Slovak can be discussed independently from the language culture. It comprises the “purposeful perfecting of oral speech manifestations by improving articulation and by care for the sound of speeches, increasing communication effect of vocal parole on the listener by use of breathing, vocal and articulatory options of the speaker while observing the orthoepic (and other language) norms”⁶² (Král', 1984, p. 31). Ábel Král' considers orthoepic correctness to be a necessary criterion of the sound culture of speech. In addition to orthoepic norms, which he considers the basic criterion of the sound culture, he lists other criteria: articulatory legibility, logicity and clarity; intonational richness, elocutionary appropriateness and convincingness, speech euphony, logically correct and unobtrusive breathing, functional use of voice properties, and neutralization of reading influence on elocution. In the area of orthoepy and sound culture of speech, theatres have played an irreplaceable role, chiefly in the past. Král' notes that, as late as in 1940s, the so-called stage pronunciation was considered the template for literary pronunciation (ibid., pp. 31 – 33). Today, this role has been taken over by electronic media, i.e., radio, television, but ever more dominant are streaming broadcasts on various Internet channels.

Orthoepy falls under normative phonetics, which studies the phenomena of literary language with the aim of describing its phonetic norms (Král', 1989a, p. 80). The first edition of *Pravidlá slovenskej výslovnosti* (Král', 1984, p. 16) define orthoepy as a study “of sound norms of the literary language. It is a sum of rules of proper creation (generation) and proper sound of spoken communication in literary language from the point of view of their sound

⁶¹ In original: “základným kritériom pri posudzovaní (...) je primeranosť, vhodnosť používaných prostriedkov, miera, v akej umožňujú správne pochopenie diskurzu. Preto za najvyššie kritérium pri rozhodovaní o kvalite jazykových prostriedkov treba brať ich komunikačnú adekvátnosť.”

⁶² In original: “cieľavedomé zdokonaľovanie ústnych rečových prejavov zlepšovaním artikulácie a starostlivosťou o znenie ústnych prejavov, zvyšovanie komunikačného účinku zvukovej reči na počúvajúceho využívaním dychových, hlasových a artikulálnych možností hovoriaceho pri zachovaní všetkých ortoepických (a iných jazykových) noriem”.

properties.”⁶³ In the quoted definition, two main points of interest of this discipline have to be emphasized:

- a) proper creation of spoken communication (correct speaking);
- b) proper sound of spoken communication.

Orthophony can be defined independently from orthoepy. In those theoretical models that separate the two, orthoepy is understood in a narrower sense, since it only relates to correct use of phonetic means, while orthophony deals with their correct creation and sound (ibid.).

We can also observe that the definition mentions literary language; orthoepy can thus be characterized as the study of literary speaking and sound of spoken communication. It has to be noted, however, that the pronunciation of Slovak literary speech is differentiated. Among instances of literary speech, **neutral style** can be distinguished, understood as the fundamental and the most common form of literary pronunciation. This is the most common style in oral speech. **Higher (or high) style** is typical for spoken expressions of artistic style and some ceremonial speeches. The typical area of realization for this style is stage speech. Here, precise pronunciation, slower speech tempo, reduced dynamicity and melodic scope are applied, and the original form is preferred in pronunciation of loanwords. In addition to the listed literary styles, there can also be talk about **lower pronunciation style**, which stands on the threshold of literary language and non-literary varieties (Olšiak, 2015, p. 18).

1.2.4 Language policy in Slovakia

Dolník labels language policy a tool of purposeful influencing of the language situation and defines it as a “sum of activities by which the functioning conditions of languages and language varieties coexisting in a given political structure are regulated”⁶⁴ (Dolník, 2010, p. 248). At the same time, he reminds that this term is used chiefly in Central and Eastern European linguistics, while Western European and American linguistics use the term language planning (ibid., p. 247).

According to the author, language policy includes a set of measures aimed at conservation or change of status of a language or its functional variety, of conservation or change in areas of their use. These measures are issued by the government or other social institutions (ibid, p. 248).

⁶³ In original: “o zvukových normách spisovného jazyka. Je to súhrn pravidiel správneho tvorenia (generovania) a správneho znenia zvukových prejavov v spisovnom jazyku z hľadiska ich zvukových vlastností”.

⁶⁴ In original: “súhrn aktivít, ktorými sa regulujú podmienky na fungovanie jazykov a jazykových variet koexistujúcich v danom politickom útvere”.

Dolník highlights that language policy most notably “manifests in periods of establishing particular nations or forming particular states, when a standardization of a certain language or language variety becomes topical, i.e., when a language or its variety achieves the status of a standard or a literary language (...)”⁶⁵ (ibid.). The method of implementing language-political interests is directly linked to the method of regulation of political relations within a given society; therefore, the basic quality of language policy is its incorporating of authoritarian or democratic tendencies. Dolník perceives language law as the most prominent language-political tool (ibid, p. 249). Every country deals with this situation in a different way, not every language community has a language law regulating the status of a language and its individual forms in a given state.⁶⁶

According to Kralčák (2015, p. 52), for the current situation and functioning of the Slovak language and other languages used in the territory of Slovakia, three laws are especially topical: The Constitution of the Slovak Republic, Act of the National Council of the Slovak Republic no. 270/1995 Coll. on the state language of the Slovak Republic⁶⁷ and Act no. 184/1999 on the use of languages of national minorities⁶⁸. The Constitution of the Slovak Republic of September 1, 1992 defines Slovak language as the state language, when it states in article 6 par. 1: “The Slovak language is the official language in the territory of the Slovak Republic.”⁶⁹ The act on the state language warrants a more detailed discussion.

The act defines the status of Slovak language as the state language in the territory of the Slovak Republic and specifies the areas of its use. In particular, the act deals with the use of the state language in certain areas of public communication in section 5 (e.g., radio and television programming, advertisements, etc.)

⁶⁵ In original: “prejavuje v období etablovania istého národa alebo formovania istého štátneho útvaru, keď sa stáva aktuálnou štandardizácia istého jazyka, resp. jazykovej variety, t. j. keď jazyk alebo varieta nadobúda status štandardu, resp. spisovného jazyka (...)”.

⁶⁶ On the history of language legislation in Slovakia and shared Czechoslovak state cf. Kačala (1993, pp. 97 – 104).

⁶⁷ Zákon Národnej rady Slovenskej republiky č. 270/1995 Z. z. o štátnom jazyku Slovenskej republiky. [Act of the National Council of the Slovak Republic no. 270/1995 Coll. on the state language of the Slovak Republic] Available at: <https://www.zakonypreludi.sk/zz/1995-270>. [cited 12. 8. 2021]. The most recent amendment is in force as of July 1, 2016.

⁶⁸ Zákon č. 184/1999 Z. z. o používaní jazykov národnostných menšín. [Act no. 184/1999 on the use of languages of national minorities] Available at: <https://www.zakonypreludi.sk/zz/1999-184>. [cited 15. 2. 2022]. The most recent amendment is in force as of January 1, 2022. In original: “Na území Slovenskej republiky je štátnym jazykom slovenský jazyk.”

⁶⁹ Constitution of the Slovak Republic of September 1, 1992 Available at: https://www.slov-lex.sk/static/pdf/1992/460/ZZ_1992_460_20210101.pdf. [cited 13. 8. 2021].

At the same time, the law has a protectionist aspect, as section 2, par. 1 shows:

“(1) The State

- a) shall create appropriate conditions in the educational, scientific and information systems to enable every citizen of the Slovak Republic to master and use the state language in oral and written communications;
- b) shall promote scientific research of the state language, research of its historical development, research of its local and social dialects, codification of the state language, and enhancement of the language culture;”⁷⁰

Paragraphs 2 and 3 of this section also define the status of codification in Slovak language:

“(2) The codified form of the state language shall be approved and published by the Ministry of Culture of the Slovak Republic (hereinafter ‘Ministry of Culture’) on its website upon request of the scientific Slovak studies research institutes and experts in the field of the state language.”⁷¹

“(3) Any interference with the codified form of the state language that is contrary to the regularities shall be inadmissible.”⁷²

The task of supervision of abiding the obligations defined in the selected sections and paragraphs of the law is assigned to the Ministry of Culture (with a few exceptions, e.g., the area of advertising, which is overseen by institutions as specified in a special regulation). In section 9, which defines this supervision, paragraph 1 also states: “In performing this supervision, the Ministry of Culture shall also take due account of the codified form of the state language pursuant to section 2(2).”

In the section 9a, sanctions in case of breach of obligations are stipulated. This competence is given to the Ministry of Culture. A fine may be levied if a breach within the scope of this law is found and if it pertains to government information addressed to the public or information of fundamental importance (e.g., concerning threat to life, health, or security of

⁷⁰ In original: “(1) Štát utvára v školskom, vedeckom a informačnom systéme také podmienky, aby si každý občan Slovenskej republiky mohol osvojiť a používať štátny jazyk slovom aj písmom, utvára podmienky na vedecký výskum štátneho jazyka a jeho historického vývinu, na výskum miestnych a sociálnych nárečí, stará sa o kodifikáciu štátneho jazyka a o zvyšovanie jazykovej kultúry.”

⁷¹ In original: “(2) Kodifikovanú podobu štátneho jazyka na podnet odborných slovakistických výskumných pracovísk a odborníkov v oblasti štátneho jazyka schvaľuje a zverejňuje Ministerstvo kultúry Slovenskej republiky (...) na svojej internetovej stránke.”

⁷² In original: “(3) Akýkoľvek zásah do kodifikovanej podoby štátneho jazyka v rozpore s jeho zákonitosťami je neprípustný.”

citizens, etc.), so long as the breach is not remedied by a given period. Practical experience shows that this provision is not usually applied.

Some authors question the real necessity of such a law, or its status in the cultural-political situation. For example, Dolník (2010, p. 249) claims that “Slovak language served its function before adopting the language law just as well as afterwards and there are no obstacles to its further efficient functioning; this is more a political gesture manifesting the essence of political practice, which dwells in persuasion that the political subject works on behalf of the nation.”⁷³ Reservations regarding the individual provisions of the law can also be observed. Notably, a rather heated debate started regarding its amending in 2009, which introduced sanctions in the form of fines. A part of the public voiced its disapproval of certain provisions of the law, including the sanctions. In this regard, we have to mention that, according to Ondrejovič (2013, p. 29), a positive relation to language cannot be built on fines.⁷⁴

Some of the other provisions of the language act seem questionable as well. For example, in relation to the aforementioned section 2 paragraph 3 (“Any interference with the codified form of the state language that is contrary to the regularities shall be inadmissible.”), Dolník asks: “Who decides what is ‘contrary to the regularities’ of the codified form?”⁷⁵ (Dolník, 2010, p. 167 – 168). In the author’s opinion, it is the codifiers, as they are the ones penning the codification handbooks. That would mean that anything a codification handbook does not permit would be in conflict with language rules according to this act (ibid.). Here, we have to remind of Slančová and Sokolová’s (1994, p. 227) statement that codification “generally lags behind the norm”.⁷⁶

From the information provided, it is evident that Slovakia belongs among those European countries that attribute a privileged position to their state language by legal means.

⁷³ In original: “že slovenský jazyk fungoval pred prijatím jazykového zákona tak dobre ako po ňom a niet žiadnych prekážok, aby naďalej fungoval bez obmedzení, ide skôr o politické gesto, ktorým sa manifestuje podstata politickej praxe spočívajúcej v presviedčaní, že politický subjekt koná v prospech národa”.

⁷⁴ Development of the law on state language in relation to its sanctioning aspect was more complicated. The law adopted originally in 1995 included sanctions. This part was abolished after change in government, then reintroduced. For a more detailed information on this development, cf. Ondrejovič (2013, p. 26; note 1).

⁷⁵ In original: “Kto rozhoduje o tom, čo je v rozpore so zákonitosťami kodifikovanej podoby jazyka?”

⁷⁶ In original: “všeobecne zaostáva za normou”.

1.3 Basic terminology in Polish linguistic context

Milena Hebal-Jeziarska

This section introduces the definitions of terms related to language culture as understood in Polish scholarly literature, explaining them in the context of Czech and Slovak approaches to these terms. These, in turn, are addressed in dedicated chapters.

We analyse the terms *język ogólny/język literacki*⁷⁷, *kultura języka*, *kodyfikacja*, *ortoepia/ortofonia* (*common language/literary language*, *language culture*, *codification*, *orthoepy/orthophony*) and the concept of language policy, taking into account the relevant legislature. The expression *norm* is used in most of these descriptions and definitions, we thus also deal with this term from multiple different angles. The discussions of this terminological apparatus within Polish linguistics are quite extensive. It is impossible to cover them in entirety here. When selecting the contents of this chapter, we decided to incline to Slavistic, rather than Polonistic approach.

1.3.1 Literary Polish. Stratification of Polish language

In Polish scholarly literature, the terms *dialekt kulturalny*, *język literacki*, *język ogólny*, *język ogólnonarodowy* (*cultured dialect*, *literary language*, *common language*, *national language*) are used to label language stratification. These can be found under the headword *dialekt kulturalny* (*cultured dialect*) in the *Encyklopedia językoznawstwa ogólnego* [Encyclopaedia of general linguistics] (EGL) (Saloni, 1999, p. 118).

Zygmunt Saloni defined the literary language as a “cultured dialect of a given language, generally only in written form, which establishes the basis for the development of literature and which is shaped alongside it”⁷⁸; it is the closest match to the understanding of the terms *literary Czech* and *literary Slovak* in Czech and Slovak environments, respectively. The original meaning of the adjective *literary* was related to writing and literature⁷⁹. Currently, it is a label for spoken and written nationwide form of Czech and Slovak languages, used by all native speakers, which is also codified.

⁷⁷ *Język ogólny/język ogólnopolski* and *język literacki* are usually translated as literary language. These terms are not equivalent in contemporary Polish theoretical works however, we are therefore leaving them in Polish.

⁷⁸ In original: “dialekt kulturalny danego języka narodowego, najczęściej tylko w wersji pisanej, stanowiący podstawę wykształcenia się literatury i rozwijający się wraz z nią.”

⁷⁹ Definition of the adjective *spisovný* (literary) in the *Průruční slovník jazyka českého* [Reference dictionary of the Czech language] (1935–1957) is formulated as follows: *spisovný* – týkající sa písania, literatury – i.e., literary – pertaining to writing, literature.

However, in Polish context, the situation is different. In contemporary Polish, the terms *język ogólny*/*język ogólnopolski*⁸⁰ (*common language* and *Poland-wide language*, respectively) are used to denote the language form that all native speakers use; the term *język literacki* (*literary language*) does not serve this function despite it referring to literature, what makes it the most analogous to the Czech and Slovak terms form-wise.

The term *język literacki* (literary language) is also used in scholarly literature, however, in relation to the change in language situation in Poland, its meaning was narrowed to the elite form of Polish literary language (Gajda, 2001, p. 212). For many years, the term *język literacki* referred to *język ogólnopolski*. As late as in 1994, Bogdan Walczak (1994, p. 35) wrote that the term *język literacki* is used with two meanings – a broader to denote literary language and a narrower to denote the written form of literary language. We believe that it functions with this broader meaning also among average language users in the common colloquial form. Search results obtained from corpora of Polish language also confirm this assumption.

In the National Corpus of the Polish Language (Narodowy Korpus Języka Polskiego; further NCPL), made of texts published by 2010, collocation *język literacki* is prevalent. Collocation *język ogólnopolski* appears sporadically in these texts, and the expression *język ogólny*, which is also infrequent, does not always relate to the differentiation of the contemporary Polish. On the other hand, the Monco corpus (compiling online texts) shows a gradual increase in frequency of use for the *język ogólnopolski*, though *język literacki* is still dominant.

Despite this, in contemporary scientific publications on the differentiation of the Polish language, the terms *język ogólny* and *język ogólnopolski* are usually adopted to denote the language variety that the Poles use regardless of social and territorial background, profession, age or gender⁸¹ (Zdunkiewicz-Jedynak, 2008, p. 22). These labels have replaced the previously

⁸⁰ In EGL, Saloni formulates the following definition: “language of educated classes, which serves as the foundation for codification of the literary language [*język literacki*] of a given nation or which remains in a clear mutual interaction with literary language [*język literacki*]. Within the scope of a single language of a given ethnicity, multiple cultural dialects may be distinguished, depending on various historical and social factors. A single cultural dialect of a given ethnicity (distinguished in case of speech differentiation among educated classes, e.g., in case of Polish), can be labelled as literary [*język ogólny*; literally translated as common language – translator’s note] or a national language [*język ogólnonarodowy*; literally translated as nation-wide language – translator’s note]. Examples of languages with multiple cultural dialects are English and German.” – In original: “język warstw wykształconych służący za podstawę kodyfikacji języka literackiego danego narodu albo pozostający w wyraźnym współoddziaływaniu z językiem literackim. W obrębie jednego języka etnicznego wyróżniać można w zależności od czynników historycznych i społecznych, różną liczbę dialektów kulturalnych. Jedyne dialekt kulturalny języka etnicznego (wyróżniamy w wypadku zróżnicowania mowy warstw wykształconych np. dla j. pol.) może też być nazywany językiem ogólnym lub ogólnonarodowym. Przykładami języków etnicznych o kilku dialektach kulturalnych może być j. ang., niemiecki”.

⁸¹ The term *język ogólnopolski* was introduced by Zenon Klemensiewicz (1961, p. 108).

used *język literacki*. The reasons for this are discussed by Stanisław Gajda (2001, pp. 207 – 219) and Dorota Zdunkiewicz-Jedynak (2008) among others. In the antebellum period, literary language was the language of educated classes, of the elite, which was then made up of yeomen and nobility. Only a few Poles used literary language at that time. Jan Miodek (1988 In Skudrzyk, Urban, 2010, p. 37) estimates that approximately 70% of Poles spoke a dialect in this era. The situation changed diametrically after the war. In the antebellum period, the class of intellectual elites was virtually non-existent due to conflicts, elimination, and emigration, the intellectual circles of the post-war period were formed mostly by the so-called first-generation intellectuals, Miodek explains. The change in the language situation was influenced by a multitude of factors, such as compulsory education, technological development, and socialism. Dialects were dying out and none of them took a dominant position within the language system (Miodek, 1988 In Urbanek, 1988, Skudrzyk, Urban, 2010, pp. 37 – 38). Language unification (Miodek, 1988), de-elitization and democratization (Gajda, 2001, p. 209) take place in this period. Gajda (ibid.) writes that it is necessary to form a new literary language (*język literacki*), which is to be used by all Poles, not just a small portion of the populace as before the war. Despite the prestige attributed to the literary language, its quality is lacking. And thus, *język literacki* is slowly pushed out by *język ogólnopolski*. In contemporary descriptions of the Polish language differentiation, central position among the individual language varieties is held by *język ogólny*. As Gajda (ibid., p. 212) states, *język ogólnopolski*, folk dialects, jargons, and different varieties of the literary language influence each other. *Język literacki* holds an elite position in this structure and is designated to “satisfy higher social needs” (ibid.).

A characteristic feature of literary language is that it can be used in various spheres of communication. Zdunkiewicz-Jedynak (2008, p. 23) differentiates the following forms of literary language: belletristic, scientific, administrative-legal, journalistic, religious, and common colloquial. Additionally, official and unofficial forms of Polish language are recognized.

Readers of this publication, particularly those who are not well-versed in the Polish scholarly literature, have to be aware that the differentiation of Polish language (and with it also the labels of its individual language varieties) is a long-contested topic. This issue has been dealt with by many influential Polish linguists, including Danuta Buttler, Antoni Furdal, Stanisław Gajda, Zenon Klemensiewicz, Andrzej Markowski, Walery Pisarek, Jadwiga Puzynina, Teresa Skubalanka, Stanisław Urbańczyk, Jacek Warchała, and Aleksander Wilkoń. Depending on the viewpoint and the date of publication, different models of the contemporary

Polish language stratification are adopted, distinguishing various styles and diverging in definitions of basic terms, including literary language, national language, common colloquial language⁸².

1.3.2 Language culture

Language culture is a term used primarily in Slavic countries (Saloni, 1999, p. 321). It was propagated by the linguists of the Prague Linguistic Circle, inspired by the works of the Russian scholar Grigoriy Vinokur, among others. Jiří Kraus (2017) notes that PLC members' lectures were published in 1932, edited by Bohumil Havránek and Miloš Weingart in *Spisovná čeština a jazyková kultura* [Literary Czech and language culture], and it has to be remembered that the theory of culture of the Czech language was created as a reaction to language purism. This publication thus contained theoretical papers explaining what should serve as a basis for qualification of correct and incorrect forms. In the period Polish sources, emphasis was placed primarily on practical proficiency of correct Polish language. In Poland, definition of *language culture* was tackled by Halina Kurkowska in a textbook named *Kultura języka polskiego* [Culture of Polish language] published in 1971 (Markowski, 2005, p 15). This was followed by efforts of others, including Andrzej Markowski, Jerzy. Bartmiński, Marian Bugajski, Walery Pisarek, Jadwiga Puzynina, and Zygmunt Saloni. This is explored in more detail in Markowski (ibid.). The summary of these approaches is encapsulated in Saloni's definition (1999, p. 321). He names two basic meanings of the term *language culture*: the ability to use language means and, at the same time, activity aimed at improving of this ability.

The broadest, but at the same time the most exact definition of *language culture* is provided by Markowski (2005, pp. 15 – 16) in *Kultura języka polskiego* [Culture of Polish language]. It takes into account the definitions previously postulated by Polish linguists and provides examples of texts where this collocation appears. As such, he differentiates four meanings of this term. In addition to the three basic meanings similar to those formulated in scholarly sources, he also provides another one, related to expressing a stance towards language. The first among the definitions of the term *language culture* is “the ability to talk and write correctly and skilfully, i.e., do so in accordance with language rules (norms) and stylistic models accepted in a given community”⁸³ (Markowski, 2005, p. 15). It is important to distinguish between these two abilities. While correctness is dependent on knowledge obtained in schools,

⁸² Exact distinctions and common attributes of classifications are provided by Wilkoń (2003, p. 51).

⁸³ In original: “umiejętność mówienia i pisania poprawnego i sprawnego, czyli zgodnego z przyjętymi z danej społeczności regułami (normami) językowymi i wzorcami stylistycznymi”.

publications, and language counselling, the ability to use language skilfully is much more demanding and, in a certain sense, approximates the Czech understanding of language culture (as suggested by the PLC), which is based on adapting language means to language functions and utterance type. This is our understanding of the part of Markowski's suggestion, in which he explains the term *language skill* (*sprawność językowa*): "It dwells in the selection of those language means, which allow for the most suitable approach towards the addressee, generating an adequate reaction (i.e., such that the author intended) and evoke positive evaluation of the speaker (writer). A text is formed skilfully if the author expresses what they intend to communicate (information, experience, emotions, etc.) in a manner that is the most appropriate in the given communication situation. Language skill is the ability to select from a number of different stylistic means, which, naturally, presupposes the proficiency with a multitude of language varieties and styles"⁸⁴ (Markowski, 2005, p. 19).

As the second meaning of the term *language culture*, Markowski proposes the cultural-language activity, that is, the propagation of knowledge of language. The third meaning that Markowski identifies is the stance towards language by its users. Here, he has in mind those people who show a marked ability to use the language correctly and skilfully in both spoken and written form. The fourth meaning is that of the name of a scholarly discipline and the related teaching subject.

Polish language corpora Monco and NCPL contain statements proving that the phrase is indeed used with all of the meanings mentioned.

In these texts, *language culture* is used as a synonym to cultivated elocution, as a part of personal culture and patriotism.

"Iłakowiczówna herself wrote on the first page of the book: 'A very promising debut. High level of language culture. Pleasant word combinations'"⁸⁵ (NCPL: Ryszard Matuszewski, *Alfabet: wybór z pamięci 90-latka*, 2004).

"Young people should learn polite behaviour and language culture at home" (NCPL: Kamila Mróz, *Tygodnik Tucholski* no. 609).

"Patriotism also means care of Polish language culture" (NCPL: Barbara Niziołek, *Wychowawca* monthly, no. 182, 2008).

⁸⁴ In original: "Polega ona na doborze takich środków językowych, które pozwolą najlepiej dotrzeć do odbiorcy, spowodować jego właściwą (to znaczy taką, o jaką chodziło autorowi tekstu) reakcję i wywołać u niego pozytywną ocenę mówiącego (piszącego). Tekst sprawny językowo to taki, w którym autor przekazuje to, co chce przekazać (informacje, przeżycia, emocje itp.), w sposób najodpowiedniejszy w danej sytuacji komunikatywnej. Sprawność językowa to umiejętność wyboru spośród różnorodnych stylistycznie środków, co zakłada, rzecz prosta, znajomość wielu odmian i stylów języka."

⁸⁵ In original: "Zupełnie obiecujący debiut. Znaczna kultura języka. Przyjemne zestawy słów."

The aforementioned definitions of language culture are thus hard to question. Other approaches essentially define the same contents in greater detail. The issue lies in the term language correctness, understood as an “ability to use all language elements in accordance with the accepted language norms”⁸⁶ (Markowski, 2005, p. 18). It is the term norm that is a point of controversy, and that also plays an important role in Polish linguistics. The definition of norm is a factor influencing viewpoints of native Polish speakers on language culture, and, more precisely, language correctness.

1.3.2.1 The term *norm* in the Polish language culture

One of the first definitions of norm is included in the text *Prawidła poprawnej wymowy polskiej* [The rules of correct Polish pronunciation] by Zenon Klemensiewicz. Norm is a true pronunciation, which can be observed among intellectuals. Klemensiewicz (1930, p. 6) states that the norm is not theoretical, nor is it a whim of individuals. He claims that a prescription to use non-authentic pronunciation will not be respected. It has to be noted, however, that this perception of norm had its justification at that time. Prior to publishing of the first version of *Prawidła...*, linguists carried out observations, consultations, and questionnaires pertaining to pronunciation.⁸⁷ They were aware of the difference between stage and common pronunciation – and that a two-level norm was necessary: stage pronunciation was defined as elevated, conscious, an expression of perfection, and common pronunciation denoted correct pronunciation taught at schools. In many cases, specific phonetic phenomena were deemed acceptable in school pronunciation, but not in stage pronunciation.⁸⁸ Two-level or even more stratified character of norm, even if not labelled as such, is found also in other publications on correct pronunciation. They differ only in the designators of the degrees of correctness. Bogusław Dunaj (2001, p. 65; 2016, p. 26) calls these pronunciation styles. He also provides the following nomenclature:

⁸⁶ In original: “umiejętność polegająca na używaniu każdego elementu językowego zgodnie z przyjętymi normami językowymi”.

⁸⁷ Cf. Subchapter 2.3 *History of Polish pronunciation codification*.

⁸⁸ Cf. Subchapter 2.3 *History of Polish pronunciation codification*.

Table 5: Pronunciation styles in publications dealing with the topic of pronunciation (per Dunaj, 2001, p. 65, and 2016, p. 26)

Publication	Pronunciation types
Zenon Klemensiewicz, <i>Prawidła poprawnej wymowy polskiej</i> (1930)	stage pronunciation, school pronunciation
Witold Doroszewski, Bronisław Wieczorkiewicz, <i>Zasady poprawnej wymowy polskiej</i> (1947)	pronunciation in ceremonial speeches, colloquial pronunciation
Leszek Biedrzycki, <i>Fonologia angielskich i polskich rezonantów</i> (1978)	three basic styles: formal, punctual conversational, fast familiar (in a more detailed description, author distinguishes two more styles: higher, and fast conversational)
Władysław Lubaś, Władysław Urbańczyk, <i>Podręczny słownik poprawnej wymowy polskiej</i> (1990)	highly pedantic, pedantic, colloquial, neglectful style

It seems that a two- or multi-level character of pronunciation norm has overshadowed the two-level character of norm generally perceived as one of the central terms of language culture. This is probably related to the fact that variability appears with a greater frequency in phonetics than in other language subsystems (Markowski 2016, p. 17).

Due to the fact that there exists no up-to-date dictionary or rules of correct Polish pronunciation and that some normative solutions have to be sought in dictionaries, we will briefly outline a definition of norm, which is currently used in context of language culture. This point is, however, open to discussion. The article by Ewa Kołodziejek (2018), which we recommend as further reading for those interested in this topic, can be seen as a summary of discussions that have been taking place in Polish linguistics for many years.

The most popular approach to the term norm, appearing in scholarly literature for some time, is understanding it as a set of language elements, units, or means, that are accepted by society⁸⁹.

⁸⁹ Norm is a set of language units approved by a given society and rules delimiting the scope in which the relations between these units are realized in texts. Social habit of using certain language means – language usage – is an expression of this approval (Butler, Kurkowska, Satkiewicz, 1971, p. 18, in Rutkowski, Włoskiewicz, 2019, p. 142). Language norm is the set of all means of a given language (i.e., phones, morphemes, words, ways of their pronunciation and connecting into larger units, etc.) that must be, on the basis of approval of a given community, mandatorily used by all users of that language, otherwise the receiver feels that the communication is not taking

This definition has been, and still is, highly controversial. While it is similar to Klemensiewicz's definition, it seems that it is not justified in the same manner as the rules of pronunciation from the beginning of 20th century. Controversies are thus caused by the measurability of social approval, elite that should be the carrier of the norm, as well as the instability of normative resolutions. Doubts related to this topic were expressed – among others – by Puzynina (1998), Liberek, Zdunkiewicz-Jedynak (2019, p. 75), Bańko (2008, 2019, p. 27).

In publications that deal with the issue of norm, two-level norm is most commonly used today: model literary norm (*norma wzorowa*) and colloquial literary norm (*norma potoczna*).

According to Markowski (2006, pp. 1626 – 1629), model literary norm is binding in formal communication. It is accepted by the majority of educated Poles. To understand it, it is necessary to know the history and current developmental trends of the Polish language. Colloquial literary norm is reserved for informal communication. It is based primarily on the criterion of reach of a certain language form.

In Polish literature, one more important orthoepic solution to the issue of defining norm has appeared, based on the principle of its multi-level character. It is the term of multi-point norm, introduced by Mirosław Bańko in his *Inny słownik języka polskiego* [A different dictionary of the Polish language]. It is based on the evaluation of an expression from multiple viewpoints: its compliance with the codified norm, its frequency, and its social acceptance (Bańko, 2019, p. 27).

Studies show that Polish speakers likely do not use the term norm, especially not codified norm, in the sense it has in the context of language culture (Kłosińska, Hącia, Mandes, Adamczyk, Kielpińska, 2017). Knowledge of model norm is also not widespread and use of some of its elements by average Poles can sound surprising. Agnieszka Rosińska-Mamej (2018) lists elements of the model norm that Polonistics students are ashamed to use in discussions with non-Polonists, as these could sound ridiculous to average speakers. They are perceived as unusual and incorrect. They do not conform to the idea of norm of the average Polish speaker. Katarzyna Kłosińska and her co-authors use a label *language comfort* (*dobrostan językowy*) for such a “norm” based on habit and internal aesthetic perception (Kłosińska, Hącia, Mandes, Adamczyk, Kielpińska, 2017). It is the violation of this language comfort, and not the codified norm, that causes discomfort in the communication partner. Language comfort is a “state of

place “as it should” (Urbańczyk (ed.), 1978, pp. 218 – 219, in Kania, 1995, p. 32). Language norm is usually understood as a sum of all language means approved by a given community, used in a given period in the given community (Klebanowska, Kochański, Markowski, 1985, p. 11, in Ruszkowski, 1995, p. 37).

mental comfort induced by communication that is acceptable from the language or belief standpoint (not necessarily explicitly expressed) about the self-evidence of the given manner of language use”⁹⁰ (Kłosińska, Hącia, Mandes, Adamczyk, Kielpińska, 2017).

1.3.3 Codification

The term *codification* arose relatively late in the Polish linguistics. Władysław Lubaś (1995, p. 30) writes that the term *codification* does not appear in dictionaries; this is supposed to be a proof that this term is not popular in Poland, as opposed to other countries. The author believes that long-term absence of this term in Polish linguistics is related to Polish aversion to formulations borrowed from legal and political sciences.

The term *language codification* itself is given the following definition in the *Encyclopaedia of General Linguistics*:

“Enactment of language norm carried out by formulating, recording and approving of specific recommendations by an official authority or an authority with jurisdiction in the corresponding language community. Classical example of codification is the formulation of binding rules of orthography and punctuation on the basis of established practice, as well as categorisation of certain forms and structures as correct and others as incorrect”⁹¹ (Saloni, 1999, p. 302).

This definition perfectly matches the situation in Czechia and Slovakia, where the codification process is centralized. In both countries, language codification is in the competence of linguists employed in specific scientific institutions. Each codification is thus a collective effort. In Czechia, it is conducted under the auspices of the Institute of the Czech Language of the Czech Academy of Sciences, and the Ľudovít Štúr Institute of Linguistics of the Slovak Academy of Sciences in Slovakia. Additionally, the prepared recommendations must be approved by a designated institution – in Czech Republic, this is the Ministry of Education, in Slovakia, the Ministry of Culture. A language-conscious user knows the date of the most recent valid codification and can name the publications that contain the forms set in the most recent codification.

⁹⁰ In original: “stan dobrego samopoczucia psychicznego wywołanego obcowaniem z wypowiedziami akceptowanymi pod względem językowym bądź przeświadczenia (niekoniecznie wyrażanego wprost) o oczywistości danego sposobu użycia języka”.

⁹¹ In original: “Nadanie normie językowej mocy obowiązującej przez sformułowanie, zapisanie i zatwierdzenie konkretnych zaleceń przez ciało oficjalne lub posiadające autorytet w danej społeczności językowej. Klasycznym przykładem kodyfikacji jest formułowanie, na podstawie istniejącej praktyki, obowiązujących reguł ortograficznych i interpunkcyjnych, a także katagoryczne kwalifikowanie jednych form i konstrukcji jako poprawnych, innych – jako niepoprawnych.”

In Poland, the situation regarding codification is vastly different. There exists no single institution or a team of researchers that would be responsible for this process. Consulting and counselling function is assigned to the Polish Language Council (*Rada Języka Polskiego*), established in 1996. One of its tasks is to solve ambiguity issues related to language, rules of orthography and punctuation, but it is not, in fact, the sole authority with codification competence. The Council publishes binding regulations and recommendations pertaining to orthography. Poles, however, are not even aware of its existence, much less of regulations published on its webpage www.rjp.pan.pl.

This situation is the reason why it is essentially impossible to provide a clear answer as to what institution is responsible for the codification of Polish language. Grammars, dictionaries, and handbooks produced by linguists are deemed authoritative⁹². The issue is that there is a rather large number of linguistic texts that are considered sources of codification norms. From this follows the issue of the differences in normative solutions arising from different criteria that the authors of these texts follow.

In Polish language, codification is thus carried out by instances of publishing of dictionaries, grammars or handbooks containing new normative information, while codification of Czech and Slovak languages is linked to language reform, the information on which are, in turn, made available in orthographic rulebooks and dictionaries. Polish codification in a given period can also vary in different aspects depending on the study followed. As an example, we can provide a quote from a textbook on language culture by Markowski (2005, p. 65): “Codification in the area of pronunciation and declension of surnames of foreign origin, which is more extensive and partially different from the one provided by the *Słownik poprawnej polszczyzny* [Dictionary of correct Polish] is contained in the *Słownik wymowy i odmiany nazwisk obcych* [Dictionary of pronunciation and declension of foreign names] by Izabela and Jerzy Bartmiński.”⁹³

Below, we provide a selection of current dictionaries containing the most recent codification of Polish language, based on Markowski’s publication (2018):

⁹² We are using the definition of codification postulated by Gajda (1979, In Kołodziejek, 2019, p. 250): “Registration of norm carried out by linguists, legitimized by the authority of a grammar textbook, dictionary, handbook, i.e., codified norm only pertains to literary language. Codified norm is not related to usage. Codification is an intentional intervention in language development, it has an axiological and subjective aspect, it creates a model”. (In original: “Rejestracja normy dokonana przez językoznawców, uprawomocniona autorytetem gramatyki, słownika, poradnika, czyli norma skodyfikowana, przysługuje wyłącznie językowi literackiemu. Norma skodyfikowana nie przylega do normy zwyczajowej. Kodyfikacja jest celową ingerencją w rozwój języka, ma aspekt aksjologiczny, subiektywny, kształtuje wzorzec”.)

⁹³ In original: “Kodyfikację w zakresie wymowy i odmiany nazwisk obcych, obszerniejszą i częściowo różniącą się od tej, która jest zawarta w Słowniku poprawnej polszczyzny, zawiera Słownik wymowy i odmiany nazwisk obcych Izabeli i Jerzego Bartmińskich.”

- *Wielki słownik poprawnej polszczyzny* [The great dictionary of correct Polish], edited by Andrzej Markowski (2004);
- *Nowy słownik ortograficzny PWN* [A new PWN dictionary of orthography], edited by Edward Polański (1996);
- *Słownik interpunkcyjny języka polskiego* [Dictionary of punctuation of the Polish language] by Jerzy Podracki (expanded edition *Nowy słownik interpunkcyjny* [New dictionary of punctuation] published in 2005);
- The same author co-authored a dictionary of punctuation titled *Gdzie postawić przecinek?* [Where to Put a Comma?] in 2010.
- *Słownik wymowy i odmiany nazwisk obcych* [Dictionary of pronunciation and declension of foreign names] by Izabela and Jerzy Bartmiński (1992).

Additionally, as Markowski (2018) claims, codification of Polish language is contained also in general dictionaries of Polish language, which typically show a normative character. Here we include the following titles:

- *Inny słownik języka polskiego* [A different dictionary of the Polish language], edited by Mirosław Bańko (2000);
- *Uniwersalny słownik języka polskiego* [Universal dictionary of Polish language], edited by Stanisław Dubisz (2003);
- *Wielki słownik języka polskiego* [Large dictionary of the Polish language], edited by Piotr Źmigrodzki (2007, online).

Identifying the publications containing the currently valid codified pronunciation norm is more troublesome. Izabela Więcek-Poborczyk (2014, p. 48) states that the majority of scholars respects two pronunciation dictionaries as sources on codified pronunciation: *Słownik wymowy polskiej* [Dictionary of Polish pronunciation] from 1977 and *Podręczny słownik poprawnej wymowy polskiej* [Concise dictionary of correct Polish pronunciation] from 1990. These dictionaries, as stated in the chapter on history of Polish pronunciation codification, were criticized for not corresponding with the most up-to-date research results. In describing the current orthographic norm, Więcek-Poborczyk uses a multitude of sources, including the mentioned dictionaries, available grammars, textbooks of phonetics, and scientific articles dealing with individual phonetic topics. In case of normative discrepancies, she follows the articles of Bogusław Dunaj published in the journal *Język Polski* [Polish language] in 2003, 2004 and 2006. Recommendations in these texts were approved by the members of the Division

for language culture of the Committee on Linguistics of the Polish Academy of Sciences (Więcek-Poborczyk, 2014, p. 51). It is worth mentioning the exceptionally important work of Anita Lorenc (2016) dealing with codification of the phone [l] and the so-called nasal vowels. Lorenc carried out her research using experimental phonetic methods. The results are presented here in the chapter dealing with the pronunciation of Polish phones.

1.3.4 Orthophony or orthoepy?

Although the Polish, Czech, and Slovak lexemes *ortoepia* (Pl., Slk.), *ortoepie* (Cz.) ultimately come from the same Greek word *orthoépeia* (ὀρθοέπεια), their meanings differ. In Greek, *orthoépeia* means correct pronunciation, correct use of language forms (Saloni, 1999, p. 409). In Czech and Slovak, *ortoepie/ortoepia* mean correct pronunciation exclusively, while in Polish, the lexeme *ortoepia* has a much wider range of meanings. According to EGL, orthoepy is “a branch of applied linguistics which deals with evaluation of language texts from the point of view of their correctness, and with formulating instructions for proper use of elements of a language system. Orthography and orthophony are parts of orthoepy. Within the broadest sense of the word, normative grammar also falls within the scope of orthoepy”⁹⁴ (Saloni, 1999, p. 409). The Polish equivalent of the Czech *ortoepie* and Slovak *ortoepia* is thus *orthophony*, which is defined as the “area of orthoepy which deals with the correct pronunciation of words and word clusters in a given language”⁹⁵ (Saloni, 1999, p. 409).

The words *orthoepy* and *orthophony* are not used regularly in Polish context. More frequently, expressions *poprawna wymowa*, *poprawna polszczyzna* (*correct pronunciation*, *correct Polish*) are used, e.g., *Podręczny słownik poprawnej wymowy polskiej*, *Słownik poprawnej polszczyzny – Concise dictionary of correct Polish pronunciation*, *Dictionary of correct Polish*. Lexemes *orthoepy* and *orthophony* appear only sporadically in publications aimed at the general public and seem to be mostly relegated to the past. Examples of works containing these expressions are texts from the earlier half of the 20th century, for example, *Słownik ortoepiczny* [Orthoepic dictionary] by Stanisław Szober (1937) and *Ortofonja polska*⁹⁶ [Polish orthophony] by Tytus Benni (1924).

⁹⁴ In original: “dział językoznawstwa stosowanego, zajmujący się oceną tekstów językowych pod względem poprawności i formułowaniem wskazówek poprawnego stosowania elementów systemu językowego. Działami ortoepii są ortografia i ortofonia. W zakresie szeroko rozumianej ortoepii mieści się także gramatyka normatywna.”

⁹⁵ In original: “dział ortoepii zajmujący się poprawną wymową wyrazów danego języka i ich połączeń”.

⁹⁶ The title spelled in accordance with the period orthography.

1.3.5 Language policy in Poland

From among the three languages discussed in this publication, two – Polish and Slovak – are protected by legal resolutions. In case of Czech, no such legal solution exists.

In Poland, Act on Polish language was adopted in 1999, regulating:

- “1) the protection of the Polish language;
- 2) use of Polish language in the implementation of public tasks;
- 3) use of the Polish language in the course of trade and in exercising the provisions of labour law in the territory of the Republic of Poland.”⁹⁷

In the preamble of the Act, it is stated that the Polish language is a fundamental element of the Polish national identity and a part of the nation’s cultural wealth. The legislator argues for the need of adopting a law primarily by the need to protect the Polish language. Historical events (divisions and occupations) are recalled, during which attempts were made at elimination of Polish language and subsequent denationalisation of Poles. Additionally, the need to safeguard the language is presented also in context of Poland’s participation on creation of a unified Europe.

One of the most important provisions of the Act is the protection of the Polish language, which includes care of Polish language culture and support of the Polish language abroad. The legally prescribed method of official verification of Polish language proficiency and regulation of the competences of the Polish Language Council are related to this care and support. The Council is recognized as an opinion-forming and advisory authority and is obliged to provide the Sejm a report on the state of Polish language protection at least biannually. The Act also exactly regulates the conditions of executing state examinations of the Polish language proficiency, selection of examiners, etc. Other significant provisions include the obligation to use Polish language in commerce involving consumers. Names of goods and services, offers, warnings, consumer information, operating instructions, information about properties of goods and services, warranty terms and conditions, invoices, bills, etc. have to be made available in Polish language (exceptions are described in art. 7a). Breach of these provisions is punishable by fine. Some agreements also have to be concluded in Polish language. Polish is recognized as the state language.

It seems that the least observed are the provisions intended to prevent the vulgarization of Polish language. The degree of “brutalization” of Polish in public spaces, in film and music is rising gradually. However, no efforts to mitigate this phenomenon are observable.

⁹⁷ Art. 1 of the Act on the Polish Language from October 7, 1999, as amended on April 11, 2003 and April 2, 2004. Available at: <http://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU19990900999/U/D19990999Lj.pdf>. [cited 30. 1. 2022].

2 History of Czech, Slovak and Polish orthoepy

The history of professional interest in “proper” pronunciation, establishment and codification of literary, standardised pronunciation had completely different developments in the three discussed neighbouring cultures. This is tied to the historical developments of their national languages, which took place in different political, social, and cultural conditions and which translate into different durations of their utilization as languages with a “national representative” and prestigious cultural function. It is also associated with the development of professional linguistic research in the individual countries, with the striving to obtain knowledge of language at all its levels (including phonetic research), with efforts to record and establish the standards that could serve as a basis for codification. These differences are also reflected in the field of orthoepy, as the following subchapters show.

The section dedicated to the Czech linguistic environment is the least extensive, primarily due to fact that the topic has already been covered in multiple publications. This topic has been most recently explored in detail by Veronika Štěpánová (2019) from among older works, the contribution of Miloš Weingart (1932, p. 171 – 189) has to be emphasized. This topic was less comprehensively addressed by Jiřina Hůrková (1995, pp. 8 – 15) and Jiří Zeman (2008, pp. 160 – 172), as well as others, and also the publications *Výslovnost spisovné češtiny I.* [Pronunciation of literary Czech I] (1967, pp. 77 – 81). Another reason for extent differences here is the fact that, unlike in the Slovak and Polish environments, the history of Czech orthoepy is not “a history of multiple codifications”, which would be comparable, it is a history culminating in a single codification, now oftentimes outdated.

The section dedicated to the Slovak environment is elaborated in greater detail, as it provides an overview of the individual changes to the literary Slovak since its first official codification, with a focus on the field of phonology. At certain points, it was also necessary to provide information on the socio-political context. A comparison of phonetic systems in individual codifications of literary Slovak facilitates a more complex image of the contemporary Slovak phonetics and its developmental background. It is also important to address the issue of the relationship between the Czech and Slovak languages in the observed period, as certain specific adjustments to the literary language were motivated precisely by an increased effort to delimit literary Slovak and Czech. It is necessary to understand that the codification development of Slovak took place in different socio-cultural conditions than the development of Czech or Polish. The most essential difference lies in the fact that this process took place in a state with a multi-ethnic composition, at first in Hungary, later in Austria-

Hungary (until 1918). Subsequent codification changes were carried out in the joint Czechoslovak state until 1992. The only exception was the short period of the first independent Slovak Republic in the years 1939 – 1945. These changes were also reflected in the language policies of the aforementioned states. During individual historical stages, the utilization of Slovak language was limited by various factors, primarily the use of other languages in the Slovak language territory, e.g., Latin and German; furthermore, at the beginning of the 19th century, the onset of Magyarization takes place (Pauliny, 1983, p. 139). During the period of the shared Czechoslovak state, Slovak was mainly under the influence of Czech as a result of intensive contact.

Multiple authors have already dealt with the topic of Polish codification history; however, it is difficult to find a single publication that would cover the history of orthoepy, the most important works on pronunciation, and the phonetic changes that have occurred over the years. The subchapter dedicated to the history of Polish orthoepy summarizes this information. Moreover, it also extensively explores the details of this history and individual approaches of linguists to the standards and language, especially of those who were involved in the pronunciation codification in the beginning of the 20th century.

2.1 History of Czech orthoepy

Pavčina Kuldanová

The earliest attempts at standardisation and cultivation of Czech pronunciation were preserved in works created in the 15th through 19th centuries; these, however, did not deal with Czech pronunciation in a comprehensive manner. Jan Hus is cited as the first author dealing with the phonetic aspects of the language, seeking to unify Czech pronunciation. This issue was also dealt with – albeit unsystematically or tangentially – by Jan Blahoslav, Jan Amos Komenský, Josef Dobrovský, and the authors of Czech grammars and linguistic manuals called “*brusy*” (literally translatable into English as “grinding stones”).

The very first systematic description of the normative pronunciation principles is presented in the work *Kallilogie čili o výslovnosti* [Callillogy, or, On pronunciation] by the philosopher Josef Durdík, published in 1873. However, this topic has received an increased attention only in the 20th century, when it became a point of interest for the phonetician Antonín Frinta, and linguists Miloš Weingart and František Trávníček, among others. In order to prevent subjective assessment of pronunciation, a collective effort on summarizing the principles of literary pronunciation was initiated in 1930s, in which selected linguists of the Prague Linguistic Circle (PLC) and employees of the Czechoslovak Radio participated. Their joint

cooperation resulted in several articles, among others on the pronunciation of loanwords (published mainly in the journal *Slovo a slovesnost* [Word and literature]).⁹⁸

Systematic elaboration and codification of the orthoepic norm is the result of efforts of the orthoepic committee, which was established in 1942 at the Czech Academy of Sciences and Arts; subsequently, the newly established committee of the Czech Language Institute of the Czechoslovak Academy of Sciences, founded in 1952, took over its activities and investigation. Publication of the codification handbook was the consummation of long-term efforts to scientifically describe the Czech pronunciation standard: edited by the professor Bohuslav Hála, a publication dealing with the principles of pronunciation of domestic words titled *Výslovnost spisovné češtiny I. Zásady a pravidla. Výslovnost slov českých* [Pronunciation of literary Czech I. Principles and rules. Pronunciation of Czech vocabulary] was published in 1955. Its second, revised edition (which already had a codification validity, unlike the 1st edition) was made available in 1967 by the Prague-based publishing house Academia. The other half of the Czech literary pronunciation principles, containing the pronunciation rules for loanwords and a more extensive pronunciation dictionary were elaborated by the members of the orthoepic committee under the leadership of professor Milan Romportl and were issued by the same publishing house in 1978 (*Výslovnost spisovné češtiny. Výslovnost slov přejatých. Výslovnostní slovník* [Pronunciation of literary Czech. Pronunciation of loanwords. Pronunciation dictionary]).⁹⁹

Unfortunately, the Czech pronunciation codification handbook is already unsatisfactory in certain aspects – since its publishing, there has been a certain shift in the real pronunciation norm, not only in terms of borrowed words, but also in domestic words. Several newer works dealing with pronunciation strive to reflect this development, yet they sometimes differ slightly in assessments of selected phenomena (e.g., of the pronunciation of the syllable *mě*, pronunciation of certain types of consonant clusters at word boundaries or the use of glottal stop). Ultimately, due to the fact that this handbook is not readily available and a more modern title with codification validity does not exist, those interested in Czech orthoepic principles can use other sources, e.g., the textbook *Fonetika a fonologie češtiny* [Czech phonetics and phonology] by Zdena Palková (1994; especially the chapter *Ortoepia* [Orthoepy], pp. 320 – 345), publication by Jiřina Hůrková *Česká výslovnostní norma* [Czech pronunciation norm] (1995), or selected Czech language textbooks and supplementary materials for university

⁹⁸ On the activities of PLC and its theory of language culture, cf. Subchapter 1.1 *Basic terminology in Czech linguistic context*.

⁹⁹ Cf. also Subchapter 3.5 *Rules of pronunciation of loanwords in Czech*.

students – especially works by Marie Krčmová (1992, 2008, 2009) and coursebooks by Jiří Zeman *Základy české ortoepie* [Introduction to Czech orthoepy] (2008). The online portal *Internetová jazyková příručka* [Online language handbook] is also worth mentioning here; it contains brief but concise orthoepic interpretations of domestic and foreign vocabulary and in the phonetic transcription is continually being uploaded for expressions that are more difficult to pronounce; approximations of the loanword pronunciations can be found in the specialized works by Vlastimil Strahl, Jiří Zeman and other authors, as well as in dictionaries of foreign words.¹⁰⁰

To those interested in the professional issues of Czech pronunciation, its development from the Middle Ages to the 20th century concluded by the codification of orthoepic rules, we recommend the monograph *Vývoj kodifikace české výslovnosti* [The development of the Czech pronunciation codification] by Veronika Štěpánová (2019). The author elaborates this topic in great detail, adds an analysis of fundamental handbooks and outlines the possibilities of research into the current pronunciation standard, which could lead to the refinement of certain orthoepic principles.

2.2 History of Slovak orthoepy

Patrik Petráš

The description of the history of Slovak orthoepy is based on the framework breakdown of literary Slovak development according to Ján Kačala and Rudolf Krajčovič (2006, pp. 12 – 13). The authors define the **pre-standard period** (beginning of the 9th – end of the 18th century), which is further subdivided into the early pre-standard period (9th – 10th centuries), older pre-standard period (11th – 15th centuries) and younger pre-standard period (16th – 18th centuries), and the **standard period** (from the end of the 18th century onward), which is further subdivided into the Bernolák's standard (1787 – 1844), Štúr's standard (1844 – 1852), Hodža–Hattala reform (1852 – 1863), Matica period (1863 – 1875), Martin period (1875 – 1918), interbellum period (1919 – 1940) and the current period (from 1940 onward).

With regard to the focus of this publication, we concentrate only on the standard period. We have to note though, particularly when discussing the earlier codifications of literary Slovak, that these standardisations had a complex nature, i.e., the individual codifiers dealt with the literary Slovak as a whole, handling the phonological system within such framework. Therefore, it is necessary to examine these codifications in the given context, and naturally for

¹⁰⁰ Cf. the list of recommended sources in Chapter 7.

our goals, with a special focus on phonology, or the phonetic level of the literary Slovak. The works focusing solely on Slovak orthoepy began to occur only in the 20th century. The codification development of literary Slovak was covered in publications (either comprehensively or with a focus on a specific historical period) by several Slovak linguists, notably Eugen Pauliny (1971, 1983), Vincent Blanár, Eugen Jóna, Jozef Ružička (1974), Ján Kačala and Rudolf Krajčovič (2006), Rudolf Krajčovič and Pavol Žigo (2006), Alexandra Chomová (2016). The Bernolák's literary Slovak was investigated by Ľubomír Kralčák (2009), a detailed concept of Štúr's codification can be found in the collective publication of Ľudovít Štúr's linguistic treatises, which also includes a study systematically analysing Štúr's linguistic work (Kralčák et al., 2015). A comprehensive overview of the development of the phonetic and graphic systems of literary Slovak since its first official codification to the current state was elaborated by Ivan Očenáš (2007).

Since the topic of literary Slovak history is covered relatively well, for the sake of providing general background, this chapter describes only the basic features of individual codification changes during the development of literary Slovak, while focusing chiefly on the phonetic system. In the framework of the aforementioned focus, we primarily analyse the differences in the phonetic system of individual codification plans. Subsequently, we will mainly pay attention to orthoepic works of the 20th century.

2.2.1 Codification of literary Slovak by Anton Bernolák

Although attempts to codify (or at least standardise) literary Slovak can be found even before Anton Bernolák,¹⁰¹ it is the Bernolák's codification that is considered the first literary norm of Slovak language (Kačala, Krajčovič, 2006, p. 62; Kralčák, 2009, p. 28). According to Očenáš (2007, p. 16), Bernolák considered the contemporaneous orthography of Slovaks to be difficult and incorrect for three reasons: 1. some unnecessary symbols were utilised; 2. grammarians did not distinguish the characters precisely enough; 3. certain unnecessary accents (today's diacritical marks in Bernolák's understanding) were used while those necessary were frequently used erroneously. Bernolák considered pronunciation to be of primary significance and

¹⁰¹ Kralčák (2009, pp. 24 – 28) also mentions earlier attempts to codify the language, or at least efforts to standardise it: It is necessary to mention here the manuscript *Walaska sskola mravuv stodola* (1755) [The shepherd's school of morals] by Hugolín Gavlovič, who did not attempt to reform the language at all its levels, however, his orthographic form of Slovak had already shown certain elements that were later codified by Bernolák (e.g. palatalization of *ň*, *ť* based on pronunciation, not using the grapheme *j* to denote *î*). Additionally, certain attempts at standardisation can be found in the activity of the Camaldolese monks, who translated the Bible and Blotius's religious hymns into Slovak, and published a Latin-Slovak dictionary. A more fundamental attempt to codify the Slovak language was made by Jozef Ignác Bajza, who published the novel *René mlád'enca Prihodi, a Skúsenosti* [Childe René's Adventures and Experiences] (1783) in his own version of language.

orthography should have been derived from it (Pauliny, 1983, p. 163). A systematic description of literary Slovak codified by Anton Bernolák was provided in the monograph *Bernolákovská spisovná slovenčina* [Bernolák's literary Slovak] (2009) by Ľubomír Kralčák.

Closely tied together with the graphetic system, phonology was codified in the collective work *Dissertatio philologico-critica de literis Slavorum, de divisione illarum, nec non accentibus* ([Philological-critical treatise on Slovak letters, their division and accents] 1787; hereafter *Dissertatio philologico-critica*) with the additional orthographic handbook *Linguae Slavonice per regnum Hungariae usitate compendiosa simul, et facilis Orthographia* ([Brief and simultaneously easy orthography of the Slovak language used in the Kingdom of Hungary] 1787; hereafter *Orthographia*). Bernolák summarized a normative description of orthographic rules in the text *Grammatica Slavica* [Slovak grammar] (1790). Within this description, he not only addressed orthoepy, morphology, syntax and prosody, but also added orthographic rules from the *Orthographia*, however, with a short appendix. He described Slovak word formation in the work *Etymologia vocum Slavicarum, sistens modum multiplicandi vocabula per derivationem et compositionem* [Etymology of Slovak words establishing the method of adding words by derivation and composition, 1791]. The crowning achievement of Bernolák's codification efforts was the preparation of the five-volume dictionary *Slowár Slowenský Česko-Latínsko-Ňemecko-Uherský* [A Slovak, Czech-Latin-German-Hungarian dictionary] (1825 – 1827), which was, however, published only posthumously (Kralčák, 2009, p. 29).

Regarding the origin, or source, of the Bernolák's codified standard, Kralčák (ibid., p. 32) draws attention to the incorrect belief that this codification was based on the Western Slovak dialect utilized around Trnava. Bernolák's codification of the Slovak language was primarily based on the spoken form of the Western Slovak usage, however, Bernolák opted for a usage positively influenced by the usage of cultural Central Slovak dialect (ibid., p. 34). The author further emphasizes that Bernolák's decision-making process in context of grapheme use – which should not be used in contradiction to the nature of phones in his opinion – is primarily based on the principle of naturalness. Prioritizing the acoustic features of the language over the written form is also based on the aforementioned principle, resulting in the basic orthographic rule of deriving the written from the pronunciation (ibid., p. 36). However, Kačala and Krajčovič (2006, p. 63) emphasize that, in addition to the dominant phonetic-phonological spelling principle, a morphological principle is also applied in Bernolák's standard (spelling *Dub* with a voiced final consonant results from the oblique forms *Dub-a*, *Dub-u* etc.). The functional principle is also partially applied (not only the proper nouns are spelled with a capital

initial letter, but also the generic ones: *Sin, Dom, Wira* etc.), as well as historical principle (phones [v] and [j] are written utilizing traditional graphemes *w* and *g*: *hlawa, geho*, etc.).

Dissertatio philologico-critica is divided into a discussion of Slavic letters, the division of letters based on what he calls “*genere et specie*”, genus (into vowels and consonants) and species (short and long vowels; hard, soft and semivocalic consonants), and the accents (diacritics) of Slavic letters. *Orthographia* deals with the proper use of letters, the separation of words, and the use of distinguishing marks (diacritics and punctuation). The first part of *Slovenská gramatika* [Slovak grammar], titled *Ortoepia* [Orthoepy] (in his Slovak also *dobročítanliwosť* [literally *good legibility*]), provides the rules for correct spelling, pronunciation and reading (Kralčák, 2009, pp. 38 – 39).

Bernolák defined the graphemic system in relation to the system of sounds they represented. He distinguished three types of graphic signs: vowels, consonants and accents, i.e., distinguishing marks. Bernolák’s orthography comprised 21 characters. Kralčák considers the most radical change to the older forms to be the exclusion of ypsilon (the letter *y*) (ibid., pp. 40 – 41).

Bernolák follows the traditional division of phones, which is also applied in contemporary Slovak, i.e., the division into vowels and consonants. However, Bernolák did not distinguish between monophthongs and diphthongs in the vowel group, what differentiates him from older authors. Bernolák’s standard contains five short and five long vowels (*a, e, i, o, u – á, é, í, ó, ú*), just like contemporary Slovak, but unlike it, it does not contain diphthongs (ibid., p. 43). According to Kralčák (ibid., p. 45), Bernolák’s standard uses quantity distribution typical for Western Slovakia, which does not respect the rhythmic law, which Kralčák considers to be a unique, originally Central Slovak phenomenon. Bernolák’s standard thus recognizes forms such as *krásní, trháňi, hádám, děšd’ík*, etc.

Regarding the consonant system, Bernolák’s standard delimited a group of voice paired soft consonants in a form that corresponds with both contemporary and present-day Slovak spoken in Central Slovakia, i.e., the pairs *d’ – d, t’ – t, ň – n, l’ – l*. In *Dissertatio philologico-critica*, Bernolák also considers the originally hard consonants *c, d, l, n, s, t, z* (all except for *g*, representing *j*) to be soft consonants; these, however, are capable of being softened only as a secondary feature. However, in *Slovenská gramatika*, in the *Ortoepia* chapter, only the consonant *j* is considered soft; consonants *d’, l’, ň, t’, č, ž, š* are called flowing sounds (ibid., p. 45). Furthermore, since pronunciation played a decisive role in Bernolák’s standard, it is essential to emphasize that softness of consonants *d’, l’, ň, t’* was always indicated, which was true even when these preceded the vowels *e, é, i* and *í*. Other orthographic and phonetic

peculiarities include the spelling of prepositions *s* and *z* based on their pronunciation (*z Adamom*,¹⁰² *s Kaplnki*¹⁰³) and establishing of group *šč*, e.g., *ešče* (Pauliny, 1983, p. 167).

Kralčák (2009, p. 46) considers the presence of soft *l'* in Bernolák's standard to be surprising, as this phone does not occur in (South-)Western Slovak dialects. In his opinion the presence of the phones [ʒ], [ʃ] and [g] (spelled as *ġ*) and syllabic consonants [r] and [l] in Bernolák's standard are features of dialects typical for Central Slovakia. However, Kralčák points out that Bernolák did not consider *dz* to be a separate sound, but perceived it as two consecutive sounds, therefore – unlike *ch* – he does not acknowledge *dz* and *dž* as double graphemes. Foreign *q* was spelled as *kw* and *x* as *ks* or *gz* in Bernolák's standard (Pauliny, 1983, p. 167).

2.2.2 Codification of literary Slovak by Ľudovít Štúr

The Ľudovít Štúr codification represents the next phase in the formation of literary Slovak. As pointed out by Kralčák et al. in the text *Ľudovít Štúr. Jazykovedné dielo* [Ľudovít Štúr. Linguistic work] (2015, p. 29), the new concept of literary Slovak appeared in a rather difficult linguistic situation of the 1840s. In addition to Bernolák's standard and Czech language, several other languages also coexisted in the territory of Slovakia, namely traditional Latin, German and the increasingly enforced Hungarian. According to Pauliny (1983, p. 175), “the Štúr period constitutes a certain culmination of the entire prior process of national revival”.¹⁰⁴ The author considers this historic stage of literary Slovak to be the constituting phase of the Slovak nation. In this regard, this period immediately follows the Bernolák period and represents a conclusion to the national consciousness forming process (ibid.). Štúr's standard was publicly codified at a convention of the *Tatrin* association held on August 26 – 28, 1844 in Liptovský Mikuláš (ibid., p. 177).

Štúr submitted his justification for the codification of literary Slovak in the work *Nárečja slovenskuo alebo potreba písanġja v tomto nárečí* [The Slovak dialect, or, the necessity of writing in this dialect] (1846; hereafter *Nárečja slovenskuo*). Štúr founded his reasoning on then-widespread opinion that the Slavs form one nation, with a single Slavonic language, and are divided into tribes (Slavic nations in today's sense), while each tribe has its own dialect

¹⁰² This is an instrumental case preposition, in modern Slovak, this preposition is always spelled as *s* and undergoing voicing assimilation in pronunciation in the same position.

¹⁰³ This is a genitive case preposition, in modern Slovak, this preposition is always spelled as *z* and undergoing voicing assimilation in pronunciation in the same position.

¹⁰⁴ In original: “štúrovské obdobie znamená isté vyvrcholenie celého predchádzajúceho národnouvedomovacieho procesu”.

(today's Slavonic languages) (ibid., p. 177). According to Kralčák et al. (2015, p. 35), a significant part of the *Nárečja slovenskuo* was dedicated to illustrating the social, cultural and especially linguistic reasons for abandoning Czech as the literary language of Slovak protestants.

Štúr chose the cultural Central Slovak dialect for his model of literary language, coming to this decision based on an analysis from which he concluded that: 1) Central Slovak dialects are the most widespread and most frequently utilized of all Slovak dialects; 2) they show the greatest viability; 3) they also spread among speakers of other dialects (Pauliny, 1983, p. 178 – 179). Štúr codified the literary Slovak in grammatical work *Nauka reči slovenskej* [The theory of the Slovak language] (1846; hereafter *Nauka*). According to Kralčák et al. (2015, p. 39), this text is traditionally referred to as a contemporary modern Slovak grammar, compiled as a scientific description of the structural features of the Slovak language. Štúr divided the grammatical description of Slovak language into three chapters. The first chapter deals with phonology, word formation, orthoepy, orthography and word classes; the second chapter characterizes the inflection of inflexible parts of speech, and finally, the third chapter focuses on the composition of the Slovak language (ibid., p. 40).

According to Kačala and Krajčovič (2006, p. 80 – 81), Štúr's orthography is based on phonetic-phonological and morphological principles. Furthermore, functional principle is also applied in terms of punctuation utilization and capitalization for showing respect (e.g., in addition to the name *Slovensko*, the adjective *Slovenskí* or appellative noun *Vlast'* are also with a majuscule); other generic nouns are spelled with a minuscule in contrast to Bernolák's standard.

Štúr (1846, p. 203) delimits the vowel inventory as follows:

a,	i,	u,
e,	o,	
l,	r.	

According to Štúr, the phones [l] and [r] can be considered vowels when they stand in a vowel position in a word (these were therefore already considered what we call syllabic in today's understanding), e.g., *hlbokí, prskota*. For comparison purposes, he adds that, in cases where Slovak utilizes *l* and *r* as vowels, Czech language positions a second vowel after these phones, e.g., *slunce* or *dlauhí* instead of contemporary Slovak forms *slnce* and *dlhí* (ibid., p. 204).

Štúr's standard includes diphthongs in contrast to Bernolák's standard. Štúr delimits the diphthongs *uo*, *ja*, *je*, characterized by being contained in a single syllable following one or more consonants. In addition, Štúr defines diphthongs that occur only in word-final position: *ai* (aj), *au*, *ei* (ej), *eu*, *iu*, *oi* (oj), *ou*, *ui* (uj), *uu*. It is therefore evident that, although Štúr introduces *iu* within the framework of diphthongs, he does not consider it to be a traditional diphthong *iu* as found in contemporary Slovak (in that case, he would have included it analogically with the diphthongs *ja* and *je* – as *ju*). In addition to the “true” diphthongs, Štúr also discusses “false” diphthongs, i.e., such diphthongs in which two vowels “blend” into one and only one phone can be heard. Štúr concludes, however, that Slovak does not have such diphthongs, with only exception being *ä*, which is used in some Slovak regions. Štúr believed that this phone does not belong to the literary language (ibid.)

Štúr's standard therefore did not adopt the phone [ä] despite it being typical for Central Slovak dialects, on which his concept of literary Slovak was based, and replaced it with phones [a] or [e] (*zavazuje*, *najme*, etc.). Moreover, instead of the diphthong *iu*, only *ú* is utilized, e.g., *znameňú*. The difference between the softness pairs *d*, *t*, *n* – *d'*, *t'*, *ň* is always indicated graphically. In contrast to Bernolák's standard, the phone [ɾ] is absent (in Štúr's standard, relevant words were spelled e.g., *laví*, *ňed'ela*). This is surprising, considering that this phone can be found in Central Slovak dialects. Similarly to Bernolák's standard, Štúr's orthography lacks the grapheme *y/y'*, and thus *i/i'* are spelled uniformly in all positions (Pauliny, 1983, p. 181). Štúr justified the exclusion of ypsilon on the basis of pronunciation, claiming that it cannot be heard among Slovak speakers (with exception of Slovaks living in regions bordering with Poland) (Štúr, 1846, p. 203).

Another peculiarity worth mentioning is that the *v* was spelled as *u* in genitive plural masculine noun forms, instrumental singular feminine noun forms and personal pronouns (*kráľou*, *víchricou*, *svojou formou*, etc.). In other cases, it was spelled as *v*, also in cases when pronounced as [u] (*spev*, *cirkev*, *pravda*, etc.). Štúr's standard did not utilize the *é*, instead, *je* was used (e.g., *dobrjeho*). Another difference from Bernolák's standard lies in consistent observance of rhythmic law, i.e., the shortening of the second long syllable (e.g., *hlása*, *vába*, etc.). The basic form of past tense utilized the suffix *-u* instead of suffix *-l* (*mau*, *volau* instead of today's forms *mal*, *volal*). For Štúr's standard, characteristic are frequent voice neutralization (*úskosť*, *vsťah*, etc.), occurrence of phenomena with Czech phonetic form (*důležití*, *důvera*, etc.) and numerous quantity discrepancies (Pauliny, 1983, pp. 181 – 182).

Ultimately, Štúr's orthography can be characterized as a diacritical system utilizing traditional components *dz*, *dž* and *ch*. Instead of the traditional *w*, *g* and *ğ* typical for Bernolák's

standard, symbols *v*, *j* and *g* were employed (*vjera*, *jeho*, *gazda*) (Kačala, Krajčovič, 2006, p. 80).

However, there was also criticism of Štúr's standard, which was voiced, among others, by Michal Miloslav Hodža, whose authority ensured the adoption of *ä*, soft *l'* and suffix *-l* in the past tense (e.g., *bol*) in 1846–1848. Ján Kollár also stood up against Štúr's literary Slovak. Kollár's initiative resulted in the manuscript *Hlasové o potrebe jednoty spisovného jazyka pro Čechy, Moravany a Slováky* [On the need for a unified literary language for Czechs, Moravians and Slovaks] (1846), in which the dismissive opinions of prominent Slovak and Czech cultural representatives were published. These people considered the Slovaks to be too weak to ensure the survival of their literary language and literature. They blamed Štúr for dissociating Slovaks from Czechs and thus leading them to national annihilation. Štúr's Slovak language was said to not have been prepared to fulfil the role of literary language and to not have been properly elaborated. Kollár was appointed a professor of Slavic archaeology at the University in Vienna in 1849. Subsequently, with Kollár's support, Czech was introduced as the curricular language in Slovak schools and was also partly used as an official language during the era of minister Alexander Bach. Here, a new literary language, the so-called Old Slovak, could be delimited, actually being only Czech with certain Slovak features. Andrej Radlinský elaborated a handbook for this literary language titled *Pravopis slowenský s krátkou mluvnici* [Slovak orthography with short grammar] (1850). However, well-regarded Catholic cultural and political activists, among whom we should mention Štefan Moyzes, Andrej Radlinský and Jozef Viktorin turned away from Czech and inclined towards Slovak. This was due to the fact that prominent Slovak linguist Martin Hattala approved Hodža's modifications to Štúr's standard and favoured the so-called revised Slovak (Pauliny, 1983, pp. 191 – 195).

2.2.3 Hodža-Hattala reform of literary Slovak

The situation regarding literary language in Slovakia during this period was very chaotic, as several languages were spoken in the territory: the Czech in its traditional form spoken by Lutherans, the new literary Czech, Old Slovak in several variants, Bernolák's standard (in several variants as well) and finally Štúr's standard in variant according to original Štúr's codification, but also the variant with modifications accepted by Hurban and Hodža's form of this modified variant. In 1851, this situation led to a meeting of leading representatives of Štúr's movement (Štúr, Hurban, Hodža) and Bernolák's movement (Palárik, Radlinský, Závodník, Hattala), who made an agreement on the introduction of a unified literary Slovak language based on Štúr's codification with spelling, phonic and morphological modifications proposed

by Michal Miloslav Hodža, which were justified and philologically grounded by Martin Hattala in treatises *Grammatica linguae slovenicae* [Grammar of the Slovak language] (1850) and *Krátká mluvnica slovenská* [A concise Slovak grammar] (1852). It was the *Krátká mluvnica slovenská* that became the fundamental handbook of codified and generally accepted literary Slovak (ibid., p. 196 – 197). This post-reform literary codification can be characterized as follows: the etymological principle was consistently applied in spelling, taking into account the principles utilized in Slavic languages, especially in Czech and Russian; utilization of *y/ý* in historical positions was introduced (*byť, bývať, dym, ženy*, etc.); vowel *ä* was introduced as well; a new diphthong *iu* was added to the already existing diphthongs spelled as *ia, ie, ô* (which could be pronounced as both [uo] or [ó]); a soft consonant *ľ* was added to the *d', t', ň* category, furthermore, softness of these consonants was no longer indicated with a caron in positions preceding vowels *i, í, e* and diphthongs *ie, ia* and *iu* (e.g., *vd'aka – deti*); the rhythmic law was preserved; the form types *chlapou, dobro, dobrého, znameňja, robu, padnuv* were substituted by the forms *chlapov, dobré, dobrého, znamenie, robil, padol*, etc. However, archaic or traditional forms were preferred in certain declension types – alternatively, such forms were permitted as variants – e.g., forms *od sluhy, s chlapy, mesta* in nominative plural and forms, *ruce, noze, muše* in dative and locative singular, as well as others were accepted with regards to Czech usage (Kačala, Krajčovič, 2006, pp. 92 – 93). Agreeing with Pauliny (1983, p. 197), it can be concluded that the Hodža-Hattala reform of literary Slovak led to balancing of orthography, phonology, and morphology to its present form – naturally, with certain adjustments along the way, which are discussed further.

2.2.4 Literary Slovak during Matica period

The Matica period is defined as the first stage of the existence of the *Matica slovenská*, i.e., it begins with its foundation in 1863 and ends with its forced dissolution in 1875 on the order of the Hungarian authorities. In this period, Hattala's reform of Štúr's standard was recognized as the representative form of literary Slovak language; however, there was an intent to replace its archaising elements with elements based on usage. Specifically, this included an effort to replace the forms *ruce, noze, od sluhy, s chlapy*, and the nominative plural *mesta* with the forms *ruke, nohe, od sluhu, s chlapmi, mestá*, etc. (Kačala, Krajčovič, 2006, p. 96).

An important institutional step to support the development of the literary language was the establishment of linguistic department at *Matica slovenská* under Hattala's leadership. The goal of the department was to care for the literary norm, its modified codification, to regulate

and improve it. It was also supposed to publish handbooks of literary Slovak and create a base for research of the Slovak language, especially its dictionary (ibid.).

Hattala's works *Mluvnice jazyka slovenského* [Grammar of Slovak language] (1864) and *Skladba jazyka slovenského* [Syntax of the Slovak language] (1865) were published during this period. Another edition of the Slovak grammar handbook in German *Grammatik der slowakischen Sprache* (1865) by Jozef Karol Viktorin was re-printed for wider audience, including adjustments based on the customary usage, i.e., the second edition used the word forms *v, ja, ktorý, keď, bol, Vy ste boli* as a replacement of first-edition *w, já, který, když, byl, Wy ste bol*. František Mráz prepared a textbook *Slovenská mluvnica pre gymnáziá, reálky, praeparandie a vyššie oddelenie hlavných škôl* [Slovak grammar for grammar schools, natural sciences schools, preparatory pedagogical schools and higher educational institutions] (1864). This textbook conveyed features already grounded in contemporary literary Slovak, e.g., a more exact definition of vowel *ä* positioning, and acceptance of form type *ruke, nohe* in dative and locative, etc. (ibid., pp. 96 – 97).

However, as Pauliny (1983, pp. 208 – 209) points out, the standard of literary language was not stabilised, e.g., vowel *ä* was used in wider range than the one prescribed by Hodža-Hattala reform (e.g. *kämeň*); utilization of *y* was also inconsistent (e.g. *blískat' sa, koryst'*); numerous inconsistencies occurred in the use of consonants *d, t, n, l – d', t', ň, l'* (e.g., *ustanovizna, bubeň*); differences in the assimilation of consonants were evident (e.g., preposition *ces*); there also occurred frequent dual variants of the *sňah – sneh* type, etc.; significant non-uniformity in vocal quantity (e.g. *vojak* as well as *voják, lodiam* as well as *lod'am*); frequent disregarding of the rhythmic law (e.g., *chvália, píšúci, listie*) and gemination of the consonant *n* (e.g. *drevenný*). Nevertheless, it needs to be pointed out that – in the context of neglecting the rhythmic law – multiple exceptions started to be applied in this period that were eventually adopted within the current literary Slovak (e.g., *chvália, listie*).¹⁰⁵

2.2.5 Literary Slovak during Martin period

The Martin period is a stage starting with the dissolution of *Matica slovenská* in 1875 and lasting until the establishment of the Czechoslovak Republic in 1918. It is called after the town of Turčiansky sv. Martin (today Martin), in which the activities of institutions, associations, editors and prominent persons pursuing the preservation and improvement of literary Slovak and development of national life concentrated after the disbanding of *Matica slovenská*. Kačala

¹⁰⁵ On this topic, cf. 4.1.2.1 Vowel quantity.

and Krajčovič (2006, p. 99) observe that it is thanks to these activities that the literary Slovak language during the Martin period gradually took on the form of a prospectively evolving system in terms of orthography, structure at all levels, and refinement of styles, eventually meeting all the criteria to qualify it as a separate usage variant in the last third of the 19th century, which is referred to as “*martinský*” (Martin). The so-called Martin centre started to develop after the dissolution of Matica slovenská. Initially, only the editorial offices of magazines such as *Orol*, *Národní hlásnik*, *Živena*, *Slovenské pohľady* could focus on care for literary Slovak, and it was the language used in *Slovenské pohľady* that became the standard model for literary language. *Slovenské národné noviny* played a similar role. Moreover, the Martin centre also enriched the literary Slovak by cultivating its spoken form, first in the Slovak choir (from 1870), then in the theatre in the National House (ibid., p. 100). Samuel Cambel’s codification was crucial in this period. Cambel’s codification was actually a modification of Hattala’s codification, favouring more common literary means of Slovak, or certain phenomena from Slovak dialects. Cambel described this codification in normative work *Rukoväť spisovnej reči slovenskej* [Manual of literary Slovak language] (1st edition in 1902). It needs to be emphasized that the author focused more on written than spoken language. In phonology, however, he specified the rules of writing *ä* – which should only occur in position following labials – as well as soft *ľ*, *y/ý*, diphthongs, quantity and soft consonants (ibid., pp. 101 – 102). In contrast to the current version of literary Slovak, his standard contained several peculiarities, e.g., in addition to diphthongs *ia*, *ie*, *iu* and *ô*, he defined diphthong *ou*, which occurs only in singular feminine nouns in instrumental (*s tou ženou*), and simultaneously emphasized that it needs to be distinguished from the suffix *-ov* occurring in plural masculine nouns in genitive (*tých chlapov*); it is evident that the author put significant emphasis in his codification on the written form of language (Czambel¹⁰⁶, 1902, pp. 13 – 14). In this sense, the situation is partly analogous to how Štúr perceived diphthongs, as he also identified diphthongs in word-final positions. Cambel substituted Hattala’s archaisms, introducing forms *od gazdu*, *v potoku*, *ruke*, *nohe*, *mestá* (nom. pl.), *berieš* instead of *od gazdy*, *v potoce*, *ruce*, *noze*, *mesta*, *bereš*, among others. (Kačala, Krajčovič, 2006, p. 102). Cambel’s codification gradually underwent several modifications, which were implemented mainly by Jozef Škultéty in editing the second (1915) and third (1919) editions of *Rukoväť spisovnej reči slovenskej* (ibid., p. 104).

¹⁰⁶ We respect the form of the name given in the cited publication. In own text, we use the adapted form of the name, *Cambel*.

2.2.6 Literary Slovak during interbellum period

It is possible to define several stages in which the literary Slovak, including its spoken form, developed during what is delimited as the interbellum period. The first stage lasted throughout the existence of the first Czechoslovak republic (1918 – 1939). The fact that, from 1918, Slovak language became the official language in essentially all offices and schools (with the exception of certain offices and university, where Czech was still used) represented a significant step towards wider implementation of literary Slovak. (Pauliny, 1983, p. 224). However, Slovak language was under the strong influence of Czech during this period, as numerous state employees, businessmen and entrepreneurs who immigrated to Slovakia after 1918 were speaking Czech; moreover, this influence was also spread through Czech literature (ibid., p. 228). In the first decade of the joint state, the codification and usage of literary Slovak were founded on Cambel's codification and the usage of the Martin centre. Matica usage came to forefront after the resumption of *Matica slovenská* as well. Cambel's codification work was substituted with orthographic texts by Ján Damborský, which were published as school textbooks in five editions between 1919 and 1930 (ibid., p. 233).

Additionally, the development of radio broadcasting in Slovakia, which began in 1926, played a significant role in cultivation of the spoken form of literary language. The first official and collective codification handbook *Pravidlá slovenského pravopisu* [Rules of Slovak orthography] was published in 1931. However, it not a codification text of Slovak orthography only, but of literary Slovak as a whole. In phonology, these principles established the syllable length in numerous words (e.g., *voz*, *ráno*, *služka*), unified the writing of prefixes *s-*, *z-* and *vz-* based on the etymological principle according to the meaning of the prefixed word, and introduced rules for writing of loanwords. However, it needs to be pointed out that the elaboration of these principles was conducted with the intent to unify Czechoslovak language, which was manifested in the codification of some Czech vocabulary and certain phonological adjustments. Therefore, publication of this handbook was met with sharp response. One notable reaction was the establishment of the journal *Slovenská reč* [Slovak speech] in 1932, the significance of which dwelt in its scientific activities related to Slovak language, as well as in stabilising the literary Slovak norm and its promoting in language practice (Kačala, Krajčovič, 2006, pp. 129 – 131).

Slovenská reč – as opposed to *Pravidlá slovenského pravopisu* from 1931 – promoted the thesis of the independence of Slovak language as one of Slavonic languages. The editors demanded observance of the so-called Matica usage or Cambel's codification revised by Škultéty in terms of morphology, phonology and orthography (Kačala, Krajčovič, 2006,

pp. 131 – 132). However, since the codification enacted by *Pravidlá slovenského pravopisu* from 1931 was legally recognized at schools and offices, a certain bifurcation arose in use and codification of the literary Slovak. The spoken form of literary Slovak could at this time also be cultivated by actors in professional theatres despite the fact that the repertoire of Slovak National Theatre, established in 1919, was initially performed only in Czech (ibid., pp. 134 – 135).

The second stage of development lasted throughout the existence of the first Slovak Republic in 1939 – 1945. In this period, the collective scientific research of the Slovak language began to take place at the Institute of Linguistics of the Slovak Academy of Sciences and Arts established in 1943, allowing it to continue the research that had already been conducted at *Matica slovenská* (ibid., p. 157).

Especially after 1939, efforts to eliminate foreign elements from Slovak language and preserve its purity, i.e., language purism, started to appear. The impetus for these attempts was the dissent among the majority of intelligence with the promotion of the idea of unified Czechoslovak nation and language, especially after the publication of the aforementioned *Pravidlá slovenského pravopisu* in 1931. The goal of the representatives of this tendency was consistent observance of the *Matica* usage in terms of orthography, phonology, and morphology, enrichment of vocabulary via domestic word-formation processes and elimination of non-functional borrowings from Czech and German (Krajčovič, Žigo, 2006, pp. 222 – 223).

2.2.7 Contemporary literary Slovak

A new handbook, again titled *Pravidlá slovenského pravopisu* [Rules of Slovak orthography] was published in 1940; in terms of orthography, it maintained continuity with the earlier *Pravidlá slovenského pravopisu* from 1931, however, the new edition specified in more detail the principle of writing on the basis of pronunciation for a number of words, as well as rules for written representation of vowel lengths in loanwords. Adjustments to these principles led to strengthening of the *Matica* usage (Kačala, Krajčovič, 2006, p. 159).

After the restoration of the Czechoslovak state in 1945, the third edition of *Pravidlá slovenského pravopisu* (1953) was published, endorsing the dominant phonemic spelling principle of literary Slovak. The most fundamental changes introduced by this edition include: 1) unification of plural forms in the past tense to a single form *robili* (in contrast to previous spelling *chlapi robili* (3. m.) – *ženy robily* (3. f)); 2) simplification of spelling of suffixes *s-*, *z-* and their vocalized variants based on pronunciation; 3) introduction of spelling of prepositions *s*, *z* and their vocalized variants based on their association with cases (preposition *z* was

constituted as a genitive preposition, *s* as an instrumental preposition); 4) unification and simplification of recording vowel quantity in loanwords and foreign vocabulary based on their pronunciation. Certain irregularities that remained in this edition were revised in 1968 (ibid., pp. 168 – 169).

A new edition of *Pravidlá slovenského pravopisu* (1991) was published in the period prior to the establishment of modern independent Slovak Republic in 1993, promoting certain typical features of literary Slovak, such as the application of rhythmic law in morphology and word-formation processes. The second, supplemented and revised edition of *Pravidlá slovenského pravopisu* from 1998 and its third, supplemented and revised edition from 2000 progressed along the same line (ibid., p. 212). The fourth, unchanged edition was published in 2013.

2.2.8 Development of Slovak orthoepy from 20th century onward

One of the first orthoepic works on Slovak was penned, paradoxically, by the Czech linguist Bohuslav Hála. His work *Základy spisovné výslovnosti slovenské a srovnání s výslovností českou* [Fundamental principles of Slovak pronunciation and its comparison with Czech pronunciation] was published in 1929. In 1934, Ľudovít Novák published the basic principles of Slovak orthoepy titled *K základom slovenskej ortoepie* [Towards the foundations of Slovak orthoepy] in *Slovenská reč* (pp. 42 – 65).

The first codification handbook for the field of pronunciation titled *Správna výslovnosť slovenská* [Correct Slovak pronunciation] was published by Henrich Bartek in 1944. It also included a pronunciation dictionary. Bartek's codification was founded on the requirement of systematicity and functionality of pronunciation rules and their independence from orthography. Pursuing this goal, Bartek built upon living pronunciation and supplied his handbook with a practical focus (Kačala, Krajčovič, 2006, p. 159).

Ján Stanislav published another orthoepic work, titled *Slovenská výslovnosť* [Slovak pronunciation] in 1953 (Král', 2009, p. 13). This handbook was prepared for the purposes of stage speech. The author himself also states that he intended this publication primarily for theatre, filmmaking, radio broadcast, and all institutions that were supposed to set an example for people in terms of speech (Stanislav, 1953, p. 13). Stanislav's *Slovenská výslovnosť* introduces an inventory of Slovak diphthongs in the form we know it today, i.e., *ia*, *ie*, *iu* and *ô*. University textbooks *Výslovnosť a prednes* [Pronunciation and presentation] and *Atlas slovenských hlások* [Atlas of Slovak phones] were published by Viliam Záborský in 1965 and by Jana Dvončová, Gejza Jenča and Ábel Král' in 1969, respectively; among other things, the latter publication was intended to be “a reliable guide for anybody who needs basic information

on literary pronunciation”¹⁰⁷ (p. 8). The core of this work is the articulatory description of Slovak phones.

After multiple partial contributions, the codification of literary pronunciation started to acquire a synthesizing character with Král’s publishing of *Príručného slovníka slovenskej výslovnosti* [Concise dictionary of Slovak pronunciation] in 1979 and 1982 (Krajčovič, Žigo, 2006, p. 234). However, in 1952, Ľudovít Štúr Institute of Linguistics also began work on a codification of literary Slovak pronunciation – a special orthoepic committee opened a discussion on basic definitions of literary Slovak pronunciation. Several of these definitions were also employed in the third edition of *Pravidlá slovenského pravopisu* (1953). A significant step forward for the publication of the first official codification handbook of literary pronunciation was the constitution of a new orthoepic committee in 1972, which founded its work on Král’s elaboration resulting from an extensive study of the acoustic structure of Slovak. This material was subjected to discussion with the active participation of linguists from all Slovak linguistic departments, universities of arts, and the general public. Finally, *Pravidlá slovenskej výslovnosti* [Rules of Slovak pronunciation] were penned by Král and published in 1984 by *Slovenské pedagogické nakladateľstvo*. Orthoepic committee of the Ľudovít Štúr Institute of Linguistics at Slovak Academy of Sciences, which was responsible for these rules and approved their wordings, was made of the following members: Ján Horecký, Gejza Horák, Ábel Král, Eugen Pauliny, Štefan Peciar, Jozef Ružička, Ján Sabol, and Viliam Záborský (Král, 1984, pp. 9 – 10). Unchanged editions of *Pravidlá slovenskej výslovnosti* were further published in 1988 and 1996 (Král, 2009, p. 13). The revised and updated edition of *Pravidlá slovenskej výslovnosti* by the same author were published by *Matica slovenská* in 2005. This edition, however, did not include a clause by the Ministry of Culture of the Slovak Republic certifying the codification validity of this handbook. Despite the fact that the author’s introduction claims that these rules “are entered into codification”¹⁰⁸ (Král, 2005, p. 15), the codification validity of this edition of *Pravidlá slovenskej výslovnosti* is rather problematic due to this fact. Such clause certifying codification validity is only included in *Pravidlá slovenskej výslovnosti* published by *Matica slovenská* in 2009. Both aforementioned editions emphasize Král’s individual authorship and state that “the author was well-aware of this fact. Therefore, he very carefully and responsibly assessed each change compared to the original and still valid codified

¹⁰⁷ In original: “spoločnou oporou pre každého, kto potrebuje základné údaje o spisovnej výslovnosti”.

¹⁰⁸ In original: “vstupujú do kodifikačného priestoru”.

standard”¹⁰⁹ (Král’, 2005, p. 15 and Král’, 2009, p. 15). The 2009 edition of *Pravidlá slovenskej výslovnosti* is thus still the currently valid codification handbook of Slovak pronunciation.

2.3 History of Polish pronunciation codification

Milena Hebal-Jeziarska

2.3.1 Beginnings of Polish pronunciation codification

Attempts at norm started to play an important role in descriptions of the Polish language only in the 19th century (Bajerowa, 1977, in Siuciak, 2020, p. 11), the efforts to organize and systematize Polish language intensified after the Polish independence. According to Siuciak (2020, p. 13), this was a result of a need to mitigate regional differences between territories that used to be parts of different states; this need was especially strongly felt in orthography. However, it is also necessary to point out that a need for more transparent pronunciation principles also arose during this period. It is, however, necessary to mention the first works on Polish phonetics that predate these events. Bożena Wierzchowska (1980, p. 20, in Jastrzębska-Golonka, 2004, p. 252) considers Jan Siestrzyński, the author of text *Teoria i mechanizm mowy* [Theory and mechanism of speech] (1820), and Józef Mroziński, the author of grammar handbook *Pierwsze zasady gramatyki polskiej* [The first rules of Polish grammar] (1822), to be the pioneers of Polish phonology. The latter work provides information on Polish pronunciation and relation between orthography and pronunciation. In her studies, Danuta Jastrzębska-Golonka (2004) explores the issues of phonetics during interbellum period. The general works by Jan Baudouin de Courtenay and *Szkic wymowy* [Pronunciation outlines] (1910) by Jan Rozwadowski (Bryzek, 1975) also played a highly significant role for the fundamental development of phonetics. Rozwadowski’s publication is considered the first scientific description of the pronunciation of phones (Szober, 1935). Additionally, two works by Juliusz Tenner should also be mentioned: *Estetyka żywego słowa* [Aesthetics of living language] (1904), *Technika żywego słowa* [Technique of Living Language] (1906), as well as translation of Otto Jespersen’s book *Najlepsza wymowa* [Best pronunciation] (Kamińska, 2020, p. 100). However, Tytus Benni (1877 – 1935) is considered to be the main codifier of Polish phonetics. Unlike his predecessors, he was the first to focus on phonetics primarily and immediately became perceived as an important phonetician thanks to his earliest works (Bryzek, 1975; Słoński, 1936). Benni’s greatest success in phonetics is the treatise titled *Opis fonetyczny języka polskiego* [Phonetic description of the Polish language], which was

¹⁰⁹ In original: “autor si to uvedomoval. Preto veľmi opatrne a zodpovedne posudzoval každú zmenu oproti pôvodnej a stále platnej kodifikácii”.

published in the second volume of encyclopaedic work *Encyklopedia polska* [Polish encyclopaedia] in 1915 and in the grammar handbook *Gramatyka języka polskiego* [A grammar of the Polish language] published by the Polish Academy of Sciences in 1923. It was also printed by the publishing house Ossolineum in 1959 and 1962 with a modified title *Fonetyka opisowa języka polskiego: z obrazami głosek polskich podług M. Abińskiego* [Descriptive phonetics of the Polish language: with images of Polish phones according to M. Abiński]. This work is considered to be the first publication presenting a comprehensive description of the phonetics of Polish language in the form of a textbook (Bryzek, 1975).

The origins of Polish pronunciation codification seem extraordinary in the light of the current normative tradition. Initiative for codifying the Polish pronunciation did not come from scientific circles, but resulted from the needs of the acting community, who were well-aware of the absence or insufficiency of pronunciation principles. In 1922, the Association of Polish Stage Artists (*Związek Artystów Scen Polskich* – APSA) asked linguists for help in establishing the rules of Polish pronunciation¹¹⁰. This situation resulted both from the linguists' approach to linguistic correctness and from following of German approach. According to Benni (1924, p. 4), orthoepy, including orthophony, was not considered a scientific topic at the time: "The task of science does not lie in giving instructions on how to behave."¹¹¹ At that time, the science was tasked with observing the reality and describing it. This attitude of linguists was reflected in the absence of standards which could have been followed by artists. This is also confirmed by Benni's report (1924, p. 5) from a meeting with the APSA representatives: "I met with artists from different regions of Poland and realized the need to introduce uniform standards of pronunciation at all Polish stages. There was no doubt about it, strict standards and rules were required."¹¹² As it was already mentioned, the established pronunciation standards in Germany – which were a great inspiration for actors and scientists – also played a significant role in this process. The pronunciation norm in Germany resulted from the cooperation of linguists and theatre representatives.¹¹³ In 1897, one university professor, together with a representative of the Berlin theatres asked the actors' and the philologists' societies to determine the uniform standards of pronunciation. As a result, a committee consisting of philologists and theatre directors was created, while the pronunciation standards themselves

¹¹⁰ The codification of Polish pronunciation is discussed by Dunaj (2016, pp. 21 – 31).

¹¹¹ In original: "Nie jest zadaniem nauki dawanie wskazówek postępowania."

¹¹² In original: "Poznałem artystów z różnych dzielnic polskich i widziałem silne odczucie potrzeby wprowadzenia jakichś jednolitych norm wymowy na wszystkich scenach polskich. Co do tego nie było żadnych wątpliwości, żądano ścisłych norm i przepisów."

¹¹³ The information about the situation in Germany are reported by Benni (1924, p. 11).

were determined by linguists based on the observation of stage speech. The determined pronunciation later became obligatory for theatres, as well as other public institutions such as schools.

The situation was very similar in the case of Polish pronunciation. The events that took place at the time of codification of Polish pronunciation were described in publications by Benni (1924, 1926), as well as Zenon Klemensiewicz (1930) and Bogusław Dunaj (2016). At the request of APSA, Benni presented a lecture on Polish orthophony in 1923, and subsequently published a book titled *Ortofonja polska. Uwagi o wzorcowej wymowie dla artystów, nauczycieli i wykształconego ogółu polskiego*. This publication subsequently became the basis for works elaborating the Polish pronunciation principles (Dunaj, 2016, p. 22). In 1924, APSA proposed the cooperation with the Society of Polish Language Lovers (*Towarzystwo Miłośników Języka Polskiego*). Based on the texts issued during the preparation of the project, there was a very close cooperation between the actor and linguist communities. Similarly to Germany, a six-member committee was established, consisting of three linguists and three actors. Its findings were subsequently consulted with a wider circle of both communities. The committee formulated five general theses and determined thirteen principles. The general theses were similar to those formulated by the German scientists to a certain degree (cf. Benni, 1924).

Subsequently, the Polish pronunciation principles were approved at the second convention of theatre pedagogues and the general assembly of the APSA delegates (Dunaj, 2016, p. 22). These events took place in 1926. The importance of the actor community opinion is illustrated by the fact that, although there were only a few, some of the rules caused so much resentment that they were not adopted. These included the identical phonic realisation of the letters *ch* and *h* (in independent position), variability in declination of adjectives, absence of nasality in phonic realisation of groups spelled as *-ęł*, *-qł* and two-level nature of stage standard (colloquial and higher). It was therefore decided that in these cases, it is vital to distinguish the phonic equivalents of the letters *ch* and *h* in speech; to take into account the slight nasality in pronunciation of groups orthographically recorded as *-ęł*, *-qł*; to permit only the pronunciation of suffixes such as *[-ym]*, *[-emi]* in declension of adjectives; and to approve a single-level and “always careful” standard of stage pronunciation (Benni, 1926, pp. 166 – 167).

Standardisation history of the Polish stage pronunciation and its principles were published in Benni’s paper *Polska wymowa sceniczna* [Polish stage pronunciation] in the journal *Język Polski* [Polish language] in 1926. The author here presents theses that play a significant role in terms of pronunciation. He emphasizes that the traditional pronunciation of the Polish

intellectuals, not the spelling, must serve as basic source for pronunciation principles. Traditional pronunciation can be observed in good theatre and among other artists. He points out that it is the nation who is to be the judge in this matter, not the linguist. On the other hand, it is the linguist's task to establish the rules of Polish pronunciation using exact methods, to draw the nation's attention to the importance of pronunciation, and to provide material for discussion (Benni, 1926, p. 162). The stage norm has its limits. It is possible to exceed these if the artistic interpretation requires it. Benni demanded the introduction of pronunciation courses for the students of drama. He believed that the standard for schools should not be equal to the stage standard.

Linguists, who were aware of the differences between stage and school pronunciation, decided to develop pronunciation rules for a wider audience. Zenon Klemensiewicz, Jan Łoś, and Kazimierz Nitsch took this task upon themselves (Dunaj, 2016, p. 22). However, they opted for a similar procedure of discussing the proposed rules. In 1928, the paper titled *Projekt prawideł poprawnej wymowy polskiej* [Project of rules of correct Polish pronunciation] was published in journal *Język Polski* (1928, no. 1). The authors called for comments on their proposal from the public, which is why the first Polish pronunciation principles intended for the general public were published only after appropriate consultations. According to Dunaj (2016, p. 22), Benni, Klemensiewicz, Nitsch, and Rozwadowski formulated the final principles only after taking into account the comments sent; the principles themselves were drawn up by Klemensiewicz (1930).

2.3.2 Works on Polish pronunciation

Publications on Polish pronunciation can be divided into the following: rules of Polish pronunciation, dictionaries of Polish pronunciation, dictionaries of literary Polish, dictionaries of the Polish language, textbooks on Polish phonetics and phonology, pronunciation exercise books, textbooks of Polish for foreigners, textbooks and handbooks on the Polish language culture, other publications with the rules of Polish pronunciation summarized comprehensively or presenting individual phonetic topics.

2.3.2.1 Rules of Polish pronunciation

Pronunciation handbooks *Prawidła poprawnej wymowy polskiej* [The rules of correct Polish pronunciation] by Klemensiewicz and *Zasady poprawnej wymowy polskiej* [Principles of

correct Polish pronunciation] (Doroszewski, Wieczorkiewicz, 1947) are considered essential for the Polish language.

The first publication dedicated exclusively to the topic of pronunciation is the aforementioned *Prawidła poprawnej wymowa polskiej* by Klemensiewicz, which was published in 1930. Several editions of this work were re-printed, each copies the content of the first edition to a large extent. Certain revisions based on the observations of the real norm were conducted in the fourth edition by Klemensiewicz (Dunaj, 2016; Klemensiewicz, 1964). However, the observations made were not as widely consulted as the issues considered in the first edition. It is worth mentioning the publishing of *Prawidła...* in 1995, i.e., after Klemensiewicz's death.. Stanisław Urbańczyk added two supplements regarding the rules of pronunciation and an introduction to Polish phones in this edition. Printings of Klemensiewicz's rules of Polish pronunciation range from 30 to 62 pages, depending on the edition. They contain a brief history of the pronunciation norm, explanation of correct rules of pronunciation, and a short dictionary with expressions that, according to the author or editor, may cause difficulties to the Polish speakers at the phonetic level. The disadvantage of *Prawidła ...* is the copying of content available in older editions (including linguistic phenomena that were considered obsolete already in the first edition), description of the same linguistic phenomena, insufficient explanation of issues related to new, often foreign vocabulary. There is no mention of consultations, surveys, etc. It is only in the fourth edition that revisions related to the changes in language reality are mentioned. All in all, the work *Prawidła poprawnej wymowy polskiej* is no longer up to date.

Witold Doroszewski and Bronisław Wieczorkiewicz published *Zasady poprawnej wymowy polskiej* (with a dictionary) in 1947. They founded their text on the antebellum committee's findings (Dunaj, 2016, p. 23).

2.3.2.2 Dictionaries

The next important publication category in context of orthophony standardization is that of dictionaries. General dictionaries of the Polish language and dictionaries of literary Polish include information on the pronunciation of individual words in specific cases, but do not deal with the topic comprehensively. Only two dictionaries dedicated exclusively to the pronunciation of Polish language have been published so far. Mieczysław Karaś and Maria Madejowa published the *Słownik wymowy polskiej* [Dictionary of Polish pronunciation] in 1977, and Władysław Lubaś and Stanisław Urbańczyk published the *Podręczny słownik poprawnej wymowy polskiej* [Concise dictionary of correct Polish pronunciation] in 1990 and

1993. These dictionaries are not up-to-date and have been criticized by multiple linguists. Among others, their shortcomings were pointed out by: Zofia Kurzowa (1979), Zygmunt Saloni (1982), Maria Madejowa (1992), Magdalena Osowicka (2000) (Wiatrowski, 2015, p. 499).

These dictionaries are mainly criticized for not relying on relevant research when deciding on correctness, the authors rely on their linguistic intuition, and certain solutions do not correspond with the results of research available at the time (Dunaj, 2016, p. 23; Wiatrowski, 2015, p. 499). The *Słownik wymowy polskiej* was also criticized for implementation of international transcription, which is not used in Poland and makes the comprehensibility more difficult for the user. The recognition of synchronous pronunciation of the equivalents *q* and *ɛ* preceding constrictives in the word-medial and final positions was also condemned (Wiatrowski, 2015, p. 498; Dukiewicz, 1995, p. 32; Lorenc, 2016, p. 58)¹¹⁴. (2015, p. 498) further points out the propagation of incorrect recommended pronunciation of nasal vowels preceding softened *l* – [l̥] – and non-syllabic *u* – [ɯ]. According to Wiatrowski, the authors of *Podręczny słownik poprawnej wymowy polskiej* repeatedly provide incorrect information on the doublet pronunciation of the combination of a voiceless consonant and a phone with the orthographic notation *w*, mentioning a possibility to pronounce it as both [kv] and [kf]. Wiatrowski here refers to research conducted by Małgorzata Witaszek-Samborska (1985, p. 94), indicating that this phenomenon is in decline. He also condemns the information on the phone with the orthographic notation *ń*, which, if following a vowel and preceding either a hard affricate or an explosive consonant, should define the articulatory span.

Wiatrowski (2015, p. 498) points out that the recommendations regarding the correct pronunciation differ across the dictionaries. As an example, he mentions varying recommendations regarding the pronunciation of noun forms of type *kwestia*, *partia*, *kopia* in genitive singular.

Normative orthophonic solutions can also be found in dictionaries of literary Polish for specific words, the correct pronunciation of which can cause difficulties according to their authors. The most up-to-date dictionary is the work *Wielki słownik poprawnej polszczyzny* [The great dictionary of correct Polish] edited by Andrzej Markowski in 2001 (it was repeatedly re-published in the following years).

¹¹⁴ Koneczna (1934), Dukiewicz (1967), Wierzchowska (1966), Steffen-Batogowa (1975) confirm asynchronous pronunciation of these (Wiatrowski, 2015, p. 496).

2.3.2.3 Textbooks of phonetics and phonology

Textbooks of phonetics and phonology probably do not contain all the rules of Polish pronunciation. Nevertheless, they can still provide information on the articulation of individual phones and more significant processes taking place in phone clusters (e.g., assimilation). Textbooks also play a very important role in presenting the latest research results.

The older works, which are, however, essential in terms of Polish phonetics, include: Benni's *Fonetyka polska z obrazkami polskich głosek Albińskiego* [Polish phonetics with images of Polish phones by Albiński] (1964), Maria Dłuska's *Fonetyka polska: artykulacja głosek polskich* [Polish phonetics: Articulation of Polish phones] (1981), Bożena Wierzchowska's *Wymowa polska* [Polish pronunciation] (1971), *Fonetyka i fonologia języka polskiego* [Phonetics and phonology of Polish language] (1980), and Leokadia Dukiewicz and Irena Sawicka's *Fonetyka i fonologia (Gramatyka współczesnego języka polskiego)* [Phonetics and phonology (Grammar of the contemporary Polish language)] (edited by Henryk Wróbel) (1995). The works containing the results of phonetic research, which are frequently used at universities, include: Maria Steffen-Batogowa's *Automatyzacja transkrypcji fonematycznej tekstów polskich* [Automation of phonemic transcription of Polish texts] (1975), and Halina Koneczna and Witold Zawadowski's *Przekroje rentgenograficzne głosek polskich* [Radiographic cross-sections of Polish phones] (1951).

From among the newer publications that make up the canon of contemporary linguistic literature, the following works are worth mentioning: Danuta Ostaszewska and Jolanta Tambor's textbook *Fonetyka i fonologia współczesnego języka polskiego* [Phonetics and phonology of the contemporary Polish language] (1988) and Marek Wiśniewski's *Zarys fonetyki i fonologii współczesnego języka polskiego* [An outline of the phonetics and phonology of the contemporary Polish language] (2000).

Bogusław Dunaj's publication *Gramatyka współczesnego języka polskiego. Część I. Fonetyka i fonologia* [Grammar of the contemporary Polish language. Part I. Phonetics and phonology] (2015) is also of great importance. Unfortunately, this work is scarcely available and it is often missing even in libraries dedicated to Polonistics.

Additionally, it is also necessary to mention the coursebooks: Agnieszka Rosińska-Mamej's *Fonetyka i fonologia języka polskiego* [Phonetics and phonology of the Polish language] (2014) and Andrzej Dyszak, Elżbieta Laskowska and Małgorzata Żak-Święcicka's *Fonetyczny i fonologiczny opis współczesnej polszczyzny* [Phonetic and phonological description of contemporary Polish] (1997).

However, outdated information can also be found in phonetics and phonology textbooks. This fact was also highlighted by Anita Lorenc (2016, p. 20). She criticizes especially the copying of information from older publications, which is most often the result of a lack of new research, as well as the fact that certain studies even use radiographs from the antebellum period.

2.3.2.4 Textbooks of pronunciation

The authors of pronunciation textbooks are usually speech therapists or pronunciation technique teachers dealing with future actors, singers or priests. The publications of this type contain primarily descriptions of the articulation of specific phones and phone groups, as well as various articulatory exercises. Due to the Poles' low awareness about the need to practice pronunciation, only a limited range of readers reach out for these books. They are sought after by speech therapists, teachers of stage pronunciation, and teachers of Polish as a foreign language. In contrast to the Czechia and Slovakia, lessons in practical orthophony are not included in the study programmes of Polish philology or pedagogy in Poland. Lectures on practical orthophony are included in study programmes for actors, speech therapists and priests. Orthophony courses are also organized for television and radio journalists. Recently, more attention has been paid to pronunciation as an element of self-presentation. These types of courses are organized by speech therapists or actors and are intended for people speaking in public.

The more significant works include the publications by Bogumiła Toczyska – speech therapist and teacher of pronunciation techniques and aesthetics – e.g., *Elementarne ćwiczenia dykcji* [Elementary diction exercises] (2000), *Kama makaka ma! Wprawki dykcyjne!* (1992), *Sarabanda w chaszczach* [Sarabande in the thicket] (1997), *Łamańce z dedykacją* [Twisters with a dedication] (1998), *Głos w ruchu. Ćwiczenia nie tylko dla dziennikarzy* [Voice in motion. Exercises not only for Journalists] (2021) and the publication by A. Majewska-Tworek *Szura, szumi i szeleści. Ćwiczenia fonetyczne nie tylko dla cudzoziemców* [It shuffles, hums, rustles. Phonetic exercises not only for foreigners] (2010). The latest publication in the field of artistic logopaedics is the book *Logopedia artystyczna* [Artistic logopaedics] (2020), edited by Barbara Kamińska and Stanisław Milewski. The variability of Polish stage speech was described in the book *Wariantywność współczesnej polskiej wymowy scenicznej* [The Variability of Contemporary Polish Stage Pronunciation] (1997) by Paweł Nowakowski.

The works which are no longer up-to-date, yet are significant from a historical perspective, include a textbook aimed at teachers titled *Poradnik fonetyczny dla nauczycieli*

[Phonetic handbook for teachers] (1986) by Bronisław Ročławski and a handbook titled *Podstawy polskiej wymowy scenicznej* [Basics of Polish stage pronunciation] (1975) by Danuta Michałowska.

Contemporary publications for foreigners and teachers of Polish as a foreign language include: *Głoski polskie* [Polish phones], *Przewodnik fonetyczny dla cudzoziemców i nauczycieli uczących języka polskiego* [Phonetic guide for foreigners and teachers of Polish] (Maciołek, Tambor, 2014), *Znajdź z polskim wspólny język. Fonetyka w nauczaniu języka polskiego jako obcego. Poradnik metodyczny* [Looking for a common language with Polish. Phonetics in teaching Polish as a foreign language. Methodical guide] (Biernacka, 2016), *Wymowa polska z ćwiczeniami* [Polish pronunciation with exercises] (Karczmarchuk, 2012) and *Fonetyka – polski w praktyce* [Phonetics – Polish in practice] (Stanek, 2020).

Publications by speech therapists and teachers of Polish as a foreign language who are not linguists, are the ideal material for practice purposes that can be used in articulation exercises of individual phones, phone groups, etc. Regarding their theoretical descriptions, one has to be careful, as they can contain serious errors, e.g., there is an incorrect phonic realisation of letters *q* and *ę* in word-medial position in Stanek (2021). Similarly, the book by Barbara Karczmarchuk (2012) also includes information on the synchronous phonic realisation of these phones; however, the author states in a footnote that the latest research observes an asynchronous articulation of letters *q* and *ę* preceding a constrictive.

Moreover, selected phonetic topics are explained in a simplified manner (phonic articulation of *q* and *ę*) in some cases (e.g., in the book *Głoski polskie*). This publication also provides a non-simplified explanation for those interested.

2.3.2.5 Other publications on Polish pronunciation

Other works dedicated to Polish pronunciation worth mentioning are the texts on the Polish language culture. It is important to emphasize here that they deal with the issue of pronunciation only partially. Examples of such publications are Tomasz Karpowicz's *Kultura języka polskiego. Wymowa, ortografia, interpunkcja* [Culture of the Polish language. Pronunciation, spelling, punctuation] (2018) and linguistic handbooks such as Andrzej Markowski's *Poradnik profesora Markowskiego* [Handbook of professor Markowski]. The most recent publications with codified rules of Polish pronunciation include Dunaj's articles (2003, 2004, 2006) published in the journal *Język Polski* [Polish language]. The rules stated in these articles were adopted by the members of the Council for the Polish Language of the Committee on Linguistics at the Polish Academy of Sciences (Więcek-Poborczyk, 2014, p. 51).

Furthermore, scientific papers focused on specific phonetic issues are being published. A special attention should be paid to Lorenc's paper titled *Wymowa normatywna polskich samogłosek nosowych i spółgłoski bocznej* [Normative pronunciation of Polish nasal vowels and lateral consonants] (2016). On the basis of experimental phonetic research, the author determines the articulation of individual phones, thereby refuting outdated information presented in numerous earlier publications. The results of her work are presented in the chapter dedicated to the rules of Polish pronunciation. Among other publications, it is necessary to mention Izabela Więcek-Poborczyk's *Normy wymawianiowe polszczyzny a wariantywność wymowy* [Pronunciation standards of the Polish language and the pronunciation variability] published in 2014.

Unfortunately, there is no single comprehensive source that could serve as a guide for speakers and would contain all the latest findings. The need to create a new pronunciation dictionary or a complex study has been expressed by multiple linguists (e.g., Dunaj, 2001, p. 24; Wiatrowski, 2015, p. 503). Wiatrowski claims that the new dictionary must be based on experimental research and must contain qualifiers indicating the frequency of individual phenomena.

The variability in pronunciation must be described taking into account geographical, chronological, situational, stylistic, as well as hypercorrect variants. Attention must be also paid to linguistic phenomena that were dealt with in the initial and subsequent phonetic studies, as their evolution is also remarkable.

2.3.3 Phonetic phenomena in Polish pronunciation rules and in orthophonic dictionaries (selected topics)

2.3.3.1 Disappearance of constricted vowels

Constricted vowels (*samogłoski pochylone* in Polish) represent a topic that is no longer relevant for contemporary Polish. These are the vowels known from the history of the Polish language, which were pronounced with a constriction of the oral cavity. Klemensiewicz claims that the pronunciation of constricted vowels, which belong to the history of the Polish language, are “a remnant of a good old tradition” in the edition published in 1930. As the author further explains, the pronunciation of the vowel [e] approximates the pronunciation of the vowels [i] or [y]. While at that time Klemensiewicz still considered this articulation permissible in school pronunciation, it was no longer viewed appropriate in stage pronunciation. The same content can be found in later editions, including the edition published in 1995, although a different text

on Polish pronunciation – *Podręczny słownik poprawnej wymowy polskiej* (1993) – does not address this issue at all. On the other hand, *Słownik wymowy polskiej* edited by Mieczysław Karaś and Maria Madejowa (1977) states that the constricted *e* completely disappeared from the Polish language. Current publications do not devote any space to this topic.

2.3.3.2 Disappearance of fluctuation in pronunciation of instrumental and locative endings -ym, -em, -ymi, -emi in adjectives, pronouns, ordinal numerals and participles

This issue is described practically without changes in Klemensiewicz's book *Prawidła poprawnej wymowy polskiej* even though the situation seems to have evolved since 1930. One can observe a slight adjustment in the 1995 edition, according to which there are differences in pronunciation in this area; some speakers always or occasionally pronounce [-em], [-emi] in these cases. Since the first standardization, one can opt for one of suffixes [-ym/-im], [-em] in both types of pronunciation. Both the stage and school pronunciations permit distinguishing the suffixes -ym, -im, -em in singular instrumental and locative, or to only use the suffix -ym. use of the suffix -em with masculine nouns is considered erroneous, e.g., *dobrem człowiekiem*. Regarding the plural forms, although only suffixes -ymi, -imi are used in written form, variant pronunciation as [-ymi], [-imi], [-emi] is allowed.

2.3.3.3 Disappearance of differences in pronunciation of phonic equivalents of letters *ch* and *h*

In the antebellum period, there was a belief – especially among actors – that the pronunciation of phonic equivalent of the character *h* is voiced and pronunciation of *ch* is voiceless. Benni (1924, p. 44) claims that this theory is founded on orthography. Based on his observations, there is no difference in pronunciation of words containing *h* and *ch*, both have a voiceless phonic realisation [x]. Moreover, Dunaj (2001, p. 69) even states that the character *h* in independent positions has never been voiced in colloquial speech. That was always a matter of regional pronunciation. Nevertheless, the antebellum acting community was so strongly convinced about the different articulation of these two letters in speech that the actors renounced the recommended principle proposed by the six-member committee (Benni, 1926, p. 167), which equalized the pronunciation of phonic equivalents of letters *h* and *ch*. It was one of the few regulations that was not adopted at the second convention of theatre pedagogues. In his

book *Prawidła poprawnej wymowy polskiej* (1930), Klemensiewicz also states that both these phones are articulated in a voiceless manner unless voicing assimilation takes place. Further editions of *Pravidla...* and the *Słownik wymowy polskiej* issued in 1977 provide the same information. However, *Podręczny słownik poprawnej wymowy polskiej* published in 1993 states that the phonic equivalent of *h* is articulated as voiced, although this pronunciation is not obligatory for broadcasting or theatres. It also shows the unsuitability of certain linguistic solutions proposed in this dictionary.

2.3.3.4 Changes in phonic realisation of letters *q* and *ę*

The issue of phonic realisation of letters *q* and *ę* – which were formerly referred to as nasal vowels but are referred to variably today – did and still does take up a large portion of any normative work, due to the complex principles regulating their pronunciation. It is so because the pronunciation of phonic equivalents of *q* and *ę* is dependent on the phone that follows them.¹¹⁵ Two trends are evident in orthoepic publications in a diachronic approach. The first trend is the gradual disappearance of nasality in phonic articulation of letters *q* and *ę* in certain positions. The second is a long-standing discussion about the manner of pronunciation of characters *q* and *ę* when preceding constrictives, which gradually moves towards the theory of polysegmentality of phones representing the letters *q* and *ę* preceding a constrictive in word-medial positions.

2.3.3.4a Gradual disappearance of nasality. Letters *q* and *ę* in word-medial position preceding occlusive or semiocclusive phone

Examining the phonetic studies from the earliest to the most recent ones, there is an evident emphasis on the concept that orthography should not serve as a model for pronunciation, which is still valid even today in case of phonic realisation of *q* and *ę*. All the already discussed studies agree that characters *q* and *ę* preceding an occlusive or a semiocclusive are articulated bi-segmentally, e.g., *mądry* as [mondry]. The first studies (Benni, 1924) still mention the occurrence of slight nasality in the aforementioned example, yet point out that the orthographic pronunciation would be incorrect. None of Klemensiewicz's works suggests the nasal phonic realisation of the letters *q* and *ę* preceding non-constrictive phones in word-medial position.

¹¹⁵ This issue is further discussed in the following chapters.

2.3.3.4b Letters *q* and *ę* in letter sequences -*ęł*, -*ql*

Over the years, the phonic realisation of the letters *q* and *ę* in combinations spelled as -*ęł*, -*ql* has changed. The earliest study on phonetics (Benni, 1924, 1926) recommend maintaining a slight nasality in their pronunciation. Klemensiewicz (1930 and further editions repeating this content: 1964, 1995) permits two options: either pronunciation without nasality (i.e., articulation in the form of oral vowels: [e], [o]) or articulation with a slight nasality for those used to this pronunciation and in stage pronunciation. Later publications, e.g., *Słownik wymowy polskiej* issued in 1977, recommend non-nasal pronunciation. The following subchapters contain information from the authors of current publications.

2.3.3.4c Phonic realisation of letter *ę* in word-final position

Here, Benni (1924) recommends semi-nasality, while Klemensiewicz permits two options: either pronunciation without nasality or with a slight nasality. He recommends applying the second option in stage pronunciation. *Słownik wymowy polskiej* (1977) classifies the full nasal realisation of *ę* in word-final position as unnatural and artificial; articulation with a slight nasality is considered pedantic and pronunciation without nasality is viewed as less pedantic. Non-nasal pronunciation is preferred over nasal pronunciation in current publications.

2.3.3.4d The topic of phonic equivalents of letters *q* and *ę* in word-internal position preceding constrictive

Since the very beginnings of Polish pronunciation codification, there is no doubt that the phonic articulation of the letters *q* and *ę* depends on the phone type following them. In case of occlusives and semi-occlusives, there occurs a consonantal pronunciation, while in case of constrictives, the pronunciation is dependent on the adopted method – there occurs either a nasal vowel, diphthong or a polysegmental phone.

The belief that the characters *q* and *ę* preceding a constrictive phone are articulated monophthongally and synchronously was prevalent in Poland for many years. Such information can be found, among others, in the publication *Słownik wymowy polskiej*, which considers only the aforementioned pronunciation to be correct; asynchronous articulation is classified here as erroneous. Current state of research speaks of the diphthongal and polysegmental structure of the phonic equivalents of *q* and *ę* (preceding a constrictive in a word-medial position). Synchronous pronunciation is rejected due to the impossibility of articulation (further information on this topic is provided in the chapter on Polish vowels).

2.3.3.5 Changes in description of pronunciation of palatalized/labial palatal consonants [p'], [b'], [m'], [v'], [f']

This is another topic that is still a subject of discussions in normative studies today. Varying assessments of the articulation of the listed phones can be observed. Multiple linguists were convinced about the correctness of synchronous pronunciation of labiopalatal phones. Benni (1924) claimed that the pronunciation of these phones is synchronous, classifying synchronous articulation as dialectal. Klemensiewicz, on the other hand, noticed that these phones are pronounced in two ways: synchronously and asynchronously. In the 1930 edition, the author recommends synchronous articulation in stage and school pronunciation, while claiming that it is also necessary to accept asynchronous pronunciation (i.e. [ɫ] pronounced after labials). All subsequent printings copy the content of the 1930 edition, despite the fact that the more recent research pointed to an asynchronous pronunciation of the aforementioned phones. The pronunciation dictionaries from 1977 and 1993 also list two types of pronunciation. On the basis of his observations, Aleksander Zajda (1977) stated that asynchronous pronunciation is prevalent when preceding back vowels and synchronous pronunciation occurs preceding front vowels. Accordingly, the authors of the former dictionary thus prefer asynchronous pronunciation when followed by a back vowel, with synchronous pronunciation as secondary, and describe the opposite situation in case of front vowels. This does not apply to the pronunciation of a labial consonant followed by *i* preceding a consonant, e.g., *piwo*. In such cases, the pronunciation is exclusively synchronous. *Podręczny słownik poprawnej wymowy polskiej* from 1993 considers the monophthongal articulation to be exceedingly pedantic and diphthongal articulation to be pedantic. Current handbooks list only the asynchronous pronunciation.

2.3.3.6 Changes in pronunciation of phones recorded as *kie*, *ke*, *gie*, *ge*

In the 1930 edition of the *Prawidła poprawnej wymowy polskiej*, Klemensiewicz recommended soft pronunciation of these letter combinations regardless of orthography. Therefore, the group of phones spelled as *ge/gie* were to be pronounced as *gie* [g'e] in the word *general*, as well as *gielda*. The later editions recommend the pronunciation of *k*, *g* preceding *e* in compliance with the orthography, whereas the soft pronunciation in letter sequence *ge* in loanwords is classified as the pronunciation of the older generation (*Prawidła poprawnej wymowy polskiej* from 1964 and 1995, *Słownik wymowy polskiej* and *Podręczny słownik poprawnej wymowy polskiej* from 1993 – here the articulation is classified as obsolete alongside hard pronunciation).

2.3.3.7 Change in pronunciation of phone recorded as *ł*

Pronunciation of the phone represented by the letter *ł* in writing has undergone an evolution in the form of disappearance of apical phone spelled as *ł* in favour of a labial pronunciation, i.e., non-syllabic *u* [ɯ]. Multiple linguists wrote about the fact that the apical pronunciation was difficult to articulate already in the antebellum period. Benni (1924, p. 28) claimed that a half of Poles could not pronounce this phone correctly. Klemensiewicz (1930) estimated that about a half of Poles pronounced the aforementioned phone as an apical and the other half as a labial; Dunaj (2001, p. 68) believed that apico-dental pronunciation was not dominant in the antebellum period. It was, however, an exception in stage pronunciation. In *Pravidla...* (1930), Klemensiewicz therefore described two types of articulation of the phone spelled as *ł*. The older pronunciation, recommended for stage pronunciation, is apico-dental, while the newer pronunciation, permissible in school pronunciation, is bilabial, typical for contemporary articulation. On a research basis, Klemensiewicz concluded that the pronunciation ratio of this phone's manner of articulation is one to one in terms of frequency of use already before the war. However, in the 1964 edition of *Prawidła...*, the same author acknowledged that the labial phonic realisation of the letter *ł* is dominant. *Prawidła poprawnej wymowy polskiej* from 1995 contains a note that the youngest generation of actors demand the exclusion of apico-dental pronunciation of *ł* from stage pronunciation. The pronunciation dictionary from 1977 stated much earlier that the apical *ł* [ɬ] is no longer used. Only the labial *ł* [ɯ] is therefore considered correct. The authors of the dictionary from 1993 consider a bilabial articulation of *ł* to be common as well. Apico-dental *ł* is classified as typical for speakers from eastern regions, specific dialectal regions and drama graduates (Lubaś, Urbańczyk, 1993, p. 29).

2.3.3.8 Change in phonic realisation of letter *n* preceding letters *k, g, h*

This topic has also undergone development over the years. The first remarks on the pronunciation of the titular phone combinations can be found in Klemensiewicz's first edition of *Prawidła...* (1930). Pronunciation of dorsal-velar *n* is recommended in foreign vocabulary, e.g., *kangur* and *Anglia*. For domestic vocabulary and established loanwords, Klemensiewicz recommends the articulation [nk], e.g., in the words *koronka* and *maszynka*. The 1964 and 1995 editions of *Prawidła...* include supplementary information on regional pronunciations. It refers to central Greater Poland and Lesser Poland, where the velar pronunciation of *n* occurs even in domestic vocabulary and loanwords, which should not be considered erroneous. Similar information is provided by pronunciation dictionaries issued in 1977 and 1993, which also

consider the velar *n* articulated in domestic and borrowed words to be a regional pronunciation so widespread that it should be recognized as correct in addition to the Warsaw pronunciation.

2.3.3.9 Other topics of pronunciation of foreign words

Older publications (Benni, Klemensiewicz regardless of the year of publication) deal only with few topics related to the pronunciation of foreign words. These include the following:

- pronunciation of nouns with suffixes *-izm*, *-yzm* in singular locative;
- pronunciation of vowels in combinations with *j* and with other vowels;
- pronunciation of vowel groups of the *-ae-*, *-oa-*, *-au-*, *eu* types in foreign words;
- pronunciation of foreign words containing phone groups: *bio*, *rio*, *lio*;
- pronunciation of words and morphemes such as *kolonia*, *dominium*, *anarchia*, *-grafia*, *-logia*;
- pronunciation of words such as *plastik*, *reżim*;
- pronunciation of foreign – and domestic – words with the following phone combinations at morpheme boundaries: *-au-*, *-eu-*, *-ua-*, *-uo-*.

The analysis of publications containing pronunciation rules showed the dynamics of phonetic elements, which includes: the disappearance of certain phonetic phenomena, changes in pronunciation, changes in the interpretation of individual phone articulation, emergence of new phonetic issues resulting from language and social changes.

The provided descriptions of selected phonetic phenomena represent the general direction of changes in the aforementioned issue. Some of the phenomena discussed disappeared: constricted vowels; the difference in pronunciation of phones indicated as *h* and *ch*; variability of suffixes *-ym*, *-em* in instrumental and locative; dual pronunciation of phones that are the phonic equivalents to the letter sequence *ge* in foreign vocabulary. The pronunciation of the phone spelled as *l* has changed entirely. Further information on phonetic-phonological changes in the Polish language can be found in Dunaj (2001). Moreover, the analysis of Polish pronunciation rulebooks and dictionaries showed how often normative solutions to a single language phenomenon differ from each other, which is frequently pointed out by both linguists and language users.

3 Orthoepy of segmental and suprasegmental phenomena in Czech language

Pavčina Kuldanová

Orthoepy (literary pronunciation) is a set of norms, which delimit the literary standard for the spoken form of language (Palková, 1994, p. 320). For Czech language, the fundamental rules of the literary pronunciation – both of domestic and loan vocabulary – were codified (“enacted”) in handbooks *Výslovnost spisovné češtiny I. Zásady a pravidla. Výslovnost slov českých* [Pronunciation of literary Czech I. Principles and rules. Pronunciation of Czech vocabulary] (Prague: Academia, 1967) and *Výslovnost spisovné češtiny. Výslovnost slov přejatých. Výslovnostní slovník* [Pronunciation of literary Czech. Pronunciation of loanwords. Pronunciation dictionary] (Prague: Academia, 1978).¹¹⁶ According to the codification handbook, orthoepic pronunciation is “factually extant, natural and conversation-based pronunciation, which, as an inseparable part of the literary language, serves its national communicative function; it is a pronunciation of language users in the entirety of the language territory attempting at literary communication cultivated in all respects, and therefore free of dialectal, regional and individual peculiarities from the pronunciation standpoint” (*Výslovnost spisovné češtiny I*, p. 10).

In literary speech, given a specific communication situation, various degrees of application (variation) of pronunciation norm – so-called **pronunciation style**¹¹⁷ – can be applied; stylistic diversity of literary language thus manifests not only in selection of morphological, lexical or syntactic language means, but also on phonetic level. In scholarly literature, these pronunciation styles (stylistic levels of pronunciation) are usually distinguished:

1. **Basic** (neutral), i.e., pronunciation in public speeches of neutral character (e.g., in schools, media, offices, in official proceedings, etc.); this basic pronunciation can be shifted in two directions – either towards especially pedantic, or cursory pronunciation;

2. **higher** (choice), i.e., especially pedantic pronunciation applied for example in ceremonial speeches and artistic elocution, or under unfavourable acoustic conditions;

3. **lower** (cursory), i.e., common pronunciation in everyday communication (if literary Czech is being used), which places reduced requirements on the speaker, allows certain

¹¹⁶ On codification of pronunciation and its history, cf. Subchapter 1.1 *Basic terminology in Czech linguistic context* and 2.1 *History of Czech orthoepy*.

¹¹⁷ Cf. also Subchapter 1.1.3 *Sound culture. Orthoepy*.

deviations from the orthoepic norm (e.g., in articulation of phone clusters, such as simplified pronunciation of consonant clusters or absence of glottal stops¹¹⁸).

This chapter puts forth information on orthophony, i.e., correct articulation of individual phones, and their orthoepic pronunciation in the stream of speech. It also points out the most frequent deviations from the proper sound of phones and their causes. The commentaries on articulation of vowels and consonants are based on their phonetic descriptions in respected scholarly works (with references provided in individual subchapters), we also follow the usual classification of phones (while pointing out some “controversial” phenomena related to phonetic characterisation of sounds). In addition to this main focus on orthoepy of segmental elements, we also provide a basic characteristic of suprasegmental phenomena, which is addressed in only a rudimentary manner by the Czech pronunciation codification.

3.1 Orthophony of Czech vocals

Literary Czech has five short vowels – [i], [e], [a], [o], [u], five long vowels – [í], [é], [á], [ó], [ú]¹¹⁹, three diphthongs – [ou] in Czech words, [au] and [eu] in loanwords and certain interjections. Their articulation is mainly carried out by tongue, its movement in oral cavity is therefore the basis for classification of vowels (the tongue moves vertically from the floor of the mouth to the hard palate on one hand, horizontally back and forth on the other); this is well illustrated by the traditional depiction of Czech vocals in the form of vowel (vocalic) triangle.

Table 6: Czech vocalic triangle

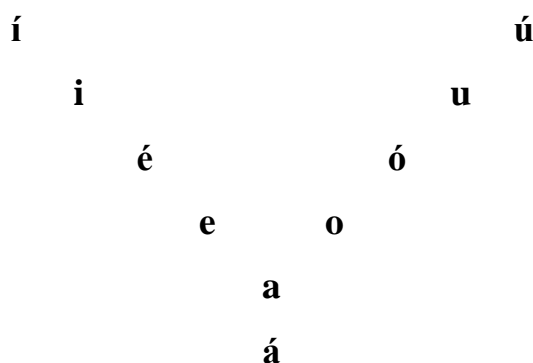
Division according to the vertical position of the tongue	close	i		u
	mid	e		o
	open		a	
		front	central	back
		Division according to the horizontal position of the tongue		

This is what a vowel triangle looks like when providing a combined graphical representation of short and long vowels (according to Hubáček et al., 2010, p. 48) (long vowels, with the

¹¹⁸ Further information on these phenomena are introduced later in this chapter.

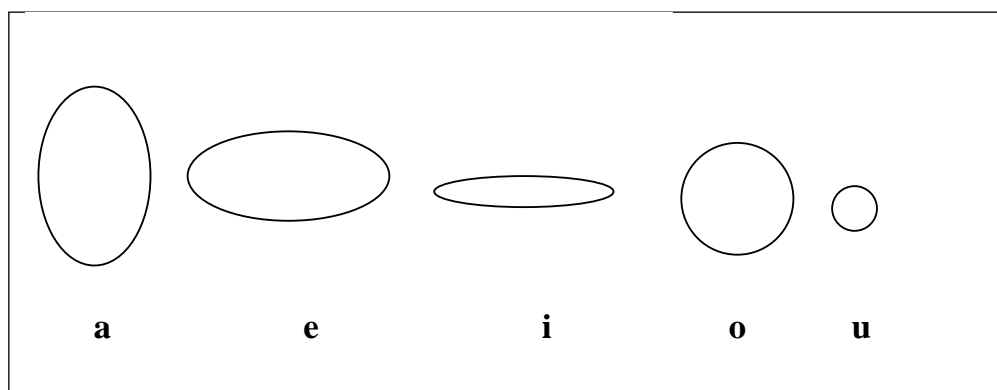
¹¹⁹ The vowel [ú] (*long u*) is represented in writing by two graphemes – *ú* or *ů*.

exception of [á], are acoustically higher, because of this, they are displayed above their short counterparts, with only [á] displayed below):



In addition to the tongue movement, an important role in pronunciation of vowels is played by proper positioning of the mouth, shape of lip aperture – without proper use of lips, a vowel cannot be articulated correctly (cf. the following diagrams and characteristics of Czech vowels):¹²⁰

Figure 1: Shape of lips in vowel articulation (according to Cmíralová, 1992, p. 31)



- **Open central vowel [a], [á]** – lips are the most apart, open, they cannot be spread nor rounded; jaws are wide open (jaw angle is the widest from among all vowels) – lower jaw is lowered (in long [á] to a greater extent than in short); tongue is in a neutral position at the bottom of the oral cavity.

¹²⁰ Simplified description of vowel orthophony is based on: Palková, 1994, pp. 181 – 185; Krčmová, 2008, pp. 134 – 137; Pokorná, Vránová, 2007.

- **Mid front vowel [e], [é]** – lips are in an elongated elliptical shape, slightly spread to the sides (corners of lips are moved to the sides); jaws are slightly open, lower jaw is closer to the upper jaw; tongue is in front and raised position.
- **Close front vowel [i], [í]** – lips are significantly spread to the sides, lip aperture is narrowed; jaws are nearly closed (more in long [í]); tongue is most prominently fronted and raised (more prominently in long [í]).
- **Mid back vowel [o], [ó]** – lips are rounded and slightly protruded; jaws are slightly open; tongue is positioned back and up.
- **Close back vowel [u], [ú]** – lips are the most rounded and prominently protruded, size of the lip opening is reduced (more in long [ú]); jaw angle is narrow; tongue is positioned most prominently back and up.

As previously stated, long vowels, with the exception of [á], are acoustically higher, only [á] is lower; they are also slightly more closed articulation-wise; their duration is approximately doubled in comparison to their short counterparts.¹²¹

- **Diphthongs [ou], [au], [eu]** are falling in Czech language; their first (core) part comprises a “full” short vowel, the second part (non-syllabic ʊ) is known as a semivowel. They are always contained in a single syllable.

According to the rules of literary pronunciation of Czech vowels, their proper **quality** (correct articulation, adequate mouth positioning) and **quantity** (not shortening the length of long vowels, not elongating the short vowels) have to be observed.

The following frequent deviations from the standard forms are to be avoided (these are pronunciation variants falling outside the scope of literariness):

- incorrect vowel quality resulting from imperfect articulation (mouth positioning) or influence of dialect; it results in a decreased speech comprehensibility, or even change in meaning due to vocalic substitution; this is more apparent in front vowels, which are articulated in a more spread manner (e.g., [i] approaches [e]) in some regions of Czechia and in a narrowed manner (e.g., [e] approaches [i]) in areas of Central Moravian dialects;

¹²¹ In more recent phonetic literature, the duration ratio of short and long vowels is described not as 1:2, but as 1:1.4 – 1.6; cf. in detail e.g., Skarnitzl (2012).

- violation of vowel length (shortening of long vocals and elongation of short vocals); this can result in change of meaning (as vocal length has minimal pair validity in Czech language!);
- dual realisation of *i*-plural (i.e., difference in pronunciation of “soft [i]” and “hard [y]”); letters *i/y* are pronounced in the same manner – as [i], letters *í/ý* as [i]; non-orthoepic dual pronunciation of *i* is frequent in areas of Silesian dialects and in parts of Wallachia.¹²²

3.2 Pronunciation of vowel clusters in Czech

When two vowels co-occur (within a single word, but belonging to two syllables, or on a boundary of two words), they are either pronounced **fluently**, non-linked, or with an **epenthetic [j]** or a **glottal stop**. If two neighbouring vowels are a part of the same syllable, they form a diphthong, both parts of which are articulated fluently (explanation in this chapter according to Krčmová, 2008; Palková, 1994; Zeman, 2008).

Epenthetic (hiatic) [j] is articulated in a cluster [i] + **any vowel** in word stems and suffixes, e.g., in words *fialka*, *dialekt*, *Marie*, *studium*, *biologie*, which are pronounced [fijalka], [dijalekt], [marije], [studijum], [bijologije].

Glottal stop, an analogy to hard vocal onset, is a sound generated by vocal fold activity (their tight closing and subsequent rapid opening by an airstream, leading to phonation), in phonetic literature it is often characterised as a glottal occlusive voiceless consonant (Krčmová, 2008, p. 180; Zeman, 2008, p. 73), or, alternatively, as a glottal explosive (Palková, 1994, p. 55). It is articulated automatically when preceding a vowel in word-initial position, following a pause. In Czech, certain rules of its use apply (as opposed to Slovak and Polish), but are not entirely stabilised and, additionally, the carefulness and frequency of its pronunciation is speaker-dependent. Glottal stop contributes to speech comprehensibility, prevents phonetic and lexical co-articulation, has a delimitative function (clearly separates the word starting with a vowel from the preceding word). It appears with increased frequency in lower speech tempo, and in higher pronunciation style – the more prestigious, ceremonial the speech, the more frequent the stops.

¹²² Dialectal pronunciation of “soft i” and “hard y” is tied to an earlier historical state, when both phones existed. Their falling together occurred probably in 15th century – at first in Central Czechia, slightly later in peripheral regions (Lamprech, Šlosar, Bauer, 1986, p. 120). Current proper pronunciation of the so-called “neutral i” (i.e., [i] is not pronounced neither as soft nor hard) is not always realised in exactly the same manner in the stream of speech, articulation is adjusted to accommodate phonic context, but these distinctions are minimal, insignificant.

Codified norm **requires** pronunciation with glottal stops (marked as ʔ) following non-syllabic prepositions *k, v, s, z*:

k oknu [kʔoknu], not [koknu], [goknu];
v únoru [fʔúnoru], not [fúnoru], [vúnoru];
s otcem [sʔotcem], not [sotcem], [zotcem];
z oka [sʔoka], not [soka], [zoka].

In other cases, the use of glottal stop is **facultative**, its articulation is, however, recommended in public speeches of a more official nature (primarily so that vowel co-articulation, especially of the same ones, does not take place). Glottal stops are **recommended** if:

- a) a word starting with a vowel is preceded by an unstressed monosyllabic word, e.g.:
byl unaven [bilʔunaven];
- b) two vowels (either same or different) meet on the boundary of a preposition and a word or prefix and a stem:
do Ostravy [doʔostravi];
u ucha [ʔuʔuxa];
pootevřít [poʔotevřít], but also [pootevřít];
nauka [naʔuka], but also [nauka];
- c) two vowels meet at a word boundary:
celá Evropa [celáʔevropa], but also [celáevropa], however, not [celávropa];
matka i otec [matkaʔiʔotec], but also [matkaʔiotec], not [matkajotec], [matkajíotec];
- d) two vowels meet at the seam of a compound:
modrooká [modroʔoká], but also [modrooká], not [modroká];
severoamerické [severoʔamerické], but also [severoamerické];
- e) word starting with a vowel is preceded by another word or a monosyllabic stressed preposition or prefix ending in a vowel (if glottal stop is not employed, voicing of the final consonant is dependent on the type of preceding word – final consonant is voiceless on a word boundary, voiced on a boundary of a word and a preposition or a prefix – this is illustrated on the provided examples of permitted pronunciation without stops):
lev odešel [lefʔodešel], but also [lefodešel], not [levodešel];
pod oknem [potʔoknem], but also [podoknem], not [potoknem];
bezútešný [besʔúťešní], but also [bezúťešní], not [besúťešní].

Glottal stops are **not pronounced** between vowels within loanwords:

chaos [xaos], not [xaʔos];

realita [realita], not [reʔalita];

teoretický [teoretický], not [teʔoretický];

poetická [poetická], not [poʔetická];

koala [koala], not [koʔala].

We have listed the main cases where glottal stops are to be pronounced, where not to be pronounced, and where they are recommended (i.e., dual pronunciation is literary). Additional examples of glottal stop use in further types of collocations and specific expressions can be found in Palková (1994), Zeman (2008), Krčmová (2008), Hůrková (1995), Pokorná, Vránová (2007).

3.3 System of Czech consonants

In describing the system of Czech consonants, we maintain the traditional (and the usual classroom and textbook) approach – we forgo the fact that some phenomena are understood differently in the phonetic literature, e.g., phonetic evaluation of the phone [j] as a glide (semivowel),¹²³ which we categorize as a sonorant consonant; we also utilise the concept of voice pairs [c] – [ɟ], [č] – [ž], we place the phone [ř] among voice paired consonants; we list [h] as a voiced counterpart of [x], even though it can be facultatively realised as a “voiced ch” – [ɣ] when preceding a voiced paired consonant. For detailed phonetic characteristics of all consonants, we refer primarily to the titles by: Palková (1994), Krčmová (2008), Pokorná, Vránová (2007), Zeman (2008), and Skarnitzl, Šturm, Volín (2016); here we provide a simplified description of consonant orthophony, which is based on the stated sources (in describing the correct forming of individual consonants in the Subchapter 3.3.4, we draw predominantly from: Pokorná, Vránová, 2007).

Relevant factors in articulation of consonants include the place of their articulation (i.e., place of forming the articulatory obstruction to the exhaled airstream), the type of obstruction (i.e., manner of articulation), participation of vocal folds or absence thereof (i.e., voicing), but also position of soft palate (deciding the presence or absence of nasal resonance), and – in certain consonants – engagement of lips. Czech consonants are most commonly divided according to these three primary criteria – we therefore usually classify them:

¹²³ On glides, cf. Krčmová (2008), Palková (1994), Skarnitzl, Šturm, Volín (2016).

- according to the **place of articulation** (place of their origin);
- according to the **manner of articulation** (type of articulatory obstruction);
- according to **voicing** (participation of vocal folds);

3.3.1 Categorisation of Czech consonants on the basis of place of articulation

According to this criterion, consonants are divided into **bilabial**, **labiodental**, **alveolar** (more precisely subdivided into **prealveolar** and **postalveolar**), **palatal**, **velar**, and **laryngeal** (also glottal).

Knowledge of the precise place of origin of consonants and participation of individual articulatory organs in their forming is necessary for their flawless articulation – in pronunciation, individual or regional deviations may occur, for example in the form of dialectal pronunciation of phones or incorrect, erroneous articulation; deviant phone sound can be a manifestation of speech impairment (dyslalia), which is present chiefly in alveolar consonants, most frequently in [l] (lambdacism), sibilants (sigmatism), [r] and [ř] (rhotacism and rotacismus bohemicus); the list and orthophony of phones belonging to the individual groups according to this criterion are provided below.

3.3.2 Categorisation of Czech consonants on the basis of manner of articulation

The second possible criterion for division of Czech consonants is their **manner of articulation** – the fact that articulatory organs create either a total or a partial obstruction to the exhaled airstream. If a **total closure** is formed, stopping the movement of air through the oral cavity entirely, with the phone sounding only after opening of the closure, **occlusive** consonants are articulated; if only a partial closure, a **constriction in airways** for the exhaled airstream is formed and the sound is created by friction of air in this stricture, **constrictive** consonants are articulated. A combination of both of these types of obstructions (closure that turns into a constriction) is applied in the articulation of **semioclusive** consonants.

According to the manner of articulation, consonants can be summarily divided into:

- occlusive: [b], [p], [m], [ɱ], [d], [t], [n], [dʲ], [tʲ], [ɲ], [g], [k], [ŋ], [ʔ];
- constrictive: [v], [f], [z], [s], [ʒ], [š], [ʎ], [x], [h], [l], [r], [ř], [ʃ], [j];
- semioclusive: [c], [ɟ], [č], [ž].

3.3.3 Categorisation of Czech consonants on the basis of voicing

Consonants differ also in the **participation of vocal folds** in articulation – some are formed with presence of voice (**voiced** consonants), others are formed by a simple modification of exhaled airstream in supraglottic cavities (**voiceless** consonants). Most consonants form voicing pairs (**paired** consonants), the rest are separate, unique, unpaired, **sonorant** (they are always voiced).

Table 7: Categorisation of Czech consonants on the basis of voice

Paired:											
Voiced	[b]	[d]	[dʲ]	[g]	[v]	[z]	[ž]	[h]	[ʒ]	[ʒ̥]	[ř]
Voiceless	[p]	[t]	[tʰ]	[k]	[f]	[s]	[š]	[x]	[c]	[č]	[ř̥]
Sonorant:											
	[m]	[ɱ]	[n]	[ɳ]	[ŋ]	[l]	[r]	[j]			

3.3.4 Orthophony of Czech consonants

The description of correct forming of consonants provided here can serve as instructions for native speakers, who can, by reading them, come to understand exact articulatory movements in individual articulatory organs involved, or can use it to improve their pronunciation of certain sounds. It can also serve foreign learners, to whom it offers a manual for correct pronunciation of Czech consonants, which may differ from the consonants in their native languages, or can be absent altogether.

Both lips participate in the pronunciation of **bilabial** consonants [b], [p], [m] (lip closure creates an articulatory closure blocking the exhaled airstream); in [b] and [m], vocal folds are also active (these are voiced consonants). These phones are formed by closure and immediate opening of lips; in articulation of [m], soft palate is lowered at the same time and the airstream moves also into the nasal cavity (this is a nasal consonant).

Labiodental consonants [v], [f] are articulated using the lower lip and upper teeth (incisors). They are formed by creation of a constriction between the lower lip and upper incisors (lower lip moves towards the teeth with a certain muscle tension); vocal folds also participate in articulation of [v] (this is a voiced consonant).

Labiodental [ɱ] is grouped together with these two phones – it is a variant of bilabial [m] formed as a result of articulatory assimilation when preceding [v] and [f].

The most numerous and also the most difficult to articulate are alveolar consonants [d], [t], [n], [s], [z], [c], [ʒ], [l], [r], [ř], [ř̥], [š], [ž], [č], [ž̥]. Their articulation includes either the tip of

the tongue, which touches the alveolar ridge (behind the upper incisors) with its upper surface, producing **prealveolar** consonants ([d], [t], [n], [s], [z], [c], [ɟ], [l], [r], [ʀ], [ʁ]), or the front part of the blade of the tongue, which is raised towards the back of alveolar ridge, with the tip of the tongue lowered towards lower teeth and lips slightly rounded, forming **postalveolar** consonants ([š], [ž], [č], [ž]). This general characteristic of the alveolar consonants should be accompanied by a more detailed commentary on the individual consonants, which can help in practicing their pronunciation:

- [d] – upper surface of the tongue tip is pressed against the alveolar ridge along the upper front teeth (tongue should rest against the front part of the ridge, not incisors), edges of the tongue blade are touching the upper molars, the phone is realised at rapid movement of the tongue away from the gums; vocal folds participate in pronunciation (this is a voiced consonant);
- [t] – upper surface of the tongue tip is pressed against the alveolar ridge along the upper front teeth (tongue should rest against the threshold of the ridge and incisors), edges of the tongue blade are touching the upper molars, the phone is articulated at a rapid movement of the tongue away from the gums and teeth;
- [n] – edges of the tongue tip are pressed against the front part of the alveolar ridge along the upper teeth (tongue tip is slightly more back than in [d]), edges of the tongue blade are touching the upper molars, the phone is articulated at a rapid movement of the tongue away from the gums; vocal folds participate in pronunciation (this is a voiced consonant), as does the soft palate, which is lowered at the same time and the airstream moves also into the nasal cavity (this is a nasal consonant);
- [s], [z] – tongue tip is lightly touching the backside of the lower incisors, edges of the tongue blade are raised and lightly touch the boundary of upper molars and gums, a constriction is formed between the front part of the alveolar ridge and front part of the tongue; the sibilant sound of these so-called hissing sibilants is formed by the exhaled airstream passing through the opening between the tongue and the palate, hitting the edges of the upper and lower incisors, which are brought significantly close to each other, and escapes the oral cavity, the corners of the mouth are slightly spread; vocal folds participate in pronunciation of [z] (this is a voiced consonant);
- [š], [ž] – in articulation of these so-called hushing sibilants, the edges of the tongue blade press against the threshold of upper molars and gums, the entirety of the tongue is moved slightly backwards; the constriction through which the exhaled airstream passes is formed in the area of the back part of the alveolar ridge, to which either the tip of the tongue is

moved, or to which the front of the tongue is moved with the tip pointing to the lower incisors but not touching them; the edges of the upper and lower incisors are brought significantly close to each other as in hissing sibilants, but the corners of the mouth are not spread, lips are rounded; an increase in space of the oral cavity leads to the lowering of the height (deepening) of the characteristic noise; vocal folds participate in pronunciation of [ž] (this is a voiced consonant);

- [c], [č] – forming of these semi-sibilants and their voiced counterparts [ʒ], [ʝ] takes place in two phases due to the combination of two articulatory obstruction types (closure and subsequent constriction);
 - at the onset of articulation of [c], lips are slightly apart and lightly spread, jaws are brought significantly close to each other, the edges of upper and lower incisors nearly touch, edges of the tongue blade are raised and lightly touching the threshold of upper molars and gums, at the same time, tongue tip touches the alveolar ridge right behind the upper incisors (or its front part does so, in such case, the tip points downward and touches the back side of the lower incisors); in the second phase the lips relax, lower jaw moves slightly but rapidly downward and the tongue moves away from the gums, tongue sides stay lightly pressed against the upper molars, creating a constriction similar to the one in articulation of [s], in which sibilant noise is formed;
 - articulation of [č] differs from that of [c] in that in the first phase, corners of the mouth move close to each other and lips are rounded, the entirety of the tongue moves slightly backward, its tip (or its front part, with the tip pointing downward) presses against the back of the alveolar ridge with a greater force than in [c]; in the second phase, after relaxing of the lips, lower jaw moves slightly downward and forward, after the movement of the tongue away from the gums, a constriction is formed similar to the one in [š], creating the characteristic noise;
- [l] – the tongue tip is pressed against the upper part of the alveolar ridge (raising of the tongue can be observed through open lips), edges of the tongue blade are free, exhaled airstream escapes around the sides of the tongue (hence the label lateral for this phone), the sound is finished after the tongue recedes downward from the alveolar ridge; vocal folds participate in pronunciation (this is a voiced consonant);
- [r] – lower jaw is slightly lowered, tip of the tongue points to the front part of the alveolar ridge and is made to vibrate by the exhaled air; for an appropriate acoustic effect, one to two cycles are sufficient; the number of cycles can be increased to three to four in increased articulatory force, under contrastive stress; pronunciation of this vibrant with

a high number of cycles is non-orthophonic, as are non-alveolar realisations of [r]; vocal folds participate in pronunciation (this is a voiced consonant);

- [ř] – this trill (vibrant) appears in both voiced and voiceless ([ř̥]) form, depending on its phonic surroundings and position within a word (unstressed variant in proximity of an unstressed consonant or in word-terminal position preceding a pause as a result of various types of voicing assimilation – regressive, progressive, as well as final, vocal folds participate in pronunciation of the voiced variant); in contrast to the articulation of [r], the lips here are slightly rounded, jaws are close to each other and the lower jaw is slightly fronted, tongue tip is pointing to the front part of the alveolar ridge as in [r] but is more tense and is made to vibrate by a stronger airstream, vibrations have a higher frequency and more repetitions than in [r] (approximately double), tongue is generally more flat; this is the most difficult Czech consonant to articulate.

The central part of the tongue blade participates on the articulation of **palatal** consonants [dʲ], [tʲ], [ɲ], [j], either pressing against (in [dʲ], [tʲ], [ɲ]), or approaching (in [j]) the front (hard) palate; depending on the phonetic context, the lips may tend to be slightly rounded, or slightly spread:

- [dʲ], [tʲ], [ɲ] – blade of the tongue is slightly pressed against the front part of the hard palate, tip of the tongue touches the lower incisors (creating support for arching of the tongue blade towards the hard palate), edges of the tongue blade are lightly touching the upper molars, phones are formed after pulling the tongue away from the palate (lower jaw moves subtly downward, it is not fronted); phones [dʲ] and [ɲ] are articulated with participation of vocal folds (they are voiced), [ɲ] with nasal resonance (which is achieved, as in other nasals, by lowering of the soft palate and movement of the airstream also into the nasal cavity);
- [j] – edges of the tongue blade are pressed against the palate on the sides – on the threshold of molars and gums, the tongue tip is touching the lower incisors, a constriction – wide passage for exhaled airstream – is formed between the hard palate and the blade of the tongue; vocal folds participate in pronunciation (this is a voiced consonant).

Velar consonants [g], [k], [x] are created by the dorsum of the tongue pressing against the soft (back) palate (in [g], [k]) or approaching it (in [x]):

- [g], [k] – tongue dorsum is firmly pressed against the soft palate, tip of the tongue is relaxed in oral cavity or can touch lower incisors (or, alternatively, lower gums); phones

are formed at distancing of the tongue from the soft palate (lower jaw moves subtly, but rapidly downward); vocal folds participate in pronunciation of [g] (this is a voiced consonant);

- [x] – tongue dorsum is arched towards the front part of the soft palate, creating a constriction between the tongue and the soft palate through which exhaled airstream passes; tip of the tongue is relaxed or can touch the lower incisors, lower jaw is slightly lowered.
- Velar [ŋ] also belongs to this group – it is a variant of alveolar [n], which is to be articulated when preceding [k], [g] (in clusters *nk/ng*), and “voiced ch” – [ɣ], which is facultatively articulated instead of [h] as a result of voicing assimilation of *ch* preceding a voiced paired consonant (however, this variant is difficult to observe by hearing alone):¹²⁴
 - [ŋ] – in articulation of this velar variant of [n], the dorsum of the tongue is arched and slightly pressed against the lowered soft palate, the phone is realised in distancing of the tongue from the palate, which moves upward at the same time due to the articulation of the subsequent consonant [k] or [g]; activity of the soft palate causes nasal resonance (it is a nasal consonant), activity of the vocal folds causes voicing of the phone.

Consonant [h] is formed directly in the larynx by vocal fold activity, it is therefore voiced by its nature¹²⁵ (no articulatory organ of the oral cavity participates in its articulation, the tongue is relaxed, its tip is lightly touching the back side of the lower incisors or the gums below them) – it is labelled as a **laryngeal** (glottal) consonant; exhaled airstream passes through the constriction between the vocal folds, which vibrate (a much greater amount of air is needed in contrast to other consonants); the phone is vocally completed in a sufficiently large space of the oral cavity, which is achieved by a slight lowering of the jaw.

On the basis of the place of origin, glottal stop [ʔ] can be included among glottal consonants, this phenomenon is addressed in the Subchapter 3.2.

¹²⁴ It is also worth mentioning that some scholarly sources link the appearance of this variant with its position on word boundaries (the phone [ɣ] is formed in word-final position preceding an expression beginning in a voiced paired consonant, e.g., *abych dal* – [abɪɣ dal]), others do not follow this restriction (the shift can thus occur also within a single word, e.g., in pronunciation of the name *Suchdol*; cf. e.g., commentary at *Internetová jazyková příručka* [Internet language handbook]: <https://prirucka.ujc.cas.cz/?id=906>. [cited 22. 1. 2022]).

¹²⁵ Its voiceless counterpart is [x], cf. also Subchapter 3.3 *System of Czech consonants*; the pair [h] – [x] is the only one among the voicing pairs that differs also in place of articulation: [h] is formed in the vocal folds, [x] in the area of soft palate.

3.4 Pronunciation of consonant clusters in Czech

In speech production, mutual influencing of neighbouring phones (coarticulation) takes place, resulting in the changes to stream of speech – consolidation of their sounds, omission or addition of phones. Orthoepic codification specifies certain rules for such changes in consonant clusters (combinations of several consequent consonants), of which we discuss the following: **Assimilation**, **simplification** of phone group (i.e., omission of one of the phones, elision), **epenthesis** (insertion of a phone).

3.4.1 Assimilation

The most frequent type of changes in Czech pronunciation is the one that smooths out the differences in articulation of individual consonants in a cluster, the so-called **assimilation**. Phones adapt to each other in **voicing**, **manner of articulation** and **place of articulation**, that is, in their most important qualities. Voicing assimilations can take place both in consonant clusters in individual words as well as on word boundaries, while articulatory assimilations only occur within individual words.

The absolutely most frequent type of assimilation is **voicing assimilation** – it takes place among voice paired consonants (sonorous consonants without voice counterparts are not subject to such changes, nor do they cause them), specifically when two paired consonants with different voice properties stand next to each other. A **regressive** direction is prevalent; in it, the last consonant of a cluster influences preceding phones with its voicing, the application of voice thus becomes unified in across the cluster (in order to simplify articulation); if the last consonant is voiced, the entire cluster is articulated in a voiced manner, if the last consonant is voiceless, the entire cluster is articulated without voicing:

- *kdo* is articulated as [gdo] – the last consonant in the cluster *kd*, i.e., [d], is voiced and influences the preceding voiceless [k], which is thus pronounced as its voiced counterpart [g], the voicing of the cluster was balanced; the later occurring phone had an influence on the earlier one – due to this, this type of assimilation is known as **regressive voicing assimilation**.
- *vztah* is pronounced as [fstax] – voiceless *t*, the last syllable in the cluster *vzt*, influenced the preceding voiced consonants [vz], so that their voiceless counterparts [fs] are pronounced, i.e., **regressive voicing assimilation** also takes place in this case. Simultaneously, at the end of this example, voiceless [x] is articulated, which is a counterpart to the voiced [h], as a result of **voicing neutralisation** – the loss of voice

before a pause, to which all paired voiced consonants are subject in word-final position. In classrooms, this phenomenon is usually labelled **final voicing assimilation**.

Progressive voicing assimilation, in which the first consonant in a cluster influences the subsequent one with its voicing, can only take place in *ř* and in the combination spelled as *sh*:

- for example, expressions *shoda*, *shon* are pronounced [sxoda], [sxon] – the first phone in the cluster, voiceless *s*, influences the following phone, which is thus also pronounced without voice; however, this cluster can also be pronounced as [zh]– [zhoda], [zhon], as a result of regressive assimilation; both pronunciations are considered literary (voiceless is prevalent in Czechia, voiced in Moravia); but the words *shora*, *shůry*, *shluk* (*shluknout se*, *shlukovat se*) are only pronounced voiced, i.e., [zhora], [zhúri], [zhluk], progressive voicing assimilation is not applied in these;
- phone [ř] can lose its voicing if it appears next to a voiceless consonant, both following it (becoming subject to progressive assimilation, e.g., in the words *tři* [tř̥i], *třeba* [tř̥eba], *křičet* [kř̥ičet]) and preceding it (where regressive assimilation takes place, e.g., in the words *mořský* [moř̥skí], *hořký* [hoř̥kí]); loss of voicing in *ř* also takes place in word-final position preceding a pause (*talíř* [talíř̥], *lékař* [lékař̥], *keř* [keř̥], *vař* [vař̥], etc.).

In voicing assimilation on **word boundary**, when the second word starts with a sonorant (unpaired) consonant, fluctuation can take place in Czech pronunciation, caused either by dialectal (usually Moravian) origin of the speaker, or lack of knowledge of pronunciation norms. For this reason, we provide at least the following rules:

- paired voiced consonant loses its voicing in word-final position not only before a voiceless consonant in the following word, but also before a sonorous consonant (or before *v*, which in this position behaves as a sonorous consonant; here, we would like to point out the unique behaviour of the consonant *v* – it is typically subject to assimilation (as other paired voiced consonants), but does not cause assimilation – it shares this property with sonorant consonants): *pohyb ruky* is pronounced as [pohip ruki], *nález vody* as [náles vodi];
- in coupling of monosyllabic stressed prepositions *přes*, *od*, *nad*, *pod*, or *před* and a word beginning in a sonorous consonant (or a *v*), voiced consonant is articulated at the end of the preposition: *přes vodu* pronounced [přez vodu], *přes jámu* [přez jámu], *přes rybník* [přez ribník], *od lesa* [od lesa], *nad moře* [nad moře], *od vody* [od vodi];

- preposition *s* (in instrumental and genitive cases) preceding sonorant consonants or *v* can be articulated both with and without voicing: phrase *s mužem* can be pronounced both [s mužem] and [z mužem], *s Janou* as [s janou] and [z janou], *s věcmi* – [s vjecmi] and [z vjecmi], *s našimi* – [s našimi] and [z našimi]; only the voiceless (non-assimilated) pronunciation occurs in connection with paradigms of pronouns *my* and *vy* – *s námi* is only correctly pronounced as [s námi], *s vámi* as [s vámi].

From among the other voicing changes (resulting from **analogy**), we would like to highlight fluctuation in specific words, the pronunciation of which is evaluated differently in various scholarly works (possibly also differently from the codification handbook, or not entirely unequivocally): in feminine nouns ending in *-ba* preceded by a consonant, such as *kresba*, *prosba*, *modlitba*, *svatba*, *platba*, *věštba*, *kletba*, etc., voiced consonant articulated as a result of regressive assimilation is transferred also into the plural genitive forms, where, however, it precedes a vowel *e* and not a voiced consonant, thus, forms [kresep], [prosep], [modlidep], [svadep] are pronounced – some scholarly sources consider their doublet non-assimilated pronunciation to be orthoepic (e.g., Zeman (2008, p. 97); Hůrková (1995, p. 30) assigns it to a higher style), others do not (Palková (1994, p. 332) evaluates the pronunciation [kresep], [prosep] as hypercorrect, erroneous). In general, it can be stated that, in the listed examples, as well as in derived adjectives and nouns (*svatební*, *modlitební*, *prosebník*, etc.), dual pronunciation is accepted; a speaker chooses a specific variant on the basis of pronunciation style (voiceless variant – matching the written forms – will most likely be preferred in a “ceremonial” style).¹²⁶

Doublet pronunciation is acceptable also in the verbal forms of first person plural imperative, if the suffix *-me* is preceded by a paired voiced consonant (if preceded by a voiceless consonant, the pronunciation stays voiceless, as in expressions *vraťme* and *kupme*, which must be pronounced as [vraťme] and [kupme]):

bud'me: pronounced as [but'me], as well as [bud'me] (pronunciation with a voiceless consonant matches the phonic realisation of the 2nd person singular form, in which voicing neutralisation occurs: *bud'* – [but'], etc.; voiced pronunciation of these forms is recognized as regional, Moravian variant);

povězme: [povjesme] as well as [povjezme];

snažme se: [snašme se] as well as [snažme se];

věřme: [vjeřme] as well as [vjeřme].

¹²⁶ Cf. also commentary: Štěpánová (2013a).

Assimilation of the place of articulation (mutual influence of consonants articulated in different parts of the oral cavity) takes place in consonant groups *nk/ng* (in these, it is obligatory) and *mv/mf* (in these, it is facultative).

- *banka, tango*: pronunciation of alveolar [n] is influenced by the following velar [k] or [g] – *velar n* is articulated [baŋka, taŋgo]; this change does not take place on word boundary, therefore [pan král] is articulated, not [paŋ král];
- *tramvaj, komfort*: bilabial [m] is influenced by labiodental [v] or [f] – *labiodental m* is thus pronounced – [traŋvaj, komfort]; however, pronunciation with a bilabial [m] is also permissible – [tramvaj], [komfort].

Assimilation of the manner of articulation can take place only in words on the boundary of the stem and a suffix (not on word boundary or between a prefix and a stem) in clusters combining occlusives *t, d* and constrictives *s, š, z, ž* (*ts/ds, tš/dš, tz/dz, dž*) – the result is an articulation of a semioclusive consonant – [c], [č], [ɟ], [ž] (the norm permits this pronunciation alongside a full, orthographic one, preferred in higher style):

dětský: pronounced as [d'etskí], as well as [d'eckí];

děští: pronounced as [d'etšt'í], as well as [d'ěčt'í];

lidský: pronounced as [litskí], as well as [lickí];

Švédsko: pronounced as [švétsko], as well as [švécko]; similarly, *švédský* [švétskí] and [švéckí], *švédští* [švétšt'í] and [švéčt'í], *švédština* [švétšt'ina] and [švéčt'ina];

větší: pronounced as [vjetší], as well as [vječí], not [vjetčí], similarly *většina* [vjetšina] and [vječina];

tvrdší: [tvřtší] and [tvřčí];

kratší: [kratší] and [kračí];

podzim: [podzim] and [pozim];

Bydžov: [bidžof] and [bižof].

The listed assimilation types take place in literary pronunciation, however, assimilations caused by dialectal influences or negligent articulation are also frequent. Assimilations of the following types are **erroneous**:

- [tfar] instead of [tvar], [kfalita] instead of [kvalita], [sfetr] instead of [svetr], [poxfala] instead of [poxvala] (dialectal progressive voicing assimilation); [gvúli] instead of [kvúli] in pronunciation of the word *kvůli*, [gvečeru] instead of [kvečeru] in the phrase *k večeru*,

[jag mislíš] instead of [jak mislíš] in *jak myslíš*, [pohib ruki] instead of [pohip ruki] in case of *pohyb ruky*, [nález vodi] instead of [náles vodi] in the phrase *nález vody*, etc. (dialectal regressive voicing assimilation preceding *v* or a sonorant);

- [píščítí] instead of [písčítí] in pronouncing the word *písčítý*, [roščílit se] instead of [rosčílit se] in *rozčílit se*, [ščítat] instead of [sčítat], [ščásti] instead of [sčásti] in *zčásti*, [roščarovaní] instead of [rosčarovaní] in *rozčarovany*, [roščesat] instead of [rosčesat] in the word *rozčesat* etc. (incorrect place of articulation assimilation of hissing and hushing sibilants).

3.4.2 Consonant cluster simplification

Literary pronunciation allows the option of **simplification of two consonants with same or different voicing** within a word (on the boundary of a base and an affix), these can be pronounced as a single phone:

panna: [pana];

Anna: [ana];

povinný: [povíní];

kamenný: [kamení];

měkký: [mňekí];

francouzský: [francoʊský];

bezstarostná: [besstarostná] and [bestarostná];

rozsypat: [rossipat] and [rosipat];

vyšší: [višší] and [viši];

babiččin: [babiččin] and [babičin];

pražští: [prašťí] and [prašští].

However, in order to conserve meaning, **simplification does no take place** on word thresholds, in compounds or imperative verb forms ending in *-me*: thus, we pronounce [poddaní] (*poddaný* x *podaný*), [racci] (*racci* x *raci*), [nejjasnější] (*nejjasnější* x *nejasnější*), [ottok] (*odtok* x *otok*), [pan novák] (not [panovák]), [před domem] (not [předomem]), *dvojjazyčný* [dvojjaziční], *půllitr* more clearly as [púllitr], *uvědomme si* [uvědomme si] (not [uvjedome si]).

Elision of a phone in a consonant cluster formed by different phones is possible only in a few cases:

- in more complex consonant clusters arising in adjectival forms in nominative plural masculine animate:

francouzští: [francoʊsʃtʲí] as well as [francoʊštʲí];

mořští: [mořʃtʲí] as well as [mořťí];

- in words *srdce*, *dcera*, *ctnost*, *egyptský*, which are pronounced either with the entire consonant cluster articulated (in higher style, in recitals), or simplified by elision of [t] (in neutral speech):
[srce] as well as [srtce];
[cera] as well as [tcera];
[ctnost] as well as [cnost];
[egiptskí] as well as [egipskí];¹²⁷
- in present forms of the verb *být* (*jsem*, *jsi*, *jsme*, *jste*, *jsou*), if it functions as an auxiliary or linking verb, phone [j] can be elided, e.g., in past tense compound verb forms:
[přišel sem] and [přišel jsem] (neutral variant without [j] occurs following a consonant);
[šla jsem] and [šla sem] (neutral variant with [j] is preferred following a vowel);
[viděli sme] and [viděli jsme] (not [viděli zme]);
[zvítězili ste] and [zvítězili jste];
- if the verb *být* functions as a lexical word or if it stands at the beginning of a sentence (it carries contrastive stress), the phone [j] is maintained (*Myslím, tedy **jsem**. Já už tady **jsem**! **Jsi** to skutečně ty? **Jsem** to já!*).

In other cases, **elision** of a consonant is **undesirable**, we therefore pronounce in full:

jméno: [jméno], not [méno];

přijdu: [přijdu], not [přidu];

hřbitov: [hřbitof], not [řbitof];

tkanička: [tkaňička], not [kaňička];

která: [která], not [kerá];

zvláštní: [zvláštňí], not [zláštňí, zlášňí];

¹²⁷ Recommended method of simplified pronunciation of this expression (with a four-consonant cluster *-ptsk-*) raises some questions – observation of its pronunciation in audial public media and among teachers, as well as a research carried out among students of the Ostrava Faculty of Education led us to a conclusion that, among these speakers, either a full, unsimplified pronunciation [egiptskí] occurs, or the form with assimilation of the manner of articulation [egipeckí] with a substitution of [c] in place of [ts] occurs, which, however, is unequivocally declared impermissible by orthoepic handbooks. In subsequent personal discussions, teachers and students evaluated the variant [egipskí] as uncultivated and wondered why they cannot pronounce the phone [c] in the same manner as in the words *dětský*, *lidský*, etc.

prázdné: [prázdne] (in cursory literary pronunciation [prázně] is also permissible, as well as is simplified pronunciation of lexis derived from this root, such as *prázdniny* – [prázdňini] and [prážňini], etc.).

3.4.3 Epenthesis

Infrequently, a vowel can be **epenthesized** (inserted) into a consonant cluster to ease pronunciation – this is the case in numerals *sedm*, *osm* and their derivatives, which can be pronounced either according to their orthographic form (with a syllabic *m*), or with an epenthesized [u]:

[sedm] and [sedum] (not [sedn]);

[osm] and [osum] (not [osn]);

[sedmnáct] and [sedumnáct], not e.g., [sedumnást], [sedumnác], [sednást] etc. (the pronunciation of the ending *-ct* must also be maintained);¹²⁸

[osmdesátá] and [osumdesátá], not [osndesátá].

Phone sequence spelled *mě* should be, according to the more recent orthoepic handbooks (Palková, 1994; Hůrková, 1995; Zeman, 2008) pronounced with an epenthesized [ň], i.e., [mňe], not [mje] (the handbooks evaluate this variant as a local, dialectally influenced pronunciation that is not considered normative), despite the fact that the codification handbook *Výslovnost spisovné češtiny I* [Pronunciation of literary Czech I] (1967) allows for dual pronunciation (considering [mňe] the neutral variant, but recognizing [mje] as a regional variation; this approach is similar to that of Marie Krčmová (2008, p. 150), who states that to “pronounce [mjesto] is not incorrect per se, but it is a less common realization, and tends to be based on dialectal habit”):¹²⁹

město: [mňesto], not [mjesto];

měsíc: [mňesíc], not [mjesíc];

změnit zaměstnání: [zmňeňit zamňestnáňí],¹³⁰ not [zmjeňit zamjestnáňí].

¹²⁸ A greater pronunciation issue arises in realisation of compound numeral expressions of the type *jedenáct set*, which should be pronounced with an unsimplified consonant cluster [cts] – [jedenáct set]; given the difficulties with this cluster, Jiří Zeman (2008, p. 119) recommends permitting “a variant [jedenáčset] at least as common”.

¹²⁹ Experts do not agree on how to perceive this phenomenon (nor did they in the past); on the basis of evaluation of public speakers, we have to mention that the pronunciation [mje] is not “less common”, as Krčmová states. On the contrary, it is prevalent in observed speakers of various ages from Moravian regions (regardless of their “native” Moravian dialectal region).

¹³⁰ Non-orthoepic elision of [m] in the [mňe] cluster is also to be avoided; it tends to occasionally take place when following a consonant: the word *podmět* is correctly articulated [podmňet], not [podňet], *samozřejmě* [samozřejmňe], not [samozřejne] etc.

Further types of consonant clusters and examples of specific words in which changes in pronunciation may occur are provided by Palková (1994), Krčmová (2008), Zeman (2008), Pokorná and Vránová (2007).

3.5 Loanword pronunciation rules in Czech

Rules of literary pronunciation for loanwords are not as stabilised as those for domestic vocabulary – this fact is related to the degree of their graphic adaptation and the relation between their graphic form (orthography) and pronunciation. The degree of domestication of a borrowed expression is reflected in its orthography, which may be adapted to Czech language to a varying extent, which correlates with a greater or smaller stabilisation of its pronunciation (Palková, 1994, pp. 341 – 343). A word entirely adapted to Czech orthographically is pronounced as a domestic word (e.g., *aféra*, *šok*); in case of words retaining their original spelling, it is necessary to know their original pronunciation (e.g., *interview* [intervjú], *laser* [lejzr], *capriccioso* [kapričózo]); in a large portion of loan vocabulary, partial graphical adaptation has occurred or doublet spellings have been introduced, resulting in fluctuation in pronunciation (e.g., *konsonant* – possibly pronounced as either [konsonant] or [konzonant] – can also be spelled *konzonant*; *cartridge*, [kartrič] or [kártrič], can today also be spelled *kartridž*). The difference between the written and spoken word forms, and the insufficient knowledge of phonic realisation of expressions in source language, are the usual causes of unstable or erroneous pronunciation.

To ascertain the adequate phonic realisation of a loanword, one can turn to the second volume of pronunciation codification handbook *Výslovnost spisovné češtiny. Výslovnost slov přejatých. Výslovnostní slovník* [Pronunciation of literary Czech. Pronunciation of loanwords. Pronunciation dictionary] (1978); it contains both the general principles of orthoepic pronunciation of loanwords and – as is evident from the title – pronunciation dictionary comprising approximately twenty thousand lexical units (the need to include a dictionary – as opposed to the first volume, dedicated to domestic vocabulary – is reasoned with the previously mentioned “fluctuant relation” between orthography and phonic realisation of loanwords). However, considering the fact that a significant amount of time has passed since its publishing (in 1960s–1970s), a shift in pronunciation norm took place in some phenomena (and a more

prominent orthographic adjustment also took place¹³¹). Additionally, Czech language was since then enriched by a copious amount of new loans, the pronunciation of which may cause difficulties – this text thus no longer describes the current state of the language. The same opinion was expressed by Veronika Štěpánová (2019, p. 204): “Codification of loan lexis pronunciation (...) is dated due to the considerable shift in the norm, it is not in line with the current orthographic codification, nor does it capture the newer, yet today rather frequent lexicon, most notably of Anglophone provenance.”¹³² In addition to its obsolescence, the handbook is not readily available. A new publication would therefore be welcome, preferably one that would introduce the current orthoepic norm of this part of vocabulary, both general and the proper nouns (pronunciation of personal and geographic proper nouns belongs among the more troublesome phenomena in Czech language). Until such a text is published (unfortunately, it is not in the works at the time of writing), we are left with the basic information on loanword pronunciation from the extant codification handbook and texts based on these general principles (such as Palková, 1994, and Hůrková, 1995), which, however, are best supplemented with more recent commentaries, formulated chiefly on the portal *Internetová jazyková příručka* [Online language handbook]¹³³ and in other recent titles that deal with this topic at least tangentially (e.g., *Pravidla českého pravopisu* [Rules of Czech orthography], *Slovník spisovné češtiny pro školu a veřejnost* [Dictionary of literary Czech for schools and public], foreign vocabulary dictionaries), and specialised works of Vlastimil Strahl, Jiří Zeman and others.¹³⁴

Here, we introduce the main principles that can be applied in loanword pronunciation. The fundamental principle here is: the Czech pronunciation is based on the pronunciation (not orthography) of the source language, but with Czech articulation of phones and with Czech stress – phones which are not present in Czech are substituted by the nearest (most similar) Czech phones and stress is moved to the first syllable if the word comes from a language with stress on a different syllable (the pronunciation is thus not entirely fidelitous to the source language, with the exception of quotes and quotation expressions, see below); combinatorial changes such as regressive assimilation take place in the same manner as in domestic vocabulary (Palková, 1994, pp. 341 – 342). Pronunciation of certain words that were borrowed

¹³¹ Cf. *Pravidla českého pravopisu* [Rules of Czech orthography] from 1993 and *Dodatek k Pravidlům českého pravopisu* [Supplement to the Rules of Czech orthography] from 1994.

¹³² In original: “Kodifikace výslovnosti přejaté slovní zásoby (...) je zastaralá z hlediska značného posunu v normě, není v souladu se současnou kodifikací pravopisnou a rovněž nezachycuje novější, avšak dnes velmi frekventované lexikum, zejména anglického původu.”

¹³³ On pronunciation of loanwords and proper nouns cf. <https://prirucka.ujc.cas.cz/?id=914>. [cited 22. 1. 2022].

¹³⁴ Cf. the list of recommended sources in Chapter 7.

in earlier periods is, however – contrary to this principle – based on their graphic form, such as *fotbal*, from English *football*, pronounced [fodbal].

In adaptation of pronunciation, for example, the following phone **substitutions** take place (Palková, 1994, p. 342):

- rounded vowels [ö], [ü] with non-rounded [e], [i] – [rentgen];
- nasal vowels with combination of corresponding non-nasal (oral) vowel and nasal consonant [n], [m] – [pardon];
- bilabial [v] with a labiodental [ɸ] – *William* [vilijem]; here English reduced vowel is also substituted with [e];
- English [θ], spelled as *th*, is pronounced as [t] (typically in word-initial position), or possibly [s] (in word-final position), e.g., *Thatcherová* [tečrová], *Smith* [smit] or [smis].¹³⁵

From among other principles, it is worth pointing out also the following:

- vowel ***i* does not soften *d*, *t*, *n*** – [diktát], not [d'iktát]; senior – [senijor], not [señijor]; incorrect softening can be heard in speakers from Silesia dialectal region, in all age groups (commonly e.g., in forms [ord'inace], [cent'imetr], [domiňik], [vaňilka], [moňitor] etc.);
- **vowel groups** in word stems belonging to different syllables, such as *ea*, *ae*, *ao*, *oa*, but also others, are not pronounced with a glottal stop (vowel combinations in this position are a clear marker of foreignness of the lexeme, since in Czech language, vocals only meet on the boundary of a prefix and base or seam of a compound) – [meandr], [aorta], [koala], [ideál], [teorije], [realita];
- **vowel combination** within a single syllable is a diphthong: *au* (*auto*), *eu* (*euforie*); glottal stops are not articulated;
- **combination of the vowel [i]** with any other vocal inside a word (e.g., *ia*, *io*, *ie*) is articulated with an epenthetic [j] – *dieta* [dijeta], *biologie* [bijologije].

The most troublesome phenomena include the fluctuation in vocalic quantity and consonant voicing. **Vowel length** is not consistently marked, as opposed to words of Czech origin:

- sometimes, it is not recorded, yet the vowel is to be articulated lengthened (e.g., *minus* [mínus]);

¹³⁵ On pronunciation and declension of the name *Smith* cf. also the portal *Internetová jazyková příručka* [Online language handbook], <https://prirucka.ujc.cas.cz/?slovo=smith#>. [cited 22. 1. 2022].

- sometimes, a dual pronunciation exists for an orthographic variant with a short vowel (e.g., [kultúra] as well as [kultura]; possibility of dual pronunciation of the suffix *-ura* has been discussed at the portal *Internetová jazyková příručka*¹³⁶ and in Zeman (2008, p. 49; here, other suffixes of this type, such as *-urka*, *-urní* are also mentioned, with a note that “variants with a short vowel are dominant”),¹³⁷ even though the codification handbook permits only long pronunciation);
- in certain suffix types, doublet spelling was introduced – dual pronunciation is therefore also permitted (e.g., in the word *pasivní* – *pasívní*; the short-vowel orthographic form in itself can be articulated with either short or long vowel);
- violation of vowel quantity can occasionally result in change of lexical meaning (*nota* – *nóta*, *deviza* – *devíza*, *lama* – *láma*);
- due to significant fluctuation in length in various suffix types (e.g., *-iv/-ív*, *-in/-ín*, *-on/-ón*, *-ona/-óna*, *-or/-ór*), it is recommended to use the *Internetová jazyková příručka* webpage to verify which is the correct variant – the following note is also drawn from this source: “Due to the shifts in pronunciation norm and changes in orthography (cf. *Psaní samohlásek v zakončení přejatých slov* [Spelling of vowels in loanword endings]), older orthoepic handbooks are often no longer topical in relation to vowel length in loanwords. It is also necessary to be aware that the length of the articulated vowel is frequently ambiguous, often articulated as semi-lengthened, and speakers themselves might not always be consistent in their pronunciation of individual expressions. It is evident that vowel length in many loanwords in Czech language is influenced by speaker’s age or regional background, and in specific cases also by the method of learning the word, lexical meaning, frequency and area of use, expressivity, and others.”¹³⁸;
- if vowel length is marked orthographically, it is also articulated.

Fluctuation in consonant voicing manifests prominently in *s/z*, less so in *k/g* and in pronunciation of the letter *x*.

¹³⁶ Cf. *Samohlásková délka u přejatých slov*. Available at: <https://prirucka.ujc.cas.cz/?id=914>. [cited 22. 1. 2022].

¹³⁷ In original: “převládají varianty s krátkou samohláskou”.

¹³⁸ *Samohlásková délka u přejatých slov*, <https://prirucka.ujc.cas.cz/?id=914>. [cited 22. 1. 2022]. In original: “Vzhledem k posunům ve výslovnostní normě a také ke změnám pravopisným (viz *Psaní samohlásek v zakončení přejatých slov*) nejsou starší ortoepické příručky ve vztahu k samohláskové délce v přejatých slovech již mnohdy aktuální. Je rovněž třeba si uvědomit, že délka vyslovované samohlásky není v mnoha případech zcela jednoznačná, nezřídka se vyslovuje tzv. polodélka a ani samotní mluvčí nemusí být ve výslovnosti stejných výrazů vždy konzistentní. Je evidentní, že na samohláskovou délku u mnoha cizích slov v češtině má vliv věk mluvčích nebo jejich regionální původ, z hlediska jednotlivých výrazů pak doba a způsob přijetí slova, lexikální význam, frekvence a sféra užití, expresivita atp.”

The most troublesome phenomenon is the **pronunciation of s/z** between vowels and in proximity of sonorous consonants:

- In positions where *s* is originally spelled, both [s] and [z] can be pronounced: the [z] pronunciation is progressive, even in cases where [s] should be pronounced on the basis of word origin – for example in words *renesance*, *disertace*, *resort*, *diskuse*, *režisér* (in these cases, dual orthography was even introduced in the handbook *Pravidla českého pravopisu* [Rules of Czech orthography] from 1993, e.g., *renesance* as well as *renezance*), pronunciation of [s] is typical for higher style, however; in the most recent edition of *Pravidla českého pravopisu* (1993) and in their *Dodatek* [Supplement] (1994), doublets were introduced also for other expressions;
- some words have a stabilised pronunciation with a voiced [z], but a doublet is permissible in written form, e.g., *filozofie/filosofie* [filozofije], *humanismus/humanizmus* [humanizmus]¹³⁹.

Consonants k/g: fluctuation occurs only in loanwords with the grapheme *k*, articulation doublets are permissible only in words *inkoust*, *plakát*, *akát*, *krejcar* – [iŋkoʊst/iŋgoʊst], [plakát/plagát], [akát/agát], [krejcar/grejcar], otherwise, only orthography-based *k* is permissible, e.g., in words *demokracie*, *frekvence*, *motocykl*, *dekret*, etc.

Letter x is pronounced as a sequence of two phones – either [ks] or [gz], depending on the phonic context (it is subject to regular regressive voicing assimilation when preceding a voice paired consonant);

- the basic form [ks] is pronounced in word-initial position preceding a vowel (such as in *xenofob*), between vowels (e.g., *praxe*, *lexikum*), preceding a voiceless consonant (e.g., *expert*, *extrém*, *textil*), preceding a sonorant consonant (e.g., *exministr*), and in word-final position (*kodex*);
- voiced pronunciation [gz] is applied when preceding a voiced paired consonant (e.g., *exhalace*, *exhibice*) or in the combination *ex-* in word-initial position preceding a vowel (as long as it is not perceived as a prefix, e.g., *existovat*, *exotický*, *exil*; otherwise, the prefix preceding a vowel or sonorant consonant is to be pronounced [eks], e.g., in the already mentioned *exministr* or *exadmirál*, where a glottal stop may also occur).

¹³⁹ Cf. *Souhlásková znělost u přejatých slov*. Available at: <https://prirucka.ujc.cas.cz/?id=914>. [cited 22. 1. 2022].

Cluster *sch* (e.g., *ischias*, pronounced [isxijas], not [išijas]) and *sp, st, sk* – [studovat], [sport], [spekulovat], [skandál] (erroneously, expressively [študovat], [špekulovat], [škandál]) are pronounced **in accordance with orthography**.

Original pronunciation of the source language is maintained only when uttering verbatim quotes or fixed expressions, quote expressions, e.g.:

curriculum vitae: [ku 'rikulum ví 'té],

doctor honoris causa (dr. h. c.): [doktor ho 'nóris 'kauzá],

fair play: ['fér 'plej],

chargé d'affaires: [šaržéda 'fér],

enfant terrible: [anfan te 'ribl], etc.

Current uncertainty of many users regarding the pronunciation of loanwords (both in general and in specific cases) was covered in detail by Štěpánová in an article answering phonetic questions asked in the language counselling at the Institute of the Czech Language (Štěpánová, 2013b).

3.6 Orthoepic norm for suprasegmental phenomena in Czech

The central topic of Czech pronunciation codification is the literary realisation of phones and phone groups, that is, the segmental level of pronunciation. Sentential sound means (that is, prosodic, suprasegmental) are only addressed in passing. On this level, codification handbook *Výslovnost spisovné češtiny I* [Pronunciation of literary Czech I] (1967) only deals with **stress** (primary and secondary words stress, phrasal stress, contrastive stress, and, chiefly, stressing of prepositions) in a standalone chapter (pp. 65 – 70), and it briefly discusses the **melody of polar questions** (pp. 71 – 72). The reasoning matches the period state of research of prosodic means and certain doubts regarding the possibility of their codification: “The norm of these means is of a rather different character than that of phones and stress. The question whether it is also possible to codify sentential sound means has not yet become a subject matter for a more profound research from orthoepic standpoint. It is, after all, a quite complicated issue”¹⁴⁰ (*Výslovnost spisovné češtiny I*, 1967, p. 71). At the same time, the text states that there exists a certain uncoded norm of prosodic means in the literary language users’ awareness; that we are aware of the deviations from this norm and perceive them as a violation of the fundamental

¹⁴⁰ In original: “Norma těchto prostředků má poněkud jiný charakter nežli při hláskách a přízvuku. Otázka, zdali je možno uskutečnit též kodifikaci zvukových prostředků větných, nestala se zatím z ortoepického hlediska předmětem důkladnějšího zkoumání. Je to ostatně otázka dosti složitá.”

system of spoken language means, particularly in relation to sentence melodics and dynamics, speech segmentation and tempo (ibid.).

Segmental and suprasegmental levels of Czech language are, according to Zdena Palková (2017a) “relatively independent” – segment modification is not ranked among prosodic units as in some other languages and “prosodic features usually have no bearing on segmental processes in speech”.¹⁴¹ Palková mentions other characteristic **prosodic features of Czech language** that could serve interlingual comparisons: “Prosodic structure of Czech language is formed by a hierarchy of linear units *syllable – stress group – speech segment – complete utterance*. These units have specific sound characteristics and foundations in the language user’s impressions. (...) The sound quality that participates the most on forming of relevant features of suprasegmental modulation and prosodic units is the melody (contour of the fundamental tone)”¹⁴² (ibid.).

In this chapter, we deal primarily with those suprasegmental phenomena that are more or less stabilised in Czech language and that follow certain orthoepic rules – **stress** and sentence **melody**. We do not address the entire complex of prosodic means applied in production of continuous speech (including its segmentation into stress groups, speech segments and utterances, pause, modulation means of melody and tempo, vocal timbre and force, which manifests not only in word stress, but also sentence stress, contrastive stress and emphasis) – these are frequently highly dependent on the entirety of context, speaker stance and individual style of speech realisation, which can be adjusted to meet the hearers’ needs.¹⁴³

For an easier comprehension, examples of the mentioned phenomena are recorded with regular spelling in this chapter, not with phonetic transcription.

3.6.1 Word stress

Word stress, sound prominence (accentuation) of a syllable within a word or a phrase is characterized in Czech as constant, initial (is bound to the first syllable of a word) (Beneš et al., 2013, p. 107; Krčmová, 2008, pp. 81, 206; Palková, pp. 156, 277, etc.). Prominence of the

¹⁴¹ In original: “vlastnosti prozodické stavby nemají většinou vliv na segmentální procesy v řeči”.

¹⁴² In original: “Prozodickou strukturu češtiny tvoří hierarchie lineárních jednotek slabika – mluvní takt – promluvový úsek – ukončená výpověď. Tyto jednotky mají konkrétní zvukovou charakteristiku a oporu v pocitu uživatele jazyka. (...) Zvukovou kvalitou, která se nejvíce podílí na vzniku relevantních rysů suprasegmentální modulace a prozodických jednotek, je melodie (průběh základního tónu).”

¹⁴³ To those interested in sentential sound means, we recommend scholarly phonetic sources, e.g., Palková, 1994; Krčmová, 1992, 2008, 2009; Zeman, 2008; Beneš et al., 2013; Skarnitzl, Šturm, Volín, 2016; as well as entries in the *Encyklopedický slovník češtiny* [Encyclopedic Dictionary of the Czech Language], cf. e.g., its online version (Karlík, Nekula, Pleskalová, 2012 – 2020).

stressed syllable is not high, it practically manifests in speech only in substantial of intentional accentuation.¹⁴⁴ In relation to orthoepic stressing, these rules are fundamental:

- in isolated expressions, stress is always on the **first syllable**;
- in the stream of speech, some expressions **do not carry word stress**, they attach themselves to the preceding or following stressed word and together form a single **stress group** (speech phrase, phonetic word), a rhythmic whole – these are so-called **clitics**: proclitics and enclitics; proclitics are unstressed words following a pause that precede stressed words (e.g., conjunctions, particles, relative pronouns, occasionally lexical words – e.g., *pan* 'král); **enclitics**, which follow stressed words, are e.g., abbreviated pronoun forms (*mi*, *ho*, *mu*), reflexive pronouns (*se*, *si*), or forms of auxiliary verb *být* (to be) (*jsem*, *jsi*, *bych*, *bys*); in contrast to proclitics, multiple enclitics can follow a stressed word (*'napsal jsem si to 'správně*);
- in collocations of true monosyllabic prepositions (e.g., *před*, *nad*, *za*, *pod*, *na*, *ve*, etc.) with nominals (nouns, adjectives, pronouns), the case of which is determined by the preposition, **the preposition carries word stress**; *'chodí 'do školy*, *'píšeme 'na tabuli*, *'stojí 'před námi*, *'za vysokým 'kopcem*, *'vyletěl 'nad mraky*; however, the stress **can move from the preposition** to the following word:
 - if the preposition is followed by a longer word, usually comprising three or more syllables (*'stalo se to na 'nejnebezpečnějším 'úseku 'dálnice*),
 - if the following word is inflexible (usually an adverb), not grammatically dependent on the preposition (*'stalo se to na 'velmi 'nebezpečném 'místě*),
 - or if one wishes to place greater emphasis on this subsequent word (e.g., in comparisons, strong emotional interest), or, alternatively, the preposition is followed by an expression belonging to a list or a phrase (*'stalo se to na 'tomto 'místě*; *'pravidlo 'platí pro 'češtinu, a 'ne pro 'polštinu*; *'čtenář se 'zamýšlí nad 'českou, 'slovenskou a 'polskou 'výslovností*; *za 'přídavným 'jménem*); marked word order, unintentional pause in speech or rhythmic structure of stress groups can also cause a loss of stress in this type of prepositions (cf. *Výslovnost spisovné češtiny I*, 1967, pp. 68 – 69, Zeman, 2008, pp. 135 – 140);
- **secondary monosyllabic prepositions**, which were formed by abbreviating originally polysyllabic expressions (e.g., *kol*, *krom*, *dle*, *skrz*, *stran*, etc.) are usually not stressed:

¹⁴⁴ More on Czech stress in the works of Beneš et al. (2013, pp. 106 – 118), Palková (1994), Krčmová (2008), Zeman (2008).

skrz 'prsty, *krom* 'tebe; they can be stressed if followed by a monosyllabic word: 'dle tvé 'rady, 'krom té 'věci;

- **bisyllabic prepositions**, however, always carry stress on their first syllable in the same manner as other bisyllabic words: 'kromě 'tebe, 'kolem 'domu, 'beze 'strachu;
- **non-syllabic prepositions** (*k*, *v*, *s*, *z*) cannot carry stress, since they are not syllabic (i.e., they do not have a syllabic nucleus made up of a vowel or a sonorant consonant), they form a phonic whole with the following word ('*k domu*).

In addition to the regular **primary** stress, **secondary** stress may also appear, for example in compound words on the first syllable of the second part of the compound ('*česko,slovenský*), in longer non-compound words/stress groups with at least four syllables on the odd syllables; it is applied only as a rhythmicizing agent (only signalling a dactyl-trochee foot of speech); in Czech, secondary stress does not manifest prominently, it is realised only in low tempo or emphatic speech, or markedly in delivery of verse – “metre of Czech poetry relies on it”¹⁴⁵ (Krčmová, 2008, pp. 172, 207).

Violation of correct stressing principles can be observed primarily in reading texts aloud (even in official speeches, in audial media): monosyllabic prepositions frequently do not carry stress in circumstances where they clearly should, sometimes they are also audibly separated from the word they grammatically determine (and with which they should form a single stress group) by being attached to the preceding expression. Similarly, influence of Silesian dialect leads to erroneous stress placement on the penultimate syllable of words or stress groups (*po'jede do Ost'ravy* instead of '*pojede 'do Ostravy*); this phenomenon may be observed in many speakers of all age groups originating from this dialectal region, even those whose speech otherwise shows no other significant deviation from the literary norm. Erroneous word stress placement results in violation of rhythm of the Czech speech.

3.6.2 Sentence melody – intonation

An important role among prosodic means is played by changes to pitch (melodic changes). Before we briefly introduce their function in the Czech language, we first elucidate the terms used in the heading of this subchapter (which are sometimes considered synonymous): **intonation** is understood here, in accordance with views of Zdena Palková, as a complex sound quality (including primarily tonal, but also dynamic and temporal modulation), the term **melody**

¹⁴⁵ In original: “počítá s ním metrum českého verše”.

denotes the basic pitch contour – melody is thus the basic component of intonation (Palková, 2017c). **Sentence intonation** of Czech is stabilised in general traits; however, it **is not codified**. The intonation norm of the literary Czech should also be at least briefly addressed, since it serves to express important **functions** (functional opposites):

- it is a signal of conclusivity of an utterance or lack thereof;
- within the category of concluded utterances, it is a sole distinguisher of certain utterance types (it signalises their communicative functions, suggests the speaker's communication intent – declaration, question, order, etc.);
- it distinguishes neutral utterances from those that are emotionally marked, expressive, etc. (Palková, 2017b; Beneš et al., 2013, p. 88).

For neutral Czech utterances, three basic melodic patterns – **melodemes**¹⁴⁶ – became stabilised to distinguish between concluded and continuing utterances and their types (explanation based on Palková, 2017b; Beneš et al., 2013, pp. 88 – 92):

1. **conclusive falling melodeme** – for declarations, imperatives, and variable questions (i.e., questions containing a question pronoun or an adverb);
2. **conclusive rising melodeme** – for polar questions (i.e., those, where a *yes* or *no* answer is expected);
3. **inconclusive melodeme** – signalizes continuation of the utterance, its inconclusiveness.

Use of incorrect (i.e., other than stabilised) melodeme cannot express the listed function oppositions, as is shown in the following overview:

Table 8: Function of intonation in neutral utterance (according to Palková, 2017b)

Communication strategy	Sentence modality	Melodeme
conclusiveness →	declarative sentence	→ conclusive falling (1)
→	imperative sentence	→ conclusive falling (1)
→	variable question	→ conclusive falling (1)
→	polar question	→ conclusive rising (2)
inconclusiveness		→ inconclusive (3)

¹⁴⁶ A **melodeme** is a set of stable melodic schemes – cadences, which are applied with stable functions in a language; a **cadence** is an abstract scheme of the contour of melody, it is formed by a specific sequence of pitch changes. In description of Czech intonation, the term melodeme is currently used to denote a set of schemata with the same function, the term cadence is used to characterise these melodic schemata individually. The melodeme carrier in Czech is most frequently the last stress group in an utterance (Beneš et al., 2013, p. 88; Palková, 2017b).

Ad 1) **Conclusive falling melodeme**: tone gradually falls from the intonation nucleus (i.e., stressed syllable of the comment, sentence stress) to the end of the utterance;

<i>Přijedou v poledne.</i>	<i>Kdy přijedou?</i>
<i>Příje dou</i> <i>v po</i> <i>led</i> <i>ne.</i>	<i>Kdy</i> <i>při</i> <i>je</i> <i>dou?</i>

<i>Přijedou v poledne.</i>	<i>Kdy přijedou?</i>
<i>v po</i> <i>Příje dou led</i> <i>ne.</i>	<i>při</i> <i>Kdy je</i> <i>dou?</i>

Ad 2) **Conclusive rising melodeme**: this intonation type is the only tool for distinguishing polar questions from declarative sentences, which otherwise have the same grammatical structure; its acoustic form is stable and most well-defined (and it is the only one

dealt with by the codification handbook, as was previously mentioned); this basic form of polar questions is characterised by a step rise between two syllables of the last stress group carrying the melodeme – according to the placement of the step rise, different variants of rogative melody are distinguished; codification recognizes two options that are considered equal:

a) **rising anticadence** – the last syllable is raised:

<i>Přijdeš na oběd?</i>
<i>Přijdeš</i> <i>na o</i> <i>běd?</i>

b) **rising-falling anticadence** – second syllable of the stress group (i.e., the first syllable following the stress) is raised, subsequent syllables gradually fall slightly, but not to the level of the first syllable (the variant is applicable in at least tri-syllabic stress group):

<i>Přijdeš</i> <i>na</i> <i>běd?</i> <i>o</i>
--

Both the codification handbook and the more recent phonetic texts point out the un-literary realisations of the rogative melodeme, particularly the so-called Prague question, “singing”, for which the rise in the first syllable of the stress group is typical.

Ad 3) **Inconclusive melodeme** (the so-called semicadence): continuation, inconclusiveness of an utterance can be expressed by various melodic variants; despite a lack of definitions, two types of semicadence can be delimited:

a) syllables of the stress group suggesting inconclusive intonation are rising in gradual steps (rising melody contour):

<i>Když se vrátil z procházky, začalo... (pršet).</i>
<i>Když se vrá til cház začalo...</i> <i>z pro</i> <i>ky</i>

b) the melody of the entire stress group is raised – either with a flat contour or with a slight fall at the end; the first of the listed variants is illustrated in the following example:

<i>Přijdeme až později, protože...</i>		
	<i>poz dě ji</i>	
<i>Přijdeme</i>		<i>protože...</i>
	<i>až</i>	

Other variations in inconclusive melody, their marked and unmarked types can be found in Palková (2017b) and Beneš et al. (2013, pp. 91 – 92).

Properly utilised intonation contributes to the **comprehension** of the text for the receiver – it is therefore necessary to apply corresponding intonation type suggesting **conclusion** or **continuation of an utterance** in speech segmentation and, at the same time, differentiate sentence types on the basis of **communicative intent** using intonation. Intonation errors take place quite frequently, however, both in lay people and public speakers – for example, rising question intonation (anticadence) appears where terminal cadence or semicadence should occur (pitch significantly rises in a position where it should fall, or where it should signalise continuation of the utterance), or terminal cadence replaces semicadence as an incorrect intonation in variable and polar questions.

4 Orthoepy of segmental and suprasegmental phenomena in Slovak

Patrik Petráš

The description of Slovak pronunciation presented here is based on the valid codification handbook *Pravidlá slovenskej výslovnosti* [Rules of Slovak pronunciation] (Král', 2009), supplemented by further scholarly sources. Articulatory description of Slovak phones is discussed in the *Atlas slovenských hlások* [Atlas of Slovak phones] (Dvončová, Jenča, Král', 1969), orthophonic characterisation of Slovak has more recently been dealt with by Ábel Král' (1989b, pp. 200 – 262).

Regarding the topic of segmental phenomena, we provide orthophonic characteristics of individual phones and the descriptions of their literary pronunciation. In discussion of the vocalic system, we characterise the pronunciations of monophthongs, diphthongs and vowel clusters. We also point out the proper use of vocalic quantity in Slovak and address the rhythmic law, which is one of the main attributes of Slovak language, making it distinct from Czech. In the consonant system, we focus on the description of pronunciation of those consonants, the variants of which are dependent on their syllabic position (*j*, *v*). Here, we also address voicing assimilation in regressive direction, a highly important phenomenon of Slovak pronunciation. We also pay attention to the pronunciation of geminate consonants, softness relations of *t*, *d*, *n*, *l* – *t'*, *d'*, *ň*, *l'*, focusing in particular on the pair *l* – *l'*, which is the most functionally weakened. Pronunciation of the consonants *m*, *n*, and their variants is assimilation-dependent, it is therefore necessary to describe in detail their articulation in relation to the following phone. In discussing Slovak consonant clusters, we distinguish those that do not undergo simplification and those that are systematically simplified, e.g., by elision of a particular consonant. From among the suprasegmental phenomena, we describe those prosodic features, which have the greatest impact on phrasing and modulation of speech signal, i.e., word and sentence stress, contrastive stress, emphasis, sentence melody, and pause. It is important to note here that the orthoepic descriptions are based on the neutral pronunciation style – in some cases, we provide notes on higher style pronunciation; such pronunciation is marked with an asterisk.¹⁴⁷

¹⁴⁷ On pronunciation styles, cf. 1.2.3 *Sound culture and Slovak orthoepy*.

4.1 Slovak vowels

Literary Slovak utilises five oppositions of short and long vowels: [a] – [á], [e] – [é], [i] – [í], [o] – [ó], [u] – [ú]. Outside of this subsystem stands the short vocal [ä], the pronunciation of which is not required in neutral style, where it is substituted with vocals [e] or [a] (see further below). The inventory of Slovak diphthongs is as follows: *ia* [ja], *ie* [je], *iu* [ju], *ô* [uo]. All Slovak diphthongs have a rising contour. From the viewpoint of quantity, long monophthongs ([á], [é], [í], [ó], [ú]) and diphthongs ([ja], [je], [ju], [uo]) are considered long vocals. On the basis of the tongue position in articulation, classification of Slovak vowels can be presented in the following table:

Table 9: Categorisation of Slovak vowels according to the position of the tongue

Division according to the vertical position of the tongue	close	<i>i, í</i>		<i>u, ú</i>
	mid	<i>e, é</i>		<i>o, ó</i>
	open		<i>ä, a, á</i>	
		front	central	back
		Division according to the horizontal position of the tongue		

4.1.1 Orthophonic characterisation of Slovak vowels

In this chapter, we describe the main articulatory features of all Slovak vowels (according to Král', 1989b, pp. 203 – 219).

- **Vowels [a], [á]**

In pronouncing these vowels, oral cavity is the most open from among all short vowel articulatory positions. Jaw angle is the widest (wider in long [á] than in short [a]). Since it is an open vowel, tongue is in the lowest position – resting at the bottom of the oral cavity. Lips do not participate on articulation of these vocals.

- **Vowel [ä]**

The vowel [ä] is articulated after bilabial consonants [p], [b], [m], [v]. Its pronunciation is required only in higher style; in neutral style, it is replaced with [e], or alternatively with [a] in certain cases. The vowel [ä] is a diphthongoid – in its articulation, the tongue continuously changes its position approximately from that in the vowel [e] to that in the vowel [a], but this

change is much smaller than in articulation of true diphthongs. For this reason, this vocal is not considered a diphthong, but a vowel. The tip of the tongue rests against the lower gums, the blade of the tongue is arched towards the palate, with the articulatory effort centred in the area of the front blade of the tongue. The highest point of the tongue arch is more front than in [a], as well as slightly higher. This vowel is also classified as open. Jaw angle is slightly narrower than in [a]. Similarly to [a], the lips do not participate on articulation of [ä].

- **Vowels [e], [é]**

The tongue is positioned in the front of the oral cavity. Jaw angle is narrower than in [a], lips do not participate in articulation.

- **Vowels [i], [í]**

The tongue is in the highest front position. Jaw angle is narrower than in the vowels [e], [é]. Similarly, lips do not participate on articulation of these vocals.

- **Vowels [o], [ó]**

The tongue takes a back mid position. Jaw angle is narrower than in the vowel [a]. Lips actively participate in articulation of this vowel, they are rounded and protruded; the labialisation is not very prominent, however.

- **Vowels [u], [ú]**

The tongue takes a back closed position. Jaw angle is narrow and lips participate in articulation by protruding and rounding, the labialisation is rather prominent.

- **Diphthongs**

Diphthongs, as gliding vocalic sounds composed of two distinguishable parts, remind of certain Slovak monophthongs in their extremes. Diphthongs *ia* [i̯a], *ie* [i̯e], and *iu* [i̯u] each comprise an *i*-part and parts similar to the vocals [a], [e], and [u]. The diphthong *ô* [ɔ̯o] comprises a *u*-part and a part similar to the vocal [o]. Slovak diphthongs thus form a class of so-called *i*- and *u*-vocalic sounds. Since the peak of sonority is in the second part of a diphthong, all Slovak diphthongs are evaluated as rising. Their duration is comparable to that of long monophthongs. Differences exist in articulation of Slovak diphthongs: the tongue does not attain the same positioning in extreme positions as in corresponding monophthongs, it only approaches these

positions. Greater differences are observable in diphthongs with a larger articulatory movement between the first and the second part, that is, in the diphthongs [ja] and [ju], with [ju] being labialized as a whole (the labialization is greater in the second part). The labialization of the diphthongs [ju] and [uo] tends to be less pronounced as in the monophthong [u]. The movement of the tongue from the first to the second articulatory part of diphthongs is realised with a fluid motion.

4.1.2 Pronunciation of Slovak vowels

4.1.2.1 Vowel quantity

According to the codification of literary Slovak, the ratio of duration of short and long vowels should be approximately 1:2. Shortening of long vowels (or their substitution with short vowels) is considered an orthoepic error; the tendency towards this error is greater at higher speech tempo and in longer words. The shortening thus erroneously takes place:

- in long words, e.g., pronunciation of words *národného* and *vysielajú* as [národneho], [visjelaju];
- in words and forms *ktorí, ktorá, ktoré, ktorého*, etc., pronounced as [ktoři], [ktora], [ktore], [ktoreho];
- in some fixed expressions, such as *dobré ráno*, that get pronounced with shortened vocals in various positions: [dobre_ráno], [dobré_rano], [dobre_rano], etc.;
- since quantity distinguishes between minimal pairs in Slovak language, in some cases, a meaning change may occur due to a change in quantity, compare e.g., pairs *sud – súd*, *zástavka – zastávka* [sud – súd], [zastáuka – zástauka], etc.

In literary Slovak, a special rule applies in quantity distribution, known as the **rhythmic law**. According to the *Pravidlá slovenskej výslovnosti* [Rules of Slovak pronunciation] (2009, p. 42), this law can be formulated as follows: “long vowel of relational or derivational suffix is shortened after a long syllable”.¹⁴⁸ For this reason, literary Slovak uses forms *pekný*, but *slávny*; *ženám*, but *vládam*; *dlaniam*, but *básňam*. In applying the rhythmic law, long vocals are shortened to their short counterparts and diphthongs are subject to the following changes: [ja] to [a], [je] to [e], [ju] to [u], and [uo] to [o]. Rhythmic law does not apply to prefixed words and compounds, e.g., *súčasť*, *viackrát*. *Pravidlá slovenského pravopisu* [Rules of Slovak

¹⁴⁸ In original: “dlhá samohláska vzťahovej (relačnej) alebo slovotvornej prípony sa po predchádzajúcej dlhej slabike kráti”.

orthography] (2013, pp. 124 – 126) present a broader understanding of the rhythmic law, also delimiting twelve exceptions; it states that the second long vowel is not shortened for example in these words and forms: *lístie, prútie; hrádzí, schôdzi; výhra – výhier* (existing alongside a form in which the rhythmic law applies: *výher*), *Mlynárce – Mlynárie*, *hospodárstvo – hospodárstiev; pávi, krokodíli; zmúdriet', zväžniet'; chvália – chváliac – chváliaci, hlásia – hlásiac – hlásiaci; vyliavší, udiavší sa; blúdievať, krmievať; míliar, bieliareň; tisíc násobný, tisíckrát; niekým, niečí; nádielka, súčiastka*.

4.1.2.2 Pronunciation of vowel [ä]

In the so-called neutral style of the literary pronunciation, utilisation of the vowel [ä] is neither required, nor prohibited. In certain situations (such as delivery of classical Slovak poetry, or recitals in general, theatre plays), good knowledge of this vowel's pronunciation is necessary. In literary Slovak, this vowel occurs only following the consonants [p], [b], [m], [v]: *opät'* [opet'/*opät'], *devät'* [d'evet'/*d'evät'], *najmä* [naĭme/*naĭmä], *záväzok* [závezok/*záväzok]. The words *bábä, dúpä, holúbä, chlápä, púpä, sóvä, žriebä* and their derivatives are today pronounced with the vowels [a] or [e], e.g., [bába/bábe/*bábä], [púpa/púpe/*púpä], [žrie_̣ba/žrie_̣be/*žrie_̣bä] etc.

4.1.2.3 Pronunciation of diphthongs

Slovak diphthongs are acoustically similar to combinations [j] + vowel and [v] + vowel, but differ from them in their clear vowel timbre; at the same time, they differ from vowel clusters of the *diadém* [di__adém] type by their monosyllabicity. In pronunciation of diphthongs, these errors occur most frequently:

- pronunciation of a diphthong as a combination of two short vowels as if distributed across two syllables: *piatok* as [pi__atok] instead of [pĭatok], etc.;
- substitution of diphthongs by phone combinations [ija], [ije], [iju] or [ijá], [ijé], [ijú], resulting in forming new syllables: *čia, čie, čiu* as [čĭja], [čĭje], [čĭju] instead of [čĕja], [čĕje], [čĕju], etc.;
- replacement of a diphthong by a long vowel: *poriadna* as [porádná] instead of [porĭadna], etc.;
- epenthesis of the consonant [j] into an *i*-diphthong: [vjém] instead of [vĭem], etc.;
- pronunciation of [uo] as [vo, vó, ó]: *dôvod* as [dvovot], or alternatively [dvóvot] instead of [dĭvovot]; *môžem* as [móžem] instead of [mĭožem], etc.;

- pronunciation of [ʊo] as [uo] in word-initial position: *ôsmý* as [uosmi] instead of [ʊosmi], etc.

In case of the diphthong [ʊo], an opposite phenomenon can also be observed – an incorrect substitution of phone sequence [vo] by this diphthong, as in the words: *dvor* as [dʊor] instead of [dvor]; *svoj* as [sʊoj] instead of [svoj]. This phenomenon is linked to articulatory and acoustic kinship of the phones [v] and [ʊ].¹⁴⁹

4.1.2.4 Pronunciation of foreign vowels [ö], [ő], [ü], [ű]

Vowels [ö], [ő], [ü], [ű] occur in Slovak only in foreign vocabulary and loanwords, for example *Göteborg* [jötebork], *Montreux* [montrő], *menu* [menü], *Kitzbühel* [kicbűl], etc. *Pravidlá slovenskej výslovnosti* [Rules of Slovak pronunciation] evaluate the substitution of these foreign vowels with native vowels [e], [é], [i], [í], [u], [ú] as conspicuous and sometimes even uncultivated – in cases when such pronunciation has not been stabilised. As far as other foreign phones are concerned, geographic and local names and foreign personal names should generally be articulated according to the source language pronunciation in literary Slovak, with the caveat that foreign phones are to be substituted by the closest, acoustically similar Slovak phones.

4.1.2.5 Pronunciation of vowel clusters in Slovak

Vowel clusters do not occur in roots of domestic vocabulary in Slovak language. They can occur in prefixed words (*zaostriť*, *výučba*), compounds (*maloobchod*, *sebaúcta*), but chiefly in loanwords and foreign vocabulary (*idea*, *demokratizácia*, *kooperácia*, *gymnázium*), where even vowel clusters containing long vowels may occur (*premiér*, *oceán*). A syllabic boundary always occurs between such vowels. Vowel clusters are pronounced with a fluid transition from the first vowel to the second in literary Slovak, without any consonants being epenthesized and without separation by a hard vocal onset. Linked pronunciation between these vowels is marked in transcription with a ◡ (tie) symbol. The words in the preceding example are pronounced [za◡ostriť], [ví◡učba], [malo◡obchot], [seba◡úcta], [ide◡a], [demokratizáci◡a], [ko◡operáci◡a], [gimnází◡um], [premi◡ér], [oce◡án]. The last vowel of the final vowel cluster in foreign words serves a function of an inflectional (genitive) ending: *ideí* [ide◡í], *demokratizácií* [demokratizáci◡í], etc.

¹⁴⁹ On this topic, cf. 4.2.3.2 *Consonant v and its pronunciation variants*.

In the process of domestication of originally foreign words in Slovak language, a change in vowel clusters takes place that results with their replacement by a monosyllabic combination or insertion of a consonant into the cluster. If the first vowel loses its syllabic function, a diphthong is formed: *hieroglyf* [h̥ieroglif], *kiahne* [k̥iahňe], etc. Another marker of domestication is an articulation of soft consonants [t̪], [d̪], [ɲ], [l̪] preceding diphthongs [ja], [je], [ju] thus created: *halier* [hal̪ier], *Daniel* [daňjel]. If the second vowel loses its syllabic function, monosyllabic groups *au* [aʊ], *ou* [oʊ], *eu* [eʊ], *iu* [iʊ], *ai* [aɪ], *ei* [eɪ], *oi* [oɪ], *ui* [uɪ] are formed, as in the words *auto*, *reuma*, *koiné*, *medaila*, pronounced [aʊto], [reʊma], [koɪné], [medaɪla]. This is, in fact, analogical to the combinations of a vowel and [v] or a vowel and [j] in domestic vocabulary: words *kov*, *kraj* are pronounced [koʊ], [kraɪ]. In this regard, we would like to provide a note on Ľudovít Štúr's understanding of diphthongs: he considered even these phone combinations in word-final positions to be diphthongs, though not equal to the diphthongs [ja] and [je].¹⁵⁰

The most common errors in pronunciation of vowel clusters include the epenthesis of phones [j] and [v] into the clusters: *idea* as [ideja] instead of [ide_a], *kakao* as [kakavo] instead of [kaka_o], etc.

The topic of vowel cluster pronunciation is closely related to two other phenomena: hard vocal onset and glottal stop. A **glottal stop** is formed by an abrupt opening of the vocal folds and their vibration following a preceding closure, which results in an explosive noise typical for voiceless occlusive consonants [p], [t], [k]. It is, essentially, a voiceless occlusive consonant. In certain languages (e.g., English and German), it is a type of an onset or coda in vowel articulation under some circumstances, in other languages (e.g., Arabic), it can even attain a status of a true phone and phoneme. For a **hard vocal onset**, it is typical that the closure is not as profound as in glottal stop and explosion noise is not formed at the opening of the vocal folds. In hard vocal onset, vocal folds are not vibrated gradually, fluidly (as is typical for Slovak), but more abruptly and the first vibration cycle tends to be strongest than the immediately subsequent ones. Such onset is perceived as an articulatory and acoustic separation of a vowel from the preceding phone, that is, as a break in glottal vibrations for a brief, but perceptible time. It is thus a violation of the characteristic Slovak linked pronunciation, which manifests also in the vowels in word-initial positions being pronounced with a soft (smooth) onset of glottal vibration (vocal folds start to vibrate gradually) and in the fact that, in vowel clusters, the glottal vibrations are not interrupted on vowel boundaries.

¹⁵⁰ On this topic, cf. 2.2.2 *Codification of literary Slovak by Ľudovít Štúr*.

According to the *Pravidlá slovenskej výslovnosti*, hard vocal onset and glottal stop are articulated only rarely in Slovak language and only in specific situations, especially in interjections and onomatopoeic words. These cases are considered to be alternatively acceptable, or even proper:

- in sentence-initial position and following a pause: e.g., word combinations *istý bohatý kupec*, *ozval sa veľký krik* can be pronounced [ʔistý_bohatý_kupec], [ʔozval_sa_veľkí_krik];
- In emotionally marked utterances, in interjections, in exclamations, and in onomatopoeic words: e.g., *ach*, *ako ste ma naľakali*; *mée* can be pronounced [ʔax|ʔako_ste_ma_naľakali], [meʔeʔé];
- in expression of stark disagreement, a glottal stop may occur in word-final position: e.g., *nie* may be pronounced [ňjeʔ].

Vice versa, hard vocal onset and glottal stop are never articulated within words on morpheme boundaries, on root boundaries in compounds and on word boundaries within a stress group, i.e., words and phrases *naučiť*, *zaokrúhliť*, *veľkoobchod*, *pod oknom*, *on i ona* are pronounced [na_učiť], [za_okrúhľiť], [veľko_obxot], [pod_oknom], [on_i_ona], [na_ul'ici].¹⁵¹

Hard vocal onset and glottal stop thus function as voiceless consonants for the purposes of voicing assimilation¹⁵². If a voiced paired consonant occurs preceding a glottal stop, a corresponding voiceless paired consonant is pronounced in its stead due to assimilation. It thus follows that errors in voicing assimilation take place as a result of glottal stop or hard vocal onset, compare, e.g., pronunciation in combination with use of glottal stop *pod oknom*, *dub a smrek* as [pot_ʔoknom], [dup_ʔa_smrek] instead of pronunciation without glottal stop [pod_oknom], [dub_a_smrek].

4.2 Slovak consonants

Slovak consonants can be classified according to various criteria, for example, the place of articulation, manner of articulation, articulatory organ, auditory impression, voicing, participation of nasal cavity, and duration.¹⁵³ From the point of view of correct articulation, we should take into account: 1) place of articulation; 2) manner of articulation; 3) voicing.

¹⁵¹ Research by Ľ. Rendár (2015) shows that, in contrast to codification, use of glottal stops and hard vocal onsets is more frequent in actual speech practice. For more information on this topic, cf. 6.2.1 *Pronunciation deviations in segmental level of Slovak language*

¹⁵² On this topic, cf. 4.2.3.3 *Voicing assimilation*.

¹⁵³ For a detailed classification of Slovak consonants according to individual criteria, cf. Kráľ, 1989, pp. 259 – 260.

Classification of Slovak consonants and their orthophonic characteristics are presented according to Král' (1989, pp. 221 – 261).

4.2.1 Classification of Slovak consonants

4.2.1.1 Categorisation of Slovak consonants on the basis of place of articulation

The following consonant classes can be distinguished in Slovak on the basis of their place of articulation: bilabial, labiodental, alveolar (which can be further subdivided into prealveolar and postalveolar), alveopalatal, palatal, and velar. Additionally, laryngeal [h] also exists in Slovak.

The consonants are sorted into individual classes as follows:

- bilabial: [p], [b], [m], [ɸ]
- labiodental: [f], [w], [v], [ɱ]
- alveolar:
 - prealveolar: [t], [d], [n], [ɲ], [s], [z], [c], [ʒ]
 - postalveolar: [ʃ], [ʒ], [č], [ʒ], [r], [r], [ř], [l], [l], [l']
- alveopalatal: [tʰ], [dʰ], [ɲ], [lʰ]
- palatal: [j], [ɰ]
- velar: [k], [g], [ŋ], [x], [ɣ], [ŋ]
- laryngeal: [h]

The place of articulation criterion basically matches the classification on the basis of articulatory organ, with a distinction that alveolar, alveopalatal, palatal, and velar consonants are all seen as lingual in this classification. (Individual places in the oral cavity specify the position of the tongue contact.) Additionally, the consonant [h] is classified as glottal on the basis of articulatory organ.

4.2.1.2 Categorisation of Slovak consonants on the basis of manner of articulation

In classification of consonants on the basis of the manner of articulation, the main criterion is the type of obstruction to the airstream that occurs in articulation. If the passage of the airstream is completely blocked, occlusive consonants are formed, if only a partial obstruction in form of a constriction occurs, constrictive consonants are formed. In some consonants, obstruction in the oral cavity is combined with palatopharyngeal opening, forming nasal consonants ([m], [ɱ],

[ŋ], [ň], [ɲ], [ɳ], [ɸ] in Slovak). If the closure is not followed by an explosion, but rather friction, semioclusive, or affricate, consonants ([c], [ɟ], [č], [ʃ]) are formed.

The obstruction can sometimes cause only a significant reduction in sonority of the articulated sound in comparison with sonority of a vowel. In such case, noise is not created in articulation of the consonant. In this manner, glide consonants ([j], [w]; [j], [v]) are formed. In addition to these, nasal, lateral ([l], [l̥], [l̥], [l̥]) and trill phones ([r], [r̥], [r̥]) are articulated without noise – these are known as sonorant consonants.

The consonant classes on the basis of the manner of articulation can thus be summed up as follows:

- occlusive: [p], [b], [m], [ɱ], [t], [d], [n], [tʰ], [dʰ], [ŋ], [k], [g], [ŋ]
- constrictive: [f], [w], [v], [ɸ], [s], [z], [ɲ], [ʃ], [ʒ], [r], [r̥], [r̥], [l], [l̥], [l̥], [l̥], [j], [j], [j], [x], [ɣ], [ɤ], [h]
- semioclusive: [c], [ɟ], [č], [ʃ]

4.2.1.3 Categorisation of Slovak consonants on the basis of voicing

On the basis of presence of vocal fold tonus in articulation, Slovak consonants are divided into voiced and voiceless. However, voicing is a neutralizable feature in Slovak: in certain situations, a voiced consonant may be articulated in place of a voiceless consonant and vice versa (voicing assimilation takes place¹⁵⁴). Literary Slovak contains ten voicing pairs (each voiceless consonant has its voiced counterpart), which alternate in assimilatory positions. In addition to these, however, Slovak also has sonorant phones, i.e., unpaired voiced consonants – their quality of being voiced is unalterable in Slovak.

Table 10: Paired voiced and voiceless consonants in literary Slovak

voiced:	[b]	[d]	[dʰ]	[g]	[w]	[z]	[ʒ]	[ɟ]	[ʃ]	[ɣ] ([h])
voiceless:	[p]	[t]	[tʰ]	[k]	[f]	[s]	[š]	[c]	[č]	[x]

In the provided schema, voiceless *ch* [x] has not one, but two voiced counterparts, the phones [ɣ] and [h], which differ from each other most notably in their place of articulation – [ɣ] is a velar consonant, [h] is a laryngeal consonant.

Unpaired (sonorant) voiced consonants in Slovak are: [r], [r̥], [r̥], [l], [l̥], [l̥], [m], [ɱ], [n], [ň], [ɲ], [ɳ], [ɸ], [v], [ɸ], [j], [j], [j], [l̥], ([h]).

¹⁵⁴ On this topic, cf. 4.2.3.3 *Voicing assimilation*.

4.2.2 Orthophony of Slovak consonants

- **Consonants [p], [b], [m]**

Bilabial consonants [p], [b], [m] are articulated by forming a closure at the lips, which is opened with an explosion at the end of the occlusion. Since the tongue does not participate in the articulation, it can take various positions, its position in the release phase is determined by the following phone. These consonants are contrasted on the basis of their voicing and nasality. Firstly, [b] and [m] can be characterised as voiced, [p] as voiceless. Secondly, [p], [b] are oral (velum blocks the passage of airstream into the nasal cavity), [m] is nasal (velum is lowered into the oral cavity and allows the passage of airstream into the nasal cavity).

- **Consonants [t], [d], [n]**

Prealveolar consonants [t], [d], [n] are articulated by forming of a closure with the tongue pressing against the edges of the alveolar ridge. Jaw angle is narrow, with a widening tendency in the order [t] – [d] – [n]. Lips are not active in articulation of these consonants.

- **Consonants [k], [g], [ŋ]**

Velar consonants [k], [g], [ŋ] are articulated by a complete oral closure in the area of soft palate (velum). Closure is achieved by the dorsum (back of the tongue), with the apex (tip) of the tongue resting against the lower gums. As in previous groups, lips do not actively participate in articulation of these phones. Jaw angle is wider than in alveolar consonants. The consonant [ŋ] is articulated only when preceding the consonants [k] and [g]. In contrast to the alveolar [n], velar [ŋ] does not have a release phase – the velar closure is maintained in the transition between the phones in the entire [ŋk] and [ŋg] clusters.

- **Consonants [tʲ], [dʲ], [ɲ]**

Alveopalatal consonants [tʲ], [dʲ], [ɲ] are articulated on the threshold of the back of the alveolar ridge and front of the hard palate, but the lingual closure is directed towards the hard palate. Though the jaw angle is narrow, it widens in the order [tʲ] – [dʲ] – [ɲ]. Lips are not active in articulation and can take different positions depending on the phonic context.

- **Consonants [f], [w], [ɱ]**

In articulation of labiodental constrictive consonants [f], [w], [ɱ], the lower lip is positioned below the upper incisors, forming a narrow constriction. However, the consonant [ɱ] can also be classified as an occlusive, since the lower lip usually touches the upper incisors. Since the tongue does not participate in articulation, its position is dependent on the articulatory needs of the surrounding phones. In articulation of [f] and [w], soft palate blocks the airstream into the nasal cavity; these are therefore oral phones, as opposed to the nasal [ɱ], in articulation of which the velum opens up the passage of the air into the nasal cavity. The consonant [f] is voiceless, as opposed to [w] and [ɱ]. The consonant [ɱ] does not contain a noise component (the airstream passes through nose throughout the occlusion). It is articulated only preceding a different labiodental consonant, which means it also does not have a release phase.

- **Consonants [s], [z], [ɳ]**

In articulation of prealveolar constrictive consonants [s], [z], [ɳ], a narrow constriction is formed between the anterior alveolar ridge and the area on the border of the tip and the blade of the tongue. Jaw angle is narrow in articulation of these consonants. Oral consonants [z] and [s] differ in their voicing, being voiced and voiceless, respectively. Nasal voiced consonant [ɳ] is sonorant, articulated without noise. It is combination-dependent, articulated only when preceding alveolar constrictives [s], [z], [š], [ž]. During the palatopharyngeal constriction, the tongue takes a position dependent on the following sibilant. Lip positioning may vary in articulation of the consonants [s], [z], [ɳ] in dependence on their phonic context.

- **Consonants [x], [ɣ], [ɤ]**

In articulation of the velar constrictive consonants [x], [ɣ], [ɤ], the tongue is positioned below the velum and a constriction is formed between the blade of the tongue and the palate. Noise in consonants [x], [ɣ] is audibly modulated in the oral cavity; noise is not present in the consonant [ɤ], as the airstream passes freely through the nasal cavity. Lips do not participate in articulation; their positioning is dependent on the phonic context. The consonant [ɤ] is only articulated when preceding the consonants [x], [ɣ]. The consonant [ɣ] is also combination-dependent: it is articulated 1) in assimilatory position instead of the voiceless [x], and 2) instead of voiced [h] if two of these phones should be articulated in immediate succession. In such situation, phone cluster [ɣh] is typically articulated.¹⁵⁵ Lips do not actively participate in the

¹⁵⁵ On assimilation of consonants [x], [ɣ], and [h], cf. Subchapter 4.2.3.3 *Voicing assimilation*.

articulation – they can be positioned in dependence on the surrounding phones. Oral consonants [ɣ] and [x] differ from each other by being voiced and voiceless, respectively, the voiced [ŋ] differs from both of these in its nasality.

- **Consonants [c], [ɟ]**

Prealveolar consonants [c], [ɟ] are articulated with tongue placement similar to that in constrictive prealveolar consonants [s], [z], but differ from them in the manner of articulation, which comprises a closure phase and a constriction phase. In the first phase, a closure is formed as in the consonants [t], [d]; in the second phase, the constriction is formed as in [s], [z], respectively. Since a hissing sibilant noise identical to that of [s], [z] is formed in the constriction phase, these consonants are also labelled as affricates. They are identical in their manner of articulation to the other pair of affricate consonants – [č], [ǰ]. Jaw angle is narrow in articulation of [c] and [ɟ], and the soft palate blocks the passage of airstream into the nasal cavity. Lips do not actively participate in the articulation and can take various positions dependent on the phonic context. These consonants form a voicing pair, [c] being voiceless, [ɟ] voiced.

- **Consonants [š], [ž], [č], [ǰ]**

Postalveolar consonants [š], [ž], [č], and [ǰ] are characterised as hushing sibilant consonants. Regarding the manner of articulation, voicing contrasts and accompanying qualities (tension, width of tongue contact, degree of constriction, noise intensity), their relations are parallel to those of the consonants [s], [z], [c], [ɟ]. They differ, however, in that [š], [ž], [č], and [ǰ] are articulated on the threshold of the anterior and posterior alveolar ridge, or on the posterior alveolar ridge (the tip of the tongue is raised towards the upper gums). In an alternative manner of articulation, the tip of the tongue is behind the lower teeth, and, if this is the case, the blade of the tongue is touching the upper gums. Soft palate blocks the passage of airstream into the nasal cavity and, in comparison with the hissing sibilants [s], [z], [c], and [ɟ], the jaw angle is wider. Additionally, lips participate in articulation of these phones – they are protruded and rounded. The consonants [š], [č] are voiceless, [ž], [ǰ] are voiced.

- **Consonant [h]**

Main articulatory position and the place of the maximal stricture in the constrictive consonant [h] is in the larynx, hence its label laryngeal consonant. Vocal folds take a unique position in its articulation: they do not form a closure as in other voiced phones (even though [h] is also

a voiced consonant), a small aperture remains in between the folds during vibration. This consonant is very breath-demanding. Velum forms a weak palatopharyngeal closure, tongue and lips do not participate in articulation of [h] (they can take various positions depending on the phonic context).

- **Consonants [v], [ʋ]**

Lips actively participate on articulation of the sonorant consonants [v], [ʋ], i.e., they are labial phones: [v] is labiodental, [ʋ] is bilabial. Constrictive voiced phone [v] is articulated similarly to the voiceless [f]. Soft palate obstructs the passage of airstream into the nasal cavity, jaw angle is narrow, but, at the same time, wider than in [f]. The consonant [v] is characterised as a glide. The typical sound of this phone is formed in the second phase of its articulation, in the transition into the next phone. This consonant forms the rising syllabic onset. Its occurrence is limited to the positions preceding vowels and sonorant consonants, i.e., the presonant part of a syllable.

In the articulation of the lingual labialized phone [ʋ], the tongue takes a closed back position nearing the one in articulation of the vowel [u], but is not as high and the tip of the tongue usually rests at the bottom of the oral cavity. Lips are protruded and rounded, however, labialization of [ʋ] is not as pronounced as in [u]. Lip aperture is very narrow in its articulation – more so than in [u]. Soft palate obstructs the airstream into the nasal cavity, vocal folds vibrate, jaw angle is narrow. The consonant [ʋ] can also be characterised as a glide – it is formed by the dynamic movement of the lips towards maximal labialization. Its characteristic sound is formed in the first part of articulation – it forms the falling syllabic coda. The distribution of the phone [ʋ] is complementary to that of [v]: [ʋ] occurs only following vowels and sonorants, i.e., in the postsonant part of a syllable. Phones [v] and [ʋ] alternate preceding sonorants.

- **Consonants [j], [ɨ]**

Palatal consonants [j], [ɨ] are reminiscent of [v], [ʋ] in their combinatorics – the phone [j] occurs in the presonant part of a syllable, phone [ɨ] in the postsonant part. These phones are also classified as glides. In articulation of [j], the tip of the tongue touches lower gums and incisors, the blade of the tongue is raised towards the palate and fills out the front part of the oral cavity. Soft palate blocks the passage of airstream into the nasal cavity and the lips do not participate in articulation, their positioning is dependent of the consonant's phonic context.

Sonorant [ɨ] is quite similar to [j], but its characteristic feature making it distinct from [j] is that an articulatory movement towards an i-positioning without a stationary phase takes place in its articulation. The phone [ɨ] shares this quality with the sonorant [ʉ].

- **Consonant [l̥]**

Alveopalatal consonant [l̥] matches the consonants [t̥], [d̥], [ɲ] in place and partially also in the manner of articulation – consonant [l̥] is lateral, however – the closure in the central part of the oral cavity is combined with a constriction at the sides of the tongue and the oral cavity. In articulation of the sonorant [l̥], soft palate blocks the passage of air into the nasal cavity, lips do not actively participate in its articulation. This phone can be articulated in two ways: 1) “The tip of the tongue may rest against the lower gums and lower incisors, or it can be raised towards the upper gums. However, the tongue touches both the gums and the hard palate. The front contact is similar to that in d̥ or ɲ and is wide”¹⁵⁶ (Král', 1984, p. 82). 2) “The tip of the tongue rests against the upper gums and the area of contact is noticeably smaller than in the previous type. In this articulation, too, the tongue is raised towards the palate, but not as high as in the first type of articulation”¹⁵⁷ (ibid.). Ábel Král' (ibid., p. 83) also reminds that “from an orthophonic point of view, it is important to attain the normalised degree of ‘softness’ in articulation of l̥. It is achieved by a wider contact of tongue with the palate and filling out the oral cavity with the raised blade of the tongue.”¹⁵⁸

- **Consonants [l], [l̥], [l̥]**

Postalveolar consonants [l], [l̥], [l̥] are characterised as sonorant, with [l̥] and [l̥] also being syllabic. Articulation is similar to that of [l̥]. All of these are lateral consonants – throughout of the occlusion in the centre of the oral cavity, a constriction is formed on the sides of the tongue and oral cavity. The tip of the tongue touches either the posterior alveolar ridge or the threshold of anterior and posterior alveolar ridge. Jaw angle is approximately the same as in articulation of mid vowels. Soft palate blocks the passage of airstream into the nasal cavity and the lips do not participate in articulation of these consonants.

- **Consonants [r], [r̥], [r̥]**

Postalveolar consonants [r], [r̥], [r̥] are trill phones, vibrants. Closures and openings of passage of the articulatory stream rapidly alternate in the oral cavity. The entire tongue moves in the

¹⁵⁶ In original: “Konček jazyka sa môže opierať o dolné d'asno a dolné rezáky alebo sa môže dvíhať k hornému d'asnu. Jazyk sa však dotýka d'asna i tvrdého podnebia. Dotyk sa vpredu podobá na d̥ alebo ɲ a je široký.”

¹⁵⁷ In original: “Konček jazyka sa opiera o horné d'asno a dotyková plocha je zreteľne menšia než pri predchádzajúcom type. Aj pri tejto artikulácii sa jazyk vypína pod podnebnú klenbu, no nie tak vysoko ako pri prvom type l̥.”

¹⁵⁸ In original: “z ortofonického hľadiska je dôležité, aby sa pri výslovnosti l̥ dosiahol normovaný stupeň „mäkkosti“. Vzniká širším dotykom jazyka o podnebnú klenbu a vyplňaním ústnej dutiny zdvihnutím chrbta jazyka.”

articulation, but the vibrating movement is caused by the tip of the tongue. In the occlusion, a complete blockage of the airstream does not need to be formed, and even if it is, it tends to be rather weak and short. On the sides of the palate, the edge of the tongue forms a complete closure. In the opening phase, only the tip of the tongue moves away from the palate. The number of vibrations is not constant, it can range from a single tap in short [r], multi-tap [r] is articulated between consonants (this is a syllabic [r]), long [r̥] tends to consist of four or more vibrations. In the articulation of [r], a quite wide jaw angle is formed, lips do not participate in articulation, soft palate blocks the airstream into the nasal cavity.

4.2.3 Pronunciation of consonants and consonant clusters

In a continuous speech in Slovak, various phonic changes take place, whether in a syllable, word or on word or morpheme boundaries. According to the type and source of the consonant change, these can be:

- a) elision of consonants (e.g., words *mestský*, *šesťsto* being articulated as [meský], [šesto], etc.);
- b) articulatory adjustment of one phone to another – fusion of a shared articulatory phase of subsequent consonants (e.g., in words *sadnúť si* [sahnút͡si], *sadla si* [sadla͡si], *poltón* [poltón], an apical closure is shared in consonant pairs [dn], [dl] and [lt]);
- c) fusion of phones (e.g., *predsa*, *väčší* articulated as [pre>ca], [ve>čí/*vä>čí], etc.);
- d) assimilation according to place and manner of articulation (e.g., words *hanba*, *cengat'* being articulated as [hamba], [cɛŋgat͡ʰ], etc.);
- e) assimilation of phones on the basis of voicing (e.g., words and phrases *predpoved'*, *vzplanúť*, *pod papierom* being articulated as [pretpovet͡ʰ], [fsplanút͡ʰ], [pot͡papjɛrom], etc.).

4.2.3.1 Consonant *j* and its pronunciation variants

The phone [j] is articulated at a syllable-initial position, preceding a vowel. In accordance with this rule, we pronounce the words *hocijako*, *hokejista*, *prijat'*, *prijímat'*, *moji* as: [hocijako], [hokejista], [prijat͡ʰ], [prijímat͡ʰ], [moji]. This pronunciation rule applies also to prefixed words, e.g., *nadjazd*, *objem*, *odjakživa*, *adjektívum*: [nadjast], [objem], [odjagživa], [adjektívum]. Similarly, it applies to interlexical phonetics. For example, the phrase *to je jasné* is pronounced [to͡je͡jasné].

The grapheme *j* is pronounced as [j], if it occurs in a syllable-final position, following a vowel. Similarly, this rule also applies to interlexical phonetics. Words and phrases *dôjst'*, *nájst'*, *dvojazyčný*, *daj mi*, *daj jej* are pronounced [dɔjst'], [nájst'], [dvojazičnɪ], [daj_mi], [daj_jej].

Variant pronunciation [j]/[j̥] is permitted in the following cases:

- if an *i* or *y* is written in a syllable preceding *j*, e.g., *Ázijčan*, *kyj* can be pronounced both [ážijčan], [kij], and [ázičan], [ki];
- if a different consonant occurs in a syllable-initial position preceding the symbol *j*, e.g., *zjazd*, *zjav* can be pronounced both as [zjast], [zjau], and [ziast], [ziau].

Words *priat' – prijať* and *vie – vyje/vije*, which differ meaningfully, have to also be distinguished in articulation: [priat' – prijať], [vie – vije]. In the words *anjel*, *archanjel*, *evanjeliár*, *evanjelický*, *evanjelik*, *evanjelium*, a diphthong is articulated, the preceding consonant therefore also has to be articulated softly: [aňjel], [arxaňjel], [evaňjeliár], [evaňjelický], [evaňjelik], [evaňjelium].

4.2.3.2 Consonant *v* and its pronunciation variants

The phone [v] is articulated in syllable-initial position preceding a vowel or a diphthong, preceding consonants [r], [l], [l'], [j], and preceding syllabic consonants [r], [r'], [l], [l']. Words and phrases *voda*, *zvierá*, *vlak*, *vlek*, *vjame*, *vrch*, *vŕba*, *vlk*, *vlča* are therefore pronounced [voda], [zviera], [vlak], [vlek], [v_jame], [vrch], [vŕba], [vlk], [vlča].

The phone [u] is articulated in syllable-final position following a vowel of a syllabic consonant. The words *kov*, *dievča*, *bratov*, *pravda*, *krv*, *obŕv* (gen. pl. of *obrva*), *konzerv* are therefore pronounced [kou], [d'jeuča], [bratou], [praɥda], [kɾu], [obŕu], [konzeru].

Variant pronunciation [v]/[u] is permitted in the following cases:

- if the grapheme *v* is preceded by [u] or [ú] within a single syllable: *obuv*, *posuv*, *cúvnuť* can be pronounced both [obuv], [posuv], [cúvnuť] and [obuɥ], [posuɥ], [cúɥnuť];
- in syllable-final position in the word root and before a suffix if followed by a consonant [n], [ň], [l], [l'], [r]: *rovnako*, *slovník*, *zívla*, *havran* can be pronounced [rovnako, slovník, zívla, havran], as well as [rounako], [slouňík], [zíɥla], [haɥran].

Pronunciation of [f] in position of [u], e.g., [bratislafskí], [pol'iefka], [prf] instead of [bratislauskí], [pol'ieuka], [prɥ], is considered erroneous.

The phone [ɯ] is pronounced in words written with [u] if it occurs following a syllabic nucleus, as in the forms of feminine instrumental *ženou*, *dlhou ulicou*, pronounced as [ženoɯ, dlhoɯ ul'icoɯ]. The phone [ɯ] can also occur in foreign vocabulary and loanwords, e.g., *auto* (analogically also: *automat*, *automatický*, *automatizmus*), *Kaukaz*, *kraul*, *faul*: [aɯto], [kaɯkaz], [kraɯl], [faɯl].

Conversely, [ɯ] is not articulated in the words *náuka*, *naučiť*, *vyučiť*, since here, *u* occurs in syllable-initial position. The listed words are therefore pronounced [náuka], [naučiť], [viučiť].¹⁵⁹ The phone [ɯ] is also not articulated in syllable-initial position instead of *v* when preceding the vowel [o], as that would lead to an erroneous formation of the diphthong [ɯo]. This means that the words *dvojka*, *dvor*, *obvod* are pronounced [dvoɯka], [dvoɯr], [obvoɯd].

4.2.3.3 Voicing assimilation

Assimilation – a process of making a phone more similar to another (neighbouring) phone in its place and manner of articulation, but most notably in voicing – is one of the characteristic features of Slovak pronunciation. In Slovak, voicing assimilation has a **regressive direction**. In voicing assimilation, voiced paired consonants lose their voice in certain situations, voiceless paired consonants, conversely, can become voiced – both in dependence on the following phone. In voicing assimilation, only contrastive pairs of voiced and voiceless consonants alternate.¹⁶⁰ In discussions of assimilatory relations in Slovak, specificity of voiced consonants [w] and [ɣ] have to be addressed. Noise consonant [w] differs from [f] only in application of voice. Consonant [v] is not obstruent, but sonorant, it therefore cannot lose its voice, and alternates with the phone [ɯ] in certain situations.¹⁶¹ A voicing pair is thus formed only by the phones [f] – [w]. Obstruent velar consonant [ɣ] only differs from [x] in voice; consonant [h] additionally differs from [x] in place of articulation, being laryngeal. This, however, has no bearing on voicing assimilation, and therefore two different phones serve as a voiced counterpart to the voiceless [x]: [ɣ] and [h].

Voicing assimilation in literary Slovak takes place: 1) on word boundaries; 2) on boundaries of word bases in compounds; 3) on boundaries of prefixes and roots or bases of words; 4) on boundaries of word roots or bases and derivational (and in rare cases also inflectional) suffixes.

¹⁵⁹ On this topic, cf. 4.1.2.4 *Pronunciation of vowel clusters in Slovak*.

¹⁶⁰ For classification of Slovak paired voiced and voiceless consonants, cf. Table 10.

¹⁶¹ On this topic, cf. 4.2.3.2 *Consonant v and its pronunciation variants*.

- **Assimilation of voiced consonant in domestic vocabulary on word boundaries, on base boundaries in compounds, and on prefix-root boundaries**

When a voiced paired obstruent (or a cluster thereof) and a voiceless consonant meet on a boundary of words, bases, or of a prefix and a root, the voiced consonant changes into voiceless (or, in case of a cluster, the entire cluster is replaced with its voiceless counterparts). This assimilation takes place also in word-final position preceding a pause and generally on boundaries of isolated words. In accordance with this rule, words and phrases *dážď prší, sneh padá; kníhkupec, beztoho; nad plotom, v Prešove; mráz, rád; bezpečný, podpis* are pronounced: [dášť _prší], [sňex _padá]; [kníxkupec], [bestoho]; [nat _plotom], [f _prešove]; [mrás], [rát]; [bespeční], [potpis].

Voicing assimilation also takes place in originally prefixed words which are no longer perceived as such and today remain only orthographic exceptions: for example, words *avšak, včela, predvčerom, však, vtedy, nebezpečenstvo, roztomilý, nadchnúť* are pronounced [afšak], [fčela], [pretfčerom], [fšak], [ftedi], [rostopilí], [natxnúť].

- **Assimilation of voiceless consonant in domestic vocabulary on word boundaries, on base boundaries in compounds, and on prefix-root boundaries**

When a voiceless consonant (or a cluster thereof) and a voiced phone (be it voice paired consonant, sonorant, or a vowel) meet at a boundary of two independent words not separated by a pause or on a boundary of bases in a compound, the voiceless consonant changes into its voiced counterpart (or, in case of a cluster, the entire cluster is replaced with its voiced counterparts). This change is rare on a prefix-root boundary. Word phrases and compounds *mesiac jún, vlak mešká, most opravili, šéf úradu; bársaký, hocako, šéfdirigent* are therefore pronounced [mesɨaʒ _jún], [vlag _mešká], [mozd _opravi'i], [šéw _úradu]; [bársaký], [hozako], [šéwdirigent] in accordance with this rule.

Words *kde, sme* and words that include a *-kdy* component are pronounced [gd'e], [zme], [-gdi] and assimilation in words *bárskde, dakde, hockde, nikdy...* is also derived from this pronunciation; the word *takmer* is pronounced in the same manner: [bárzkd'e], [dakd'e], [hozkd'e], [ňigdi], [tagmer].

However, words with a *-kto* component (*kto, nikto, niekto, hockto...*) are appropriately pronounced unassimilated [kto], [ňikto], [ňiekto], [hockto]. Pronunciation [gdo], [ňigdo], [ňiegdo], [hozgdo] is erroneous, realised under the assumption that these follow the same regular pattern.

- **Assimilation of voiceless consonants on the boundary of a word base and a suffix**

This type of assimilation only applies in Slovak in full extent when a voiceless consonant meets a voiced obstruent on a boundary of a word base and a suffix – that is, this type of assimilation does not take place when a voiceless consonant is followed by a sonorant consonant or a vowel in such position. For example, words *prosba*, *mlatba*, *veštbá* are pronounced [prozba], [mladba], [vešdba]. Conversely, word forms *chlapa*, *chlapmi*, *šťastný*, *taktný* are pronounced [xlapa], [xlapmi], [šťastní], [taktní].

Occasionally, this type of voicing assimilation takes place in the verbal form of first person plural imperative, preceding the suffix *-me* (i.e., preceding the sonorous phone [m]): words *prosme*, *kúpme*, *pustme* are pronounced [prozme], [kúbme], [puzďme]. Assimilation also takes place in the pronoun forms *nášho*, *vášho*, *nášmu*, *vášmu*, which are pronounced [nážho], [vážho], [nážmu], [vážmu].

In adverbials formed with the suffix *-mo*, e.g., *obkročmo*, *skrčmo*, and, analogically, in the word *skusmo*, variant pronunciation is permitted: [opkročmo], [skržmo], [skuzmo], but also [opkročmo], [skrčmo], [skusmo].

- **Assimilation of voiced consonants on the boundary of a word base and a suffix**

When a voiced obstruent and a voiceless consonant meet at the boundary of a base and a suffix, the voiced consonant is assimilated. For example, words *blízko*, *bodka*, *dovozca*, *robte*, *ľahko*, *svedka*, *viezť* are pronounced [bl'isko], [botka], [dovosca], [ropt'e], [l'axko], [svetka], [v'jest']. This assimilation also takes place when a voiced paired consonant occurs in word-final position preceding a pause.

In genitive plural forms of nouns of the type *ceruzka*, *klbko*, *prosba*, *platba*, etc., which are pronounced [ceruska], [klpko], [prozba], [pladba], an epenthetic phone (vowel or a diphthong) is inserted, and assimilation does not occur in the preceding position, that is, the forms *ceruziek*, *klbiek*, *prosieb*, *platieb* are pronounced [ceruziek], [klbiek], [prosjep], [plat'jep].

- **Voicing assimilation [f] – [w]**

In Slovak language, the grapheme *v* denotes four phones: [v], [ʋ], [w], [f]. The phones [v], [ʋ] are sonorous and do not have a noise component, [w], [f] are obstruent. Consonant [w] has the same noise component as [f], but also has a tonal component, since it is voiced. It is, therefore, a “voiced [f]”.

The phone [f] is pronounced: 1) in word-initial position preceding a vowel where *f* is spelled, e.g., in words *farba*, *dúfať*; 2) in word-final position where *f* is spelled, if followed by

a pause or if the following word starts with a voiceless consonant, e.g., *golf*, *šéf prišiel*; 3) in syllable-initial position where *v* is spelled, if followed by a voiceless consonant, e.g., *včera*, *vták*; 4) as a part of a prefix *vz-* if followed by a voiceless consonant, e.g., *vzchopiť sa*, *vzťah*; 5) as a non-syllabic preposition preceding a voiceless consonant, e.g., *v práci*, *v kuchyni*. The listed words and phrases are therefore pronounced [farba], [dúfatʰ]; [golf], [šéf_prišiel]; [fčera], [fták]; [fsxopitʰsa], [fstʰax]; [f_práci], [f_kuxiňi].

The phone [w] is pronounced: 1) in syllable-initial position, where *v* is spelled, if followed by a voiced obstruent and not a vowel or [r], [l], [r], [r̥], [l], [l̥], [r̥], [j], e.g., in words *vbiť*, *v hore*, *vžiť sa*, and as a part of prefix *vz-*, *vzo-* in the same situation, e.g., *vzrast*, *vzostup*, similarly in the words *vziať*, *vzduch*, etc.; 2) in prepositional phrases preceding a voiced obstruent, e.g., *v Bratislave*, *v dome*, *v dialke*; 3) in word-final position and in compounds at the end of the first base, where *f* is spelled, if followed by a vowel, voiced or sonorous consonant and no pause occurs in between, e.g., *šéfredaktor*, *húf ľudí*, and additionally in words *Afganistan*, *Afganec*, etc. The listed words and phrases are therefore pronounced [wbítʰ], [w_hore], [wžiť sa], [wzrast], [wzostup], [wziať], [wzdux]; [w_bratislave], [w_dome], [w_dʲaľke]; [šéwredaktor], [húw_ľudí], [awganistan], [afgañec].

Pronunciation of words with unstable syllabification fluctuates, e.g., *závdavok* [závdavok/záwdavok]; same fluctuation is present in words in which *v* is preceded by a vowel and followed by a [n] or [ň], e.g., *vnem*, *vnútri*, *vnučka*, which are pronounced [vñem/wñem], [vnútri/wnútri], [vnučka/wnučka].

• Voicing assimilation [x] – [ɣ] ([h])

This assimilation is highly specific, since voiceless *ch* – [x] does not have one, but two voiced counterparts, the phones [ɣ] and [h], which most notably differ from each other in their place of articulation – [ɣ] is a velar consonant, [h] is a laryngeal consonant. The true voicing pair is thus [x] – [ɣ].

The following rules apply for the pronunciation of *ch* and *h*:

- If the phone [h] meets a voiceless consonant in an assimilatory position or if it occurs in word-final position before a pause, it is assimilated into [x], for example in the words and phrases *juh*, *lúh*, *roh stola*, *prah citlivosti*, which are pronounced [jux], [lúx], [rox_stola], [prax_citl'ivost'i].
- If the consonant [x] occurs in assimilatory position, such as in the words and phrases *nechže*, *cechmajster*, *nech ide*, *strach má*, or the consonant [h] occurs in such a position, as in *onehdy*, *kníhviazač*, *prah domu*, *Váh i Hron*, variant pronunciation is possible: either

[ňɛɣʒe], [ceɣmaɪster], [ňɛɣid'e], [stray_má]; [oňɛɣdi], [kňíɣvɪazač], [praɣ_domu], [váɣ_i_hron], or [ňehʒe], [cehmaɪster], [ňehid'e], [strah_má]; [oňehdi], [kňíhvɪazač], [prah_domu], [váh_i_hron]. At the same time, *Pravidlá slovenskej výslovnosti* [Rules of Slovak pronunciation] state that more common and natural is the pronunciation with [ɣ].

- If [x] or [h] occur in assimilatory position immediately followed by a [h], as in the phrases *strach hráčov*, *Váh hučí*, *lieh horí*, a phone group [ɣh] is usually pronounced: [stray_hráčoʊ], [váɣ_hučí], [lieɣ_horí].

Despite the fact that pronouncing [hh] is not erroneous, *Pravidlá slovenskej výslovnosti* do not recommend doing so, since such pronunciation is demanding on exhaled airstream and speech economy mechanism can manifest in the form of weakening or even total omission of the first [h]. Such pronunciation is extremely rare. Due to the large amount of exhaled air needed for articulation of [h], in inattentive articulation, this phone may at first disappear from the terminal parts of sentence and from longer words, which is considered a pronunciation error.

• Voicing assimilation of prepositions *s*, *k*

Rules of voicing assimilation also apply to pronunciation of prepositions *s* and *k*. Preceding a voiceless consonant, these are pronounced as [s] and [k], preceding a voiced consonant or a vowel, they are pronounced as [z] and [g], respectively. Prepositional phrases *s tebou*, *s pravdou*; *k tebe*, *k pravde* are therefore pronounced [s_ťeboʊ], [s_praʊdoʊ]; [k_ťebe], [k_praʊde], but *s vaším známym*, *s Evou*; *k domu*, *k hore* show assimilation: [z_vášim_známim], [z_evou]; [g_domu], [g_hore].

Voicing assimilation of non-syllabic prepositions *s* and *k* **does not take place**, however, when they are immediately followed by personal pronouns: *s ním*, *s ňou*, *s nami*, *s vami*, *s nimi*; *k nemu*, *k nej*, *k nám*, *k vám*, *k nim*; these are pronounced [s_ňím], [s_ňou], [s_nami], [s_vami], [s_ňimi]; [k_ňemu], [k_ňei], [k_nám], [k_vám], [k_nim]. Vocalized prepositions *so* and *ku* are naturally pronounced as [zo] and [gu], that is, phrases *so sestrou*, *ku kamarátovi* are pronounced [zo_sestroʊ] [gu_kamarátovi], with the exception of phrases *so mnou*, *ku mne*, when these are, irregularly, pronounced with a voiceless consonant: [so_mnou], [ku_mňe].

- **Voicing assimilation in loanwords**

In Slovak language, rules of voicing assimilation manifest in the use, borrowing and naturalisation of foreign vocabulary in the same manner as for domestic vocabulary. Voicing assimilation is one of the means of adapting foreign vocabulary to Slovak language. However, various exceptions to the general Slovak rules of voicing assimilation exist and the changes to the original pronunciation are not always explicable by the rules of assimilation.

The pronunciation rules of foreign vocabulary are as follows:

- In **commonly used loanwords**, voicing assimilation takes place on word boundaries, on base boundaries in compounds, and on boundaries of prefixes and bases. For example, *ex lex*, *ex libris*, *ad personam*, *plus-mínus*, *kontakt s bratom*; *avantgarda*, *basketbal*, *transakcia*; *exminister*, *dislokácia*, *subfebrilný* are pronounced [egz_leks], [egz_libris], [at_personam], [pluz_mínus], [kontagd_z_bratom]; [avandgarda], [baskedbal], [tranzakci_a/tranzakci_a¹⁶²]; [egzminister], [dizlokáci_a], [supfebrilný].
- This assimilation does not take place on boundaries of bases in **borrowed compounds** when a voiceless consonant precedes a sonorous consonant, as in the words *finišman*, *pivotman*, *biznisman*, *kongresman*, which are pronounced [finišman], [pivotman], [biznisman], [konɣresman¹⁶³].
- In **clusters of two or more consonants**, voicing assimilation occurs when two consonants co-occur within a word that could not co-occur in domestic vocabulary, e.g., words *augsburský*, *Aztékovia*, *ekzém*, *Habsburg*, *röntgen*, *Wolfgang* are pronounced [augzburskí], [astékovja], [egzém], [habzburk], [röndgen], [volwganɣk].
- In **loanwords in which ss was or is spelled**, pronunciation with unassimilated [s] is usually maintained. For example, words *glissando*, *pianissimo*, *asimilácia*, *asistent*, *komisia*, *kompresor*, *koncesionár*, *konfesionalny* are pronounced [glisando], [pi_anisimo], [asimiláci_a], [asistent], [komisi_a], [kompresor], [koncesi_onár], [konfesi_onálni].
- In some **loanwords with a letter s occurring between two vowels** [z] is pronounced, e.g., *mesalína*, *resorbovať*, *resumé* are pronounced [mezalína], [rezorbovať], [rezümé]. Similarly, [z] is articulated in many loanwords in which [s] occurs following a sonorous consonant: *in extenso*, *persifláž*, *vice versa* are pronounced [in_ekstenzo/in_ekstenzo], [perzifláž], [vice_verza]. In some words, however, pronunciation is not stabilised and a variant pronunciation with [s] is permitted, e.g., in the words *garsónka*, *konsonant*,

¹⁶² On variant pronunciations of *n*, cf. Subchapter 4.2.3.6 *Consonants m, n and their variants*.

¹⁶³ On variant pronunciations of *n*, cf. Subchapter 4.2.3.6 *Consonants m, n and their variants*.

persóna, personál, šansón, which can be pronounced [garsónka], [konsonant/konsonant], [persóna], [personál], [šansón/šansón], as well as [garzónka], [konzonant/konzonant], [perzóna], [perzonál], [šanzón/šanzón].

- Usually, there is a distinction in pronunciation of **words with Latin prefix *di-* and Latin (or Greek) prefix *dis-*, *dys-***. In words prefixed with *di-*, voicing assimilation does not usually take place. Therefore, words *disimilácia, disolúcia, disonancia* are pronounced [disimiláci_a], [disolúci_a], [disonanci_a]. In words containing prefixes *dis-*, *dys-*, voicing assimilation does take place – the words *disharmónia, disjunkcia, dysbázia, dyslália* are therefore pronounced [dizharmóni_a], [dizjun̩kci_a], [dizbázi_a], [dizláli_a].
- In **foreign words and loanwords beginning in the group *ex***, [gz] is pronounced in the position of *x* if followed by a vowel, voiced, or sonorant consonant. The same [gz] pronunciation is applied for *x* occurring in word-final position if voicing assimilation criteria are met. Per this rule, e.g., words and phrases *exaktný, exemplár, exil, existovať, ex lex, fax dostal* are pronounced: [egzaktní], [egzemplár], [egzil], [egzistovat̚], [egz_leks], [fagz_dostal].

4.2.3.4 Gemination

In literary Slovak, geminate consonants occur on morphemic boundaries, i.e., on boundaries of words not separated by a pause, on boundaries of bases in compounds, and of bases and prefixes or suffixes.

Pronunciation rules for geminate consonants are as follows:

- Geminate consonants are pronounced when two instances of one consonant (*tt, nn, šš*, etc.) or two consonants differing only in their voice (*bp, dt, d't*, etc.) meet within a word or on a boundary of two words. Within a word, geminate consonants are also articulated when two consonants differing in softness (*tt', td', dt', t'd*, etc.) co-occur. For example, words and phrases *dennodenne, chytte, mäkký, pollitrový, vyšší, nižší, podte, váš žiak, nad topolom* are pronounced [d'e>nod'e>ne], [xi>t'e], [me>kí/*mä>kí], [po>litroví], [vi>ší], [ňi>ší], [po>t'e], [vá>žiak], [na>topol'om].
- Geminate consonants are also articulated in consonant clusters when any of the letters *t, d, t', d'* co-occurs with a sibilant, such as in words *dvadsať, tridsať, predsa, rozhodca, sudca*, but also in prefixed words, *odcestovať, odsať, odčiniť, predsudok, desaťciferný*, etc. These words are articulated [dva>cať], [tri>cať], [pre>ca], [rozho>ca], [su>ca]; [o>cestovat̚], [o>činiť], [pre>cudok], [d'esa>ciferný].

- In certain cases, geminate consonants are also articulated when a semioclusive and a constrictive consonant meet on a morphemic boundary, as in the words *váčší*, *váčšina*, *váčšinou*, pronounced as [ve>čí/*vä>čí], [ve>čina/*vä>čina], [ve>činou/*vä>činou].
- Geminate consonant pronunciation also takes place in words with clusters of three consonants, if all the criteria for gemination are met and if the third consonant is [r], [l], [l'], [v], [m], [n], or [ň], and it is not preceded by [c], [ʒ], [č], or [ž]. For example, words *päťslabičný*, *rozslabikovať*, *predtlač*, *žltší* are pronounced [pe>cslabiční/*pä>cslabiční], [ro>slabikovať], [pre>tlač], [žl>čí] according to this rule.

In some cases, however, dual pronunciation is permitted, particularly on the boundary of a prefix and a base, on base boundary in compounds, if certain combinational rules are met, and on boundaries of independent words (in this last case, non-geminate pronunciation is even recommended). The aforementioned words and phrases *predsudok*, *päťslabičný*, *váš žiak*, *nad topoľom* can thus also be pronounced [pretsudok], [peťslabiční/*päťslabičný], [váž_žiak], [nat_topoľom].¹⁶⁴ In numerals, a simplified pronunciation is permitted, e.g., words *dvadsať*, *tridsať*, *desaťtisíc* can be pronounced [dvacať], [tricať], [desaťisíc], the numeral *šesťsto* is regularly pronounced [šesto].¹⁶⁵ The words *dcéra*, *väčšmi* and *najväčšmi* are pronounced [céra], [večmi/*väčmi], [največmi/*najväčmi].

Conversely, gemination does not occur:

- Geminate *j* is not articulated in literary Slovak, e.g., the word *dvojjazyčný* is pronounced [dvojžazičnǐ].¹⁶⁶
- Geminate consonants are not formed on the boundaries of independent words unless two instances of the same consonant meet in this position, nor are they formed if two consonants differing only in voicing, or any of the combinations of consonants [t], [d], [t'], [d'] with [c], [ʒ], [č], [ž] meet. Similarly, geminate consonants are not articulated if two consonants differing only in softness meet on independent word boundaries. Phrases *umývať sa*, *predstaviť si*, *rád som*, *pod' sem*, *pred tebou* are therefore pronounced [umívať_sa], [prectaviť_si], [rát_som], [pot'_sem], [pret'_tebou].

¹⁶⁴ For more detail on variant pronunciation, cf. Král' (2009, p. 66).

¹⁶⁵ For further information on the pronunciation of the consonant clusters *s'c*, *s'čl'*, *s's*, *sts*, *s'tz*, *s'st*, *s'str*, *s'st'*, *s'sl*, *s'dň*, *std*, *sd't'* cf. *ibid.*, pp. 67 – 68.

¹⁶⁶ On pronunciation of *j* and its variants, cf. Subchapter 4.2.3.1 *Consonant j and its pronunciation variants*.

- Geminate consonants are also not articulated in clusters of three or more consonants if the gemination conditions within for cluster are not met (see above), or if the morphemic boundary is not perceivable. For this reason, words *francúzsky*, *odpusťte*, *podstata*, etc. are articulated [francúski], [otpusťe], [poc̣tata].
- Geminate consonants are similarly not formed if a hissing sibilant ([s], [z], [c], [ʒ]) and a hushing sibilant ([š], [ž], [č], [ẓ̌]) meet on a morphemic boundary or if any of the constrictives [s], [z], [š], [ž] meet any semioclusive ([c], [ʒ], [č], [ẓ̌]), as in the words and phrases *rozšíriť*, *les šumí*; *sčítať*, *rozkaz čakať*, *nôž čistí*; *hocčo*, *viac času*, which are pronounced [rosšíritʃ], [lʲes_šumí]; [sčítať], [roskas_čakatʃ], [nʊoš_čistʲi]; [hocčo], [vʲiac_čaṣu].

4.2.3.5 Hard and soft consonants

Slovak orthography recognizes hard, soft, and neutral, vacillating consonants. Hard consonants include [t], [d], [n], [l], their soft counterparts are [tʲ], [dʲ], [nʲ], [lʲ]. Some pronunciation errors related to these consonants stem from Slovak orthography, according to which the softness of [tʲ], [dʲ], [nʲ], [lʲ] is not marked with a caron if followed by [i], [í], [e], [ĭa], [ĭe], [ĭu]. In this regard, the most troublesome is the opposition of [l] – [lʲ], where soft (palatalised) [lʲ] is frequently substituted with a hard [l]. Literary Slovak recognizes two pronunciation variants of [lʲ]:

1. **the so-called soft [lʲ]** should be articulated in all cultivated literary speech, for example in the words *ľad*, *ľan*, *koľko* [lʲad], [lʲan], [kolʲko].

2. **the so-called softened [lʲ]** is formed as a result of natural articulatory assimilation of the consonant [l] preceding an [i], [í], [e], [ĭa], [ĭe], or [ĭu], as in the words *koleño*, *ale*, *alebo*, *lipa*, *listie*, *polievať* [kolʲeno], [alʲe], [alʲebo], [lʲipa], [lʲistʲie], [polʲievatʲ].

It is important to clearly distinguish the softened [lʲ] from the hard [l], which appears e.g., in *slovo*, *volatʲ*, *vlak* [slovo], [volatʲ], [vlak]. However, it has to be noted that the current codification of soft [lʲ] pronunciation preceding [i], [í], [e], [ĭa], [ĭe], [ĭu] (the case of the so-called phonologically weak positions) does not match the real norm¹⁶⁷ of the literary Slovak. Due to this, a recent handbook of Slovak orthoepy for university students by Iveta Bónová (2019, p. 53) states that, in these phonologically weak positions, a non-palatalized (hard) [l] could be acceptable, such as in the words *lekár*, *pole*, which can be pronounced both [lʲekár], [polʲe] and [lekár], [pole].

¹⁶⁷ On the term real norm, cf. Subchapter 1.2.1 *Literary Czech. Usage – norm – codification*.

Disregarding the previously mentioned acceptance of hard [l] pronunciation in place of soft [l'] in phonologically weak positions, according to the current codification, two rules apply to the pronunciation of [t], [d], [n], [l] – [t'], [d'], [ň], [l']:

1. In word-final position, preceding vowels [a], [o], [u], [á], [ó], [ú], [é], diphthong [uo], or another consonant, these consonants are pronounced in accordance with orthography. If the letter *y* follows *t*, *d*, *n*, *l* in writing, these consonants are articulated in a hard manner, even though no distinction exists in phonic realisations of graphemes *i* and *y* in contemporary Slovak.

2. In domestic vocabulary, consonants [t'], [d'], [ň], [l'] are articulated in positions where their softness is denoted with a caron, as well as when followed by [i], [í], [e], [ia], [ie], [iu] (in such case, their softness is not marked graphically). For example, words *deň*, *deti*, *sloní*, *slonia*, *slonie*, *včelí*, *okamžite*, *šťastne*, *pošlem*, *pošli*, *mlieť*, *mlel*, *meľ*, *meľme* are pronounced [d'eň], [d'eťi], [sloňi], [sloňja], [sloňje], [f'čel'i], [okamžit'e], [šťastne], [poš'lem], [poš'li], [ml'iet'], [ml'el], [meľ], [meľme].¹⁶⁸

However, in foreign vocabulary and loanwords, the rule of softening of [t], [d], [n], [l] does not apply.

However, *Pravidlá slovenskej výslovnosti* [Rules of Slovak pronunciation] also point out specific cases of hard pronunciation of the consonants [t], [d], [n], [l] preceding [i], [í], [e], [ie] in domestic vocabulary. Here we list the most important among these:¹⁶⁹

- forms of nominative plural of adjectives belonging to the *pekny* paradigm and forms of adjectives belonging to the *matkin* paradigm, forms of certain numerals and passive participles, e.g., *vážení prítomní*, *Katkini príbuzní*; *jedni rodičia*, *jednej známej*; *zaviati lyžiari*, *vyvolaní žiaci* are articulated [vážení_přítomní], [katkini_příbuzní]; [jedni_rodičja], [jednej_známej]; [zavjati_ližiari], [vivolaní_žiaci];
- words *žiaden*, *hoden*, *vinen* are pronounced [žjaden], [hoden], [vinen];
- hard pronunciation is also required in pronouns *ten*, *tento*, *onen* and their forms and derivatives, e.g., *tej*, *tí*, *tie*, *títo*, *tieto*, *onej*: [ten], [tento], [onen], [tej], [tí], [tie], [títo], [tieto], [onej];
- [t], [d], [n], [l] are also articulated in prefixes if the base starts with any of the vowels [i], [í], [e], such as in the words *odist'*, *predist'*, *odistiť*, *predizba*, in compound *polizba* and in

¹⁶⁸ Forms *sloní*, *slonia*, *slonie*, *včelí* are forms of possessive adjectives, which are declined in Slovak according to the *pávi* paradigm. The unmarked form to the verbal forms *pošlem* (1 sg decl), *pošli* (2 sg imp) is the infinitive *poslať*, which, however, is pronounced with a hard [l], i.e., [poslat'].
¹⁶⁹ Cf. in detail Král (2009, pp. 69 – 71).

the words *nadeň, podeň, predeň*: [odístʰ], [predístʰ], [odistʰitʰ], [predizba]; [polizba]; [nadeň], [podeň], [predeň];

- hard pronunciation is also necessary in onomatopoeic words and interjections, such as *cingi-lingi, dínom-dánom, fidlikať, tikať, tikot*: [cingi_lingi], [dínom_dánom], [fidlikať], [tikať], [tikot];
- In addition to the listed cases, in literary Slovak, these frequently used words are also articulated in a hard manner: *jeden, jedenástʰ, teda, temer, teraz, terč, vtedy, v júni, v júli, poveternostný* [jeden], [jedenástʰ], [teda], [temer], [teras], [terč], [ftedi], [v_júni], [v_júli], [poveternostní].

For pronunciation of the consonants [t], [d], [n], [l] – [tʰ], [dʰ], [ň], [lʰ] in foreign and loan vocabulary, the following rules apply:

- hard pronunciation of the consonants [t], [d], [n], [l] preceding vowels [i], [í], [e] is one of the features of foreign vocabulary. For example, words *Adela, Filip, Martin, Peter, dekan, etnikum, liter, meter, miliarda, milión, tiger* are pronounced [adela], [filip], [martin], [peter], [dekan], [etnikum], [liter], [meter], [mili_arda], [mili_ón], [tiger];
- in fully naturalised foreign words, soft consonants [tʰ], [dʰ], [ň], [lʰ] are pronounced in place of their hard counterparts when preceding vowels [i], [í], [e], as in the words *anjel, košeľa, tehla*, as well as in word bases (not preceding suffixes) of *evanjelium, evanjelik, evanjelický*: [aňjel], [arxaňjel], [evaňjeli_ár], [evaňjelickí], [evaňjelic], [evaňjeli_um].
- soft consonants [tʰ], [dʰ], [ň], [lʰ] are also articulated in loanwords when preceding inflectional and domestic derivational suffixes and within these suffixes before [i], [í], [e], [ja], [je], [ju], e.g., *v teréne, na bicykli, na futbale, v hoteli, veľa paliet, anjlelik, špendlík, golier, maniak, Bengálec, terkelica, fiflénka, tónina, agrárnik, ciferník* [v teréne], [na_biciklʰi], [na_fudbalʰe], [w_hotelʰi], [veľa_palʰjet], [aňjelʰik], [špendlʰík], [golʰjer], [maňjak], [bengálec], [terkelʰica], [fiflʰena], [tónina], [agrárnik], [ciferňík];
- hard consonants [t], [d], [n], [l] are pronounced preceding foreign – including naturalised – suffixes *-ik, -ík (evanjelik, katolík), -ický, -ický (biblický, katolícky), -izovať (aktualizovať), -izmus (symbolizmus), -ista (huslista), -ika (akustika), -id, -it (jodid, igelit), -ín, -ínka, -ínka (bernardín, pralínka, blondínka), -ent (prezident), -er, -ér (partner, reportér), -es (notes), -e (finále)* and preceding terminal vowel clusters *-ia, -ie, -ea, -ium (beštia, lapálie, idea, evanjelium)*; these are therefore pronounced: [evaňjelic], [katolík], [biblickí], [katolícki], [aktu_alizovať], [simbolizmus], [huslista], [akustika],

[jodid], [igelit], [bernardín], [praliŋka], [blondiŋka], [president], [partner], [reporter], [notes], [finale], [bešti_a], [lapáli_e], [ide_a], [evaŋġeli_um].

4.2.3.6 Consonants *m, n* and their variants

The consonants *m* and *n* are subject to assimilatory changes in Slovak language. In the literary language, in addition to prealveolar constrictive [n], the grapheme *n* can be represented in speech by these phones:

- velar occlusive [ŋ], which is pronounced preceding [k] and [g], e.g., *banka*, *cengat'*: [baŋka], [ceŋgaŋt'];¹⁷⁰
- velar constrictive [ɲ], which is articulated when preceding [x], e.g., *melanchólia*, *synchronický*: [melaɲxóli_a], [siɲchronickí];
- prealveolar constrictive [ɳ], which may be articulated preceding [s], [z], [š], [ž]; in this case, variant pronunciation is permitted; the words *banský*, *inžinier*, *penzia* can therefore be pronounced [baŋský], [iɳžiniɛr], [peɳzi_a], as well as [banský], [inžiɲiɛr], [penzi_a];
- phone [m] is articulated in place of [n] in word-medial position when preceding bilabial consonants [p], [b], as in the words *bonbón*, *hanba*, *klenba*, *ženba*: [bombón], [hamba], [klemba], [žemba].

The grapheme *m* can manifest – in addition to the bilabial occlusive [m] – as a labiodental constrictive [ɱ], which is articulated preceding labiodental constrictives [f], [v], e.g., in the words *domvedúca*, *amfiteáter*, *triumf*: [domvedúca], [amɱfiteáter], [tri_umɱf].

4.2.3.7 Consonant clusters

Consonant clusters in literary Slovak can be divided into two groups: 1) consonant clusters that do not undergo simplification; 2) consonant clusters that undergo simplification.

1) Consonant clusters that are not simplified in contemporary Slovak are the following:

- *t, d + n, ň, l, ň* (*tn, tň, dn, dň, tl, tl', dl, dl'*) – for example, words *padnúť*, *tliet'*, *dláto*, *podliehať* are pronounced [padnúť], [tľ'iet'], [dláto], [podľ'iehať];
- *n, ň + t, d, t', d'* (*nt, nd, dt', nd', ňt, ňd, ňt', ňd'*) – for example, words *tento*, *kandidát*, *študenti*, *inde* are pronounced [tento], [kandidát], [študenti], [ind'e];

¹⁷⁰ This type of assimilation preceding [k], [g] does not take place on word boundaries, however – for example, phrases *ten kohút*, *jeden gunár* are pronounced [ten_kohút], [jeden_gunár].

- *l, l' + t, d, t', d', n, ň* (*lt, ld, lt', ld', ln, lň, lt, ld, lt', ld, ln, lň*) – for example, words *Poltár, halda, vlna, vlnený, uvoľniť, voľno* are pronounced [poltár], [halda], [vlna], [vlnění], [uvoľňiť], [voľno];
- *s, z, š, ž, c + t, d + n, ň, l, l'* (*stn, stň, zdn, zdň, štň, ždň, stl, zdl, stl', ctñ*) – for example, words *čestný, dáždňik, miestny, prázdniny, rastlina, starostlivý, šťastný, týždne, vlastne* are pronounced [čestní], [dáždňik], [mjestni], [prázdnini], [rastl'ina], [starostl'iví], [šťastní], [týždne], [vlastne], but a stabilised exception to this rule is the pronunciation of numerals, e.g., *šestnásť, šestnásti* (cardinal numeral), *šestnásty* (ordinal numeral) are pronounced [šesnásť], [šesnásťi], [šesnásti];
- *ntn, ntň* – for example, words *bažantnica, latentne, permanentný* are pronounced [bažantňica], [latentne], [permanentní];
- *šs, žs, sš, zš, zž, sč, čs, zč* – for example, words *černošský, mužský, rozšíriť* are pronounced [černošský], [mužský], [rosšířit'];¹⁷¹
- *stk, štk; stv, nstv, žstv, mstv; tkn, tkň, ktn, ktň; pt, ptk* – for example, words *čiastka, dotknúť sa, dvanásťka, efektne, Egypt, dejstvo* are pronounced [čiasťka], [dotknúť sa], [dvanásťka], [efektne], [egipt], [d'ejstvo].

2) Consonant clusters that are simplified in contemporary Slovak are:

- *tsk, dsk, dst, zsk, zst, dšt, tšt', ptč, dzsk, tstv, d'stv, ndsk* – the listed consonant clusters either undergo simplification, or the pair of occlusive (semiocclusive) and constrictive consonants are merged into the consonant *c* or *č*: e.g., words *hradská, kamarátsky, ľudský, podstata, rozstúpiť sa, prievdzský, šatstvo, Švédsko, lod'stvo* are pronounced [hracká], [kamarácki], [ľuckí], [pocťata], [rostúpiť sa], [prievický], [šactvo], [švécko], [loctvo];
- consonant clusters *zsk, zšt'* are simplified by an elision of the consonant *z*: e.g., words *Francúzsko, francúzština, perzský* are pronounced [francúsko], [francúšťina], [perskí];
- consonant clusters *dšt, tšt', ptč* in words such as *egyptčina, odštiepok, zľudštieť* are pronounced as: [egipčina], [očťiepok], [zľučťiet'];
- in consonant clusters *ntsk, ndsk*, the consonant pairs *ts, ds* are simplified by means of assimilation into *c*: e.g., words *asistentský, emigrantský, prezidentský* are pronounced [asistenckí], [emigranckí], [prezidenckí];
- consonant clusters *stsk, ststv, st'st* are simplified by elision of the consonant *t*, or the group *st, št'*: e.g., words *egyptský, koptský, mestský* are pronounced [egipskí], [kopskí], [meskí].

¹⁷¹ Voicing assimilation takes place in the words *mužský, rozšíriť*, etc.

4.3 Suprasegmental phenomena in Slovak

Suprasegmental speech phenomena, manifesting in units larger than a phone, i.e., syllables, words, phrases and sentences, are formed with dynamic, tonal and temporal modulation of speech (Král', 1989, p. 357). Certain suprasegmental phenomena, which are labelled with a shared name **intonation**¹⁷², can be regulated with a conscious effort, others are dependent on individual predispositions of the speaker (or are influenced by such). *Pravidlá slovenskej výslovnosti* (2009, p. 79) consider **stress**, **contrastive stress**, **melody** and **vocal strength**, **pause**, **tempo**, and **rhythm** to be the most important suprasegmental features. However, not all of the listed suprasegmental means can be codified with a unified approach, since some suprasegmental phenomena are also modified by individual characteristics of the speaker (e.g., speech tempo¹⁷³). Generally, though, it can be stated that the degrees of codifiability of segmental means and intonation are not the same.¹⁷⁴ The *Pravidlá slovenskej výslovnosti* (ibid.) state that the orthoepic codification of these speech features can be applied only to the so-called **intonationally neutral speech**, i.e., that does not carry extralingual information, such as information on physical and mental state of the speaker, etc. In the following part of the book, we deal with only those suprasegmental phenomena which are described codification-wise in the *Pravidlá slovenskej výslovnosti* (ibid., pp. 79 – 108), that is: stress, sentence stress, contrastive stress, emphasis, sentence melody, pause. These are also the basic means of speech phrasing. For greater transparency, examples of suprasegmental phenomena are not recorded in phonetic transcription, but only using the symbols for individual phenomena in question.

4.3.1 Stress

Word stress is a suprasegmental phenomenon which manifests by one syllable being more prominent than others. Stressed syllable is contrasted with unstressed syllables by its heightened prominence. Stress manifests in words, or in a stress group, with individual syllables as its carriers. Foregrounding of the stressed syllable is achieved by speech sound intensity and, most

¹⁷² On the relation of the terms intonation and melody, cf. Král' (2009, p. 79).

¹⁷³ The appropriateness of speech tempo can be evaluated e.g., in relation to the contents of the speech, communication situation, but it is heavily dependent also on the individualities of the speaker, e.g., their temperament (Hála, 1975, p. 290). For this reason, codification of "correct" tempo would be troublesome and it would be difficult to evaluate in relation to the norm. In evaluating tempo, it is better to focus on the comprehensibility of the communication, or on pragmalinguistic factors. However, research has also been carried out on the appropriate tempo (Sabol, Zimmermann, 1978; Smoláková, 2010; Petráš, 2012).

¹⁷⁴ On the topic of intonation codification, cf. Ondrejovič (2002, p. 78). The author discusses the field of intonation as a phenomenon which is more mutable and variable, and also harder to record and codify than the segmental sound level.

notably, by voice pitch. Alternation of stressed and unstressed syllables results in a sinuous movement of the intonation contour of a sentence.

In Slovak language, stress is placed on the first syllable of a word and is fixed (its position does not change), it is therefore not used for distinguishing between words, but serves the function of a boundary signal.

Sometimes, **primary** and **secondary stress** are distinguished. Secondary stress manifests as a less prominent foregrounding of another syllable in a word or stress group and is placed on a third or fourth syllable of longer words (*'skontro,lovat'*) and on the first syllable of the second base in compounds: *mnohonárodnostný* (*'mnoho,národnostný*), *polovodič* (*'polo,vodič*), *poľnohospodár* (*'poľno,hospodár*). *Pravidlá slovenskej výslovnosti* state that if both components of a compound expression are equal (if they are written with a hyphen), the second part of the expression also carries primary stress: *žlto-zelený* (*'žlto'zelený*), *grécko-rímsky* (*'grécko'rímsky*), etc.

In Slovak, however, unstressed words – **enclitics** and **proclitics** – also exist. Enclitics – unstressed words that are attached to the preceding stressed words as their hosts – most notably include forms of the auxiliary verb *byť* (*som, si, je, sme, ste...*), pronoun forms (*mi, ti, si, mu, jej...*) and, in some cases, also monosyllabic prepositions and conjunctions. Proclitics – unstressed words that are attached to the following stressed words as their hosts – include monosyllabic conjunctions and particles (*a, i, aj, že, keď, len, či, už*). Such groups of unstressed words and stress-carrying words form stress groups: *'volám sa; 'predstav si; 'Adam bol; 'dal som mu; keď 'prídu aj 'ostatní*.

In specific cases, however, enclitics and proclitics may also be stressed, particularly if they stand alongside another unstressed word: *'dal som 'si to; 'vypočul 'som si ho...; 'keď si to 'obzrel; 'nevedel, 'že to 'môže byť...*

Polysyllabic prepositions (*medzi, popri, okrem, ponad...*) carry stress on their first syllables. **Monosyllabic prepositions** (*na, pri, pred, u...*) can be both stressed and unstressed. Sometimes, a preposition may – but does not have to be – stressed in a given context. The stressing of monosyllabic prepositions is determined chiefly by their context, meaning prominence of the preposition in the given sentence, rhythmic foot, etc. Following monosyllabic stressed words, monosyllabic prepositions tend to be unstressed (particularly if in turn followed by a polysyllabic word): *'týždeň za 'týždňom, 'dom so 'záhradou*.

Monosyllabic prepositions can be stressed in the following situations:

- if they occur before a monosyllabic word (especially if they follow a polysyllabic word at the same time): *z 'roka 'na rok, 'išli 'cez les;*

- if they occur before an unstressed word: 'vedel 'o tom, 'zaostali 'za ním;
- monosyllabic preposition can, but does not have to be, stressed, if it is preceded by an enclitic, proclitic, or a group of unstressed words: 'Videli, 'že si sa 'na dvore 'zastavil. – 'Videli, 'že si sa na 'dvore zastavil.
- the stressing of monosyllabic prepositions can sometimes be decided also by other factors, e.g., meaning prominence of the preposition or rhythmic organisation of sentences and utterances.¹⁷⁵

4.3.2 Sentence stress, contrastive stress, and emphasis

In contrast to word stress, in which the first syllable of a word is foregrounded, **sentence stress** and **contrastive stress** manifest as acoustic foregrounding of a word, stress group, or a phrase in a sentence. Sentence stress is realised as a weak intonation rise; it is technically a sentence-level parallel to the word stress. Sentence stress foregrounds the comment of the utterance.

Sentence, or rather utterance, may have **objective** and **subjective order** of the **topic** (theme, that which is already known) and the **comment** (rheme, that which brings forth new information). The order topic – comment is understood as objective, while comment – topic is subjective.

Pravidlá slovenskej výslovnosti delimit the specific function of the contrastive stress as follows: 1) it is melodically and dynamically prominent; 2) it serves the sense structure of the utterance; 3) its position in a sentence is not fixed – it depends on the context, situation, stance of the speaker towards the contents of the utterance. While sentence stress can change the objective (topic – comment), or subjective (comment – topic) order of an utterance, contrastive stress can, in turn, change the meaning of the utterance; compare e.g., these sentences: *Človek má slobodnú 'vôľu.* – *Človek má 'slobodnú vôľu.* – *Človek 'má slobodnú vôľu.*

Sentence stress and contrastive stress are both frequently placed on evaluative lexis, such as adjectives, adverbs, and numerals. For example, in the sentence *Získal si veľmi dobré meno*, sentence stress should be on *veľmi*: *Získal si 'veľmi dobré meno.*

Emphasis is a specific type of foregrounding; it is an emotional accent. Prominent melodic and dynamic movement on the accentuated word is characteristic for emphasis; a lengthening of vowels may also take place: *To bolo 'úúžasnée!*

¹⁷⁵ Cf. in detail Král' (2009, pp. 86 – 87).

4.3.3 Sentence melody

Sentence melody manifests as a movement, change, and oscillation of the tonal component of speech. It is a change in the voice pitch in speech. In literary Slovak, three basic melody types exist: 1) conclusive cadence; 2) anticadence; 3) semicadence (inconclusive rising cadence).

- **Conclusive cadence**

Conclusive melody is characterised by a falling tone. Melodeme (the melodic segment with the greatest melodic movement, the so-called characteristic tonal interval) tends to be placed on the stretch of speech containing the comment of the utterance, or alternatively starts with the first syllable of the word that carries contrastive stress. If the melodeme is on an stressed word, the immediately following melodic contour tends to be more monotonous.

Conclusive cadence is the typical melodic contour for **declarative sentences** in Slovak language, e.g., *Parlament schválil návrh zákona.* ♩), **optative sentences** (*Kiež by sa nám tento rok vyhli povodne!* ♩), **exclamatory sentences** (*To je zaujímavé!* ♩) and for a specific type of rogative sentences, **variable questions** – these contain question words (*kto, kedy, koľko...*): *Kedy bol schválený návrh zákona?* ♩

- **Anticadence**

Tonal contour of this melody type is characterised by an upward movement towards higher tones. The characteristic tonal contour of the utterance is dependent also on syllable length: tonal movement is usually realised over a large melodic interval, which takes place by a gliding movement in monosyllabic words, a large interval between the first and second syllable can be observed in bisyllabic words; in trisyllabic and longer words, it is realised between the penultimate and the last syllable.

Anticadence is typical for the so-called **polar questions**, to which a *yes* or *no* (or, more generally, a positive or negative) answer can be provided. Correct melodic realisation of these questions is very important, as they do not contain a question word that would signal its status of a question. In spoken communication, melody is thus frequently the only question marker for these. Compare: *Urobil skúšku.* ♩ (declaration) – *Urobil skúšku?* ↗ (question)

The topic of **rhetorical and alternative questions** is closely linked to the polar questions. A question that the speaker addresses to oneself is called **rhetorical**. An example of such question is *Na koho som myslel?* ↗ It is impossible to answer it in the same manner as a polar question, with a *yes* or *no*. In the *Pravidlá slovenskej výslovnosti*, such question is delimited as

a specific type of polar question. It can have a grammatical form of a variable question, but its phonic realisation is that of a polar question.

Questions of the *Vidíš či nevidíš? Priznávaš chybu alebo ju popieraš?* are known as **alternative questions**. In these questions, the melodeme of polar question is applied to the first part, or rather to the first clause in the compound sentence, but the melodeme continues in an even higher position at the onset of the second part of the utterance. The melodeme of the alternative question is thus formed by a two-step interval, which transitions from one part of the question into the other, and a pause can occur between these parts. Therefore, in case of the utterance *Priznávaš chybu alebo ju popieraš?*, the intonation peak of the first part is placed on the segment *chybu*, the peak of the second part (higher than the first one) will be on the segment *alebo ju*; the second intonation peak of these questions (in the example, the *alebo ju* segment) is normally followed by a more monotonous melodic contour, which ends in a conclusive cadence (in this example on the segment *popieraš*). Melodic contours of the provided sentences can be schematically recorded as follows: *Vidíš ↗ či nevidíš? ↘ Priznávaš chybu ↗ alebo ju popieraš? ↘*

- **Semicadence**

Semicadence signals a relative independence of the preceding stretch of speech; at the same time, it causes an expectation of conclusion of the unfinished meaning. Semicadence connects utterance units that are in a coordinative or subordinative syntactic relation.

Literary Slovak recognises two basic forms of semicadence: **rising** and **neutral**. **Rising semicadence** is similar to anticadence. An upward melodic movement occurs on the last stress group before an inconclusive pause. In this case, it is a smaller interval that does not start as low as in the case of anticadence. Realisation of utterances with rising semicadence can be illustrated by complex sentences: *Povedal nám ↗, že nepríde. Boli zvedaví ↗, ako sa to skončí.*

Neutral, non-rising semicadence can be **raised** and **non-raised**. The melodeme of a raised non-rising semicadence is higher than that of the preceding word, and it is relatively stabilised at this height. The last one or two syllables may fall a little lower than the preceding one. Application of the raised non-rising semicadence can be illustrated on the complex sentences: *Neskoro sme sa dozvedeli →, že treba čakať. Oprávnená je aj otázka →, čo budeme robiť.*

Non-raised semicadence ties utterance segments together more closely than rising or raised semicadence. No pause is normally present in this semicadence type. It can be applied in a complex sentence, e.g., *Urobím to →, ak budem môcť.*

In the *Pravidlá slovenskej výslovnosti*, **falling semicadence** is also delimited. It is defined independently because the fall of this semicadence is not as steep and has a smaller interval than the conclusive cadence of a declarative sentence. Falling semicadence is essentially a continuation of a gradually falling sentence segment, resulting in a very close tie between the utterance part with this semicadence and the following sentence stretch. An example of such is *Neviem ↘, čo je to.*

Both the rising and neutral semicadence are seen as equal in the *Pravidlá slovenskej výslovnosti*. Simultaneously, use of the rising semicadence only is not advised, especially not repetitively in short stretches of speech. In order to show a high level of speech culture, it is desirable to alternate different types of inconclusive melody so that the speech does not appear mechanical, stereotypical.

4.3.4 Pause

A pause manifests in continuous speech as a break in the sound and articulatory process for an observable amount of time. Pause is frequently realised in places where punctuation marks (comma, full stop, bracket, hyphen, ellipsis, etc.) are used in writing.

The two basic types of pause are the **physiological pause**, which occurs for breathing needs, and **logical pause**, which separates two relatively independent parts of an utterance. Breath should be used in speech in such a manner that logical pauses can be also utilised for inhales, i.e., logical pause should overlap with physiological pause.

Pravidlá slovenskej výslovnosti distinguish two types of realisation positions for pauses: 1) those where it can be – and usually is – realised; 2) those where a pause is necessary; 3) those where a pause is not necessary; 4) those where a pause should not be realised.

1) **Places where a pause can be – and usually is – realised** represent the boundaries of standalone sentences, boundaries of clauses in complex and compound sentences, compound phrase, boundaries of a parenthesis, on the boundary of a foregrounded phrase, at an interrupted or unfinished clause, following addressing and interjections, and in sentences containing direct speech. This is, however, not an exhaustive list of potential realisations of a pause. It can also occur in other positions, especially where it is to induce a particular effect of tension and gradation, in places of twists in thought, before stating unexpected facts, etc. Examples: *Kvapky vody tam nebolo. || Dávno už nepršalo. – Svojím kamenným výzorom, | ako sme postrehli, | nás chcel odohnať. – Aj ona bola mladšia, | pred rokmi. – Hudba, | to je umenie! – Deti, | ponáhľajte sa!*

2) **Pause is necessary** in a compound phrase (*veselý, mladý priateľ*'), which could be understood as a phrase with complex, subordinated structure (*veselý mladý priateľ*') without it. Pause also has to occur in places of so-called false phrases, which would otherwise also cause an incorrect understanding of intended meaning: *Vypočuli sme si príhovor poslanca a predsedu významnej politickej strany*. In this utterance, a pause is to occur after the word *poslanca*. If it does not, the hearer may perceive the utterance as meaning that there was one speech by a single person with two functions. Such parsing of similar sentences is usually accompanied by a specific melodic modulation.

A pause has to occur also in longer and syntactically more complex sentences, which would otherwise become confusing and hard to understand. Additionally, such sentences cannot be pronounced without a physiological pause, the position of which should, however, take into account the semantic structure of the utterance. For example: *Ned'aleko tiekol potok Teplica, | ktorý v zime nezamrzal, | a zjari kvitli vôkol neho kvety, | akých nebolo na širokom okolí*. Regarding intelligibility, the pause following the word *nezamrzal* is the most important, the others could be omitted.

3) A **pause may be omitted** in all places where punctuation marks are present in graphic rendering of the utterance, as well as in positions of conjunctions. This is especially the case in simple coordination (*Dámy a páni! Medved' vzal ovcu i jahňa.*) and relatively simple compound sentences, such as *Viem, čo je to*.

4) A **pause should not occur** in logically unjustified positions and in positions where it would impede understanding of the utterance, or potentially cause misunderstandings or result in ambiguity, etc.

5 Characteristics and pronunciation of Polish phones

Milena Hebal-Jeziarska

This chapter deals with the characteristic and pronunciation of the Polish phones. In scholarly works, this topic has been covered in the textbooks of phonetics and phonology, in pronunciation exercise books and in language handbooks. Comparison of descriptions in these publications reveals differences in the use of terminology, definitions of certain phones, and reliance on outdated research in some phonetic phenomena. The most recent research results are being published in scientific papers and monographs, but always deal with a single linguistic or logopaedic topic. A complex probe into Polish phonetics has not been created. Additionally, these reports are scattered across various journals. The aim of this chapter is to highlight the differences in the characterisation of phones and terms across the prominent studies on Polish phonetics, and to illuminate the current state of research in this field. We also briefly point to the inventory of Czech and Slovak phones in order to motivate the reader to compare the contents of this chapter with those on Czech and Slovak languages.

5.1 Division of Polish phones

Phones are usually divided into vowels and consonants in Polish scholarly literature. The main division criteria typically used are: functional, acoustic, and articulatory. Functional criterion takes into account the syllabicity of the phone, i.e., its ability to form syllabic nuclei. In Polish, vowels are the carriers of syllabicity. Acoustic criterion evaluates sound characteristics, such as pitch, force, timbre, and quantity (Ostaszewska, Tambor, 2012, p. 29). Vowels are formed by tones (they have a regular acoustic contour), while consonants are made of tones and noises (they have irregular acoustic contour). Articulatory criterion evaluates the method of phone creation. If a closure, constriction, or both are formed in articulation of a phone, a consonant is pronounced. The articulation is open in vowels.

The authors of Polish studies on phonetics divide phones either on the basis of one of these criteria, which they consider superior, or on the basis of all three. An example of the former approach is the *Fonetyka i fonologia współczesnego języka polskiego* [Phonetics and phonology of the contemporary Polish language] by Danuta Ostaszewska and Jolanta Tambor – a publication which considers articulatory criterion the most important. The latter approach can be seen in the *Zarys fonetyki i fonologii współczesnego języka polskiego* [An outline of the phonetics and phonology of the contemporary Polish language] by Marek Wiśniewski, where all three criteria are taken into account. Due to their different approaches, non-syllabic *u* ([ɯ]),

[ũ], [u̯], [ũ̯]) and non-syllabic ([ɹ]/[ɹ̥]) are classified differently in these publications. In the *Fonetyka i fonologia współczesnego języka polskiego*, they are included in the group of semiopen consonants. Similar perception is found in the works of Bogusław Dunaj (2015) and Agnieszka Rosińska-Mamej (2014), while in Wiśniewski (2001) and Andrzej Dyszak, Elżbieta Laskowska, and Małgorzata Żak-Świąćicka (1997), these are not described as either vowels or consonants. In Wiśniewski's study, they are included in the group of non-consonants, comprising vowels and semivowels; in Dyszak, Laskowska and Żak-Świąćicka's text, they are given a standalone chapter. The issue with these phones dwells in the fact that, from functional point of view, they behave as consonants. From acoustic point of view, however, non-syllabic *i* is considered a mixed phone with an insignificant amount of noise (Dyszak, Laskowska, Żak-Świąćicka, 1997, p. 93, in Dłuska, 1983, p. 14). The articulatory criterion is interpretation-dependent. From articulatory standpoint, these two phones are open (articulated without closure), but "with a prominent narrowing (transition between an opening and a constriction)"¹⁷⁶ (Ostaszewska, Tambor, 2012, p. 35). Depending on the evaluation of the narrowing, they are either considered consonants/non-consonants or a standalone phone group. In older works (e.g., Jassem), these phones were also perceived as vowels (Wierzchowska 1965, p. 70).

One further classification that makes appearance in Polish scholarly literature has to be noted, having been used in the *Fonetyka i fonologia* [Phonetics and phonology] (1995) by Leokadia Dukiewicz and Irena Sawicka. The authors utilise the *vocoid* – *contoid* opposition. These terms were introduced by Kenneth Lee Pike (1947) for the purposes of phone categorisation on the basis of articulatory and acoustic criteria. This classification is contrasted with the division into vowels and consonants on the basis of functional criterion (Dukiewicz, Sawicka, 1995, p. 24).

In this book, we divide phones into vowels, consonants and semivowels, which include the non-syllabic *u* and non-syllabic *i*.

5.2 Polish vowels

Bożena Wierzchowska (1965, p. 69) defines vowels as follows: "Vowels are sounds in the articulation of which a channel without closures and strictures is formed in the central plane of the speech organs."¹⁷⁷ Danuta Ostaszewska and Jolanta Tambor (2012, p. 30) approach this

¹⁷⁶ In original: "ale z silnym przewężeniem (pośrednim między otworem a szczeliną)".

¹⁷⁷ In original: "Do samogłosek zaliczane są dźwięki, przy których wytwarzaniu w środkowej płaszczyźnie narządów mowy powstaje kanał bez zwarć i szczelin."

term in a similar fashion: “in articulation of vowels, in the central plane of the speech apparatus, a channel without closures and strictures is formed”¹⁷⁸. In Polish language, all vowels are voiced, syllabic and formed by tones. In certain positions, e.g., in word-final position, they may be devoiced (Nowakowski, 1997, p. 107).

In the description of Polish vowels in scholarly literature, articulatory criteria are taken into account – vertical and horizontal position of the tongue and the participation of lips in articulation Marek Wiśniewski (2001) also describes the movements of the palatal uvula, and Wierzchowska (1965) and Bogumiła Toczyska (2016) the movements of the lower jaw (mandible).

The division adopted in this book is based on a phone’s occurrence in an independent position. We distinguish basic vowels and their allophones, which occur only in certain phonic contexts. Allophonic variants are described on the basis of the most up-to-date findings of Piotr Wojdak (2018). phonics realisations of the letters *q* and *ę* are also included in discussion of vowels, despite these not being such, as it is quite likely that the reader will look up the letters *q* and *ę* in this subchapter. In description of phonic equivalents of the letters *q* and *ę*, we also provide data from the research of Anita Lorenc (2016).

5.2.1 Basic vowels

Six basic vowels are recognised in the Polish language: [i], [y], [e], [a], [o], [u].

These are oral vowels, monophthongs (consisting of one segment). Polish, in contrast with Czech and Slovak, does not have long vowels, it is therefore the most limited in the richness of inventory of vowels occurring in independent positions. However, it is the only of these languages to have distinct phonetic values for graphemes *y* and *i*.

In this study, on the basis of the newest findings in the field of phonetics, we assume that monophthong nasal vowels do not exist in Polish. Contrary to popular belief, *q* and *ę* are letters and do not simply represent vowels. Their sound realisation shall be discussed later.

The division of basic vowels according to the articulatory criterion is depicted in the following table. In addition, it includes the lower jaw participation criterion, which is usually not taken into account in linguistic studies. However, it is considered important by stage pronunciation speakers. The lower jaw participation criterion was explored by Toczyska (2016, p. 24).

¹⁷⁸ In original: “w czasie wymawiania samogłosek w środkowej płaszczyźnie aparatu mowy powstaje kanał bez zwarcia i szczeliny”.

Table 11: Categorisation of basic vowels on the basis of articulatory criterion as per Toczyska (2016, p. 24).

Vowel	Horizontal tongue position	Vertical tongue position	Lip participation	Lower jaw participation
[a]	central	open	natural	wide
[e]	front	mid	spread	neutral
[y]	front	close	spread	narrow
[i]	front	close	spread	narrow
[o]	back	mid	rounded	neutral
[u]	back	close	rounded	narrow

5.2.1.1 Pronunciation and characteristics of basic vowels

The pronunciation descriptions of individual vowels are based on the works of Barbara Karczmarchuk (2012), Bogumiła Toczyska (2016), Ewa Skorek (2010), and Bożena Wierzchowska (1964).

- **Vowel [a]**

In the articulation of the phone [a], the tongue is in the lowest position from among all Polish vowels. Jaw angle is wide, the mandible stays relaxed. The tongue touches the lower incisors. Lips maintain their natural position, that is, they are neither spread nor compressed, but are prominently rounded.

- **Vowel [e]**

In the pronunciation of the phone [e], the tongue takes a central position on the vertical axis. The tip of the tongue touches the lower incisors. Lips are slightly spread and tense. Lower jaw is in neutral position, it is slightly lowered.

- **Vowel [o]**

The tongue is positioned in the back of the oral cavity, its tip stays near the teeth. Lips are rounded and slightly protruded. Lower jaw is open wider than in [e], but less so than in [a].

- **Vowel [u]**

In pronunciation of the phone [u], the tongue is resting in the back of the oral cavity, but not as much as in [o]. Lips are compressed and rounded, as well as protruded. The tongue is close to the lower teeth. The phone [u] is the phonic realisation of two graphemes, *u* and *ó*.

- **Vowel [i]**

The tongue is moved forward and points to the lower teeth. It is arched. The lips are more spread than in any other Polish vowel.

- **Vowel [y]**

This is a phone that is the most difficult to pronounce for most foreigners. For this reason, we decided to pay closer attention to it, building on the descriptions by Karczmarszuk (2012), Toczyska (2016) and Skorek (2010).

The lips are more closed than in [e], but less so than in [i] (Karczmarszuk, 2012, p. 88), and are more spread than in pronunciation of [e] (Toczyska, 2016). Tongue is arched in the middle. The tip of the tongue is resting against the lower incisors; the lower jaw is in a central-raised position (Toczyska, 2016).

Toczyska (ibid.) also suggests what should be avoided in practicing the pronunciation of the phone [y]:

- the back part of the tongue should not be lowered;
- the tongue should be moved to a fronted position, it should not be retracted into the oral cavity;
- the lips should not be relaxed.

As a result of assimilation¹⁷⁹, the basic vowels and their allophones influenced by a nasal phone (e.g., [n], [m], [ŋ], [ɲ]) may become nasalised (see below). Nasalised phone is not the same as a nasal phone. The basic nasalised vowels in Polish language are: [ã], [ẽ], [õ], [ĩ], [ỹ], [ũ]. The examples of occurrence of these nasalised vowels are: *szansa* [šãũsa], *wąs* [võũs], *kunstowny* [kũũštovny], *pańsko* [paĩũko], *czynsz* [čỹũš], *pensja* [pẽũsia].

¹⁷⁹ Change of one or more features of a phone due to the influence of a neighbouring phone, e.g., when a nasal phone influences an oral phone, making it nasalised.

5.2.2 Vowel allophones

In Polish language, in addition to the basic vowels, there exist also their allophonic variants, which are either centralised, or with a raised articulation relative to the basic vowels. Centralised phones and/or phones with a fronted articulation may additionally be nasalised or devoiced (Wiśniewski, 2001, p. 85). This takes place when a basic vowel occurs in proximity of soft consonants or certain glides (semivowels). Under such circumstances, a change in vowel articulation takes place. Only the vowels [a], [o], [e], [u] have allophones in Polish. In transcription, these are marked with one or two dots positioned above the vowel.

Wiśniewski¹⁸⁰ (2001, p. 74) observes the occurrence of vowel allophones in the following contexts:

- in a position between two soft consonants, e.g., in the word *ciocia*;
- in a position bordered by *j* on both sides, e.g., in the word *jajko*;
- in a position following *j* and preceding a soft consonant, e.g., in the word *Jaś*;
- in a position following a soft consonant and preceding *j*, e.g., in the word *dzieje*;
- in word-final position following a soft consonant or *j*¹⁸¹.

Additionally, as Wojdak (2018, citing Sawicka, 1995, p. 124) states, raised *e* and *o* may occur facultatively, when in proximity of other glides, such as oral *j*, [ɨ], specifically nasal *j*, [ĩ], non-syllabic oral and nasal *u* ([ɯ] and [ũ], respectively).

In contemporary scholarly sources, there is a confusion regarding the number of variants of the described phones, as well as notation of vowels with raised or centralised articulation. In this book, we are drawing from the results presented by Wojdak in the article titled *Kiedy z jedną kropką, kiedy z dwiema? O położeniu języka podczas artykulacji niesamodzielnych wariantów samogłosek* [When one dot, when two? On the position of the tongue in articulation of vowel allophones] (2018).

Following Wojdak (2018, p. 25), we therefore adopt this notation for vowel allophones:

- two dots – “centralisation of articulation in relation to the basic vowel, i.e., deviation of the tongue toward the neutral position”¹⁸² – its movement forward (in [ä], [ö], [ü]) or backward (in [ë]), with a facultative raised articulation; ([ü]) is not raised, since [u] itself is already raised;

¹⁸⁰ Wiśniewski refers to the works of Zdzisław Sieber (1966), Maria Steffen-Batogowa (1975), Ostaszewska and Tambor (1990), Dukiewiczova (1995), and Sawicka (1995).

¹⁸¹ Wiśniewski, on basis of findings of Sawicka (1995, pp. 122 – 123).

¹⁸² In original: “centralizacja artykulacji w stosunku do samogłoski podstawowej, czyli odchylenie języka w kierunku położenia neutralnego”.

- one dot – standalone raising of articulation (relative to the basic vowel), without centralisation ([ê], [ô]) (Wojdak, 2018, p. 25).

5.2.2.1 Inventory of vowel allophones

In listing vowel allophones (with the exception of nasalised and desonorised variants), we are following the conclusions presented in the previously cited paper by Piotr Wojdak (2018, p. 24). We would like to remind of the differences between the inventory mentioned here and the notation of vowel allophones and information included in other Polish phonetic works.

Vowel allophones (not including nasalised and desonorised variants)

Allophones of the vowel [u]:

- close, back, centralised *u* – [ũ];

Allophones of the vowel [e]:

- mid-raised, front *e* – [ê];

Allophones of the vowel [a]:

- open-raised, central, centralised *a* – [ä];

Allophones of the vowel [o]:

- mid-raised, back *o* – [ô];
- mid-raised, back, centralised *o* – [ö];

As we have already mentioned, the listed variants can be nasalised or devoiced as a result of assimilation (Wiśniewski, 2001, p. 85).

5.2.3 Nasal vowels

In this publication, we are following the conclusion of Wiśniewski (2001, p. 76) and Ostaszewska and Tambor (2012, p. 61) that synchronously pronounced monophthong nasal vowels do not exist in the Polish language. phonic realisations of the letters *q* and *ę* preceding constrictive phones in word-medial position are here considered phones comprising more than a single segment; their articulation is asynchronous on the basis of the research and sources cited.

Synchronous nasality takes place when “both cavities – oral and nasal – participate in the phone articulation from start to finish. Soft palate does not form a closure with the back wall of

the pharynx, nor with the back of the tongue. (...) Asynchronous course (...) takes place when the soft palate allows the exhaled airstream into the nasal cavity with a slight delay relative to the opening of the oral cavity”¹⁸³ (Dukiewicz, 1995, p. 29).

The polysegmental character of the described phones was addressed as early as by Tytus Benni (1924, p. 21). He claimed that Polish nasal vowels have a diphthongal character, i.e., they comprise two segments. Bronisław Ročławski (1976, in Lorenc 2016, p. 329) also talked about the two-segmental realisation of Polish nasal vowels. Dukiewicz (1995, p. 33) writes about instrumental, auditive tests, which confirm the polyphthongal and oftentimes asynchronous articulation of the phonic equivalents of *q* and *ę* preceding constrictive phones in word-medial position. This is in agreement with the findings of Halina Koneczna (1934), Dukiewicz (1967), Maria Zagórska-Brooks (1964), Wierzchowska (1966). Lorenc (2016, p. 329) adds also the studies of Koneczna (1965), Maria Dłuska (1950), Wierzchowska (1971) to this group. Despite their disagreement on the structural details of the so-called nasal vowels¹⁸⁴, all of these authors agreed on the fact that these vowels do not comprise one sound element, and are thus not monophthongs.

Despite a volume of research carried out by prominent Polish phoneticians, a myth of *q* and *ę* vowels persists to this day. It is fed by schools and orthography, which suggest that *q* and *ę* are vowels just like the monophthongal [e], [o], [i], [y], [u]. Many publications provide information suggesting that the phonic realisation of the letters *q* and *ę* in the specified position is synchronous and monophthongal. *Słownik wymowy polskiej* [Dictionary of Polish pronunciation] (1977) serves as an example – its authors consider synchronous pronunciation of these phones to be the correct one.

All the contemporary phonetics handbooks of the Polish language (Wiśniewski, 2001; Ostaszewska, Tambor, 2012; Dyszak, Laskowska, Żak-Święcicka, 1997; Rosińska-Mamej, 2014; Dunaj, 2015) and pronunciation rulebooks (Dunaj, 2006; Karpowicz, 2018) written by experts contain information about diphthongal phonic realisation of the letters *q* and *ę* in word-medial position preceding a constrictive phone. The findings from recent experimental phonetic

¹⁸³ In original: “obie jamy – ustna i nosowa – uczestniczą w artykulacji głoski od jej początku do końca. Podniebienie miękkie nie tworzy zwarcia ani z tylną ścianką gardła, ani z tyłem języka. (...) Przebieg asynchroniczny (...) polega na tym, że podniebienie miękkie otwiera strumieniowi wydychanego powietrza dostęp do jamy nosowej z pewnym opóźnieniem w stosunku do otwarcia ustnego.”

¹⁸⁴ The terms nasal vowels and nasals are used in Polish scholarly literature, either in quotation marks, or without them, but accompanied by a “so-called”, to denote the phonic realisation of the letters *q* and *ę* in word-medial position preceding a constrictive (Steffen-Batogowa, 1975, pp. 30 – 34, in Ostaszewska, Tambor, 2012, p. 60). This is related to the fact that, in older literature, these were considered monophthongs with a synchronous articulation, while today they are perceived as polysegmental phones with asynchronous articulation.

research carried out by Lorenc (2016) have to be mentioned here, as they prove the polysegmental pronunciation of the equivalents of *q* and *ę* in the described position.

5.2.3.1 What are *ę* and *q* – an explanation

The graphemes *q* and *ę* are evaluated here as having their phonetic value dependent on the phonic context in which they occur.

- **Phonic equivalents of the letter *ę* in word-final position**

In the contemporary handbooks (Wiśniewski, 2001; Ostaszewska, Tambor, 2012; Dunaj, 2015), the following are listed as correct phonic representations of the letter *ę* in word-final position. Due to the differences in their interpretations, we also provide the names of authors listing the individual realisations. These are:

- vowel [e], e.g., *mogę* [moge] (Wiśniewski, 2001, Dunaj, 2015; Ostaszewska, Tambor, 2012);
- diphthong comprising an oral vowel [e] and nasal semivowel with a value of non-syllabic nasal *u*, marked as [ũ], e.g., *mogę* [mogeũ] (Wiśniewski 2001; Dunaj 2015);
- diphthong comprising a nasalised vowel¹⁸⁵ [ẽ] and nasal semivowel with a value of non-syllabic nasal *u*, marked as [ũ], e.g., *mogę* [mogẽũ] (Ostaszewska, Tambor, 2012; Wiśniewski, 2001 – seen as a permissible variant).

Diphthong comprising an oral vowel [e] and nasal semivowel with a value of non-syllabic *u* [ũ], as in [mogeũ], is considered incorrect.

¹⁸⁵ Nasalised vowel formed as a result of assimilation (under the influence of a nasal phone).

According to the research carried out by Lorenc (2016, p. 327) using experimental phonetic methods, the phonic realisation of the letter *ę* in word-final position is as follows¹⁸⁶:

- single-segment realisation (oral phase) – 37.93 % of verified instances;
- two-segment realisation (oral phase, followed by oral-nasal phase) – 34.48 % of verified instances;
- three-segment realisation (oral phase, followed by oral-nasal phase, followed by nasal phase) – 27.58 % of verified instances.

• **Phonic equivalents of the letter *ą* in word-final position**

In the contemporary handbooks (Wiśniewski, 2001; Ostaszewska, Tambor, 2012; Dunaj, 2015), the following are listed as correct representations of the letter *ą* in word-final position.

- diphthong comprising an oral vowel [o] and nasal semivowel with a value of non-syllabic nasal *u*, marked as [ũ], e.g., *mogą* [mogoũ] (Wiśniewski 2001; Dunaj 2015);
- diphthong comprising a nasalised vowel [õ] and nasal semivowel with a value of a non-syllabic nasal *u*, marked as [ũ], e.g., *mogą* [mogõũ] (Ostaszewska, Tambor, 2012; Wiśniewski, 2001 – as a permissible variant).

Diphthong comprising an oral vowel [e] and a nasal semivowel with a value of non-syllabic *u* [ɯ], as in [mogoɯ], is considered incorrect.

The pronunciation of this phone as a vowel [o] in word-terminal position is incorrect, as well as unacceptable for most Poles. This manner of pronunciation may even be ridiculed, especially in case of public figures or people with public trust, e.g., teachers.

According to the research carried out by Lorenc (2016, p. 328) using experimental phonetic methods, the letter *ą* in word-final position is realised as a phone comprising three segments: The first is the oral phase, followed by oral-nasal phase, and finally nasal phase. This realisation was observed in full 100 % of the observed samples.

¹⁸⁶ “The detection of sound emission sources with an anticipated threshold of 3 dB drop of acoustic pressure allowed to recognize three phases of articulation of nasal vowels, which are: 1. Oral phase – expulsion with resonance in oral cavity occurs. 2. Oral-nasal phase – characterised by participation of both the oral and nasal energy. 3. Nasal phase – takes place solely with resonance in nasal cavity” (Lorenc, 2016, p. 324). (In original: “Przeprowadzona detekcja źródeł emisji dźwięku z przyjętym progiem spadku ciśnienia akustycznego wynoszącym 3 dB pozwoliła wyodrębnić trzy fazy artykulacji samogosek nosowych, takie jak: 1. Faza ustna – powstająca z wyłącznym udziałem rezonansu jamy ustnej. 2. Faza ustno-nosowa – charakteryzująca się równoczesnym udziałem energii ustnej i nosowej. 3. Faza nosowa – powstająca z wyłącznym udziałem rezonansu jamy nosowej.”)

- **Phonic equivalents of the letter *ę* in word-medial position preceding a constrictive other than [ż] or [ś]**

In the contemporary handbooks (Wiśniewski, 2001; Ostaszewska, Tambor, 2012; Dunaj, 2015), the following are listed as correct representations of the letter *ę* in word-medial position (when preceding a constrictive other than *ż* or *ś*). These are:

- diphthong comprising an oral vowel [e] and a nasal semivowel with a value of non-syllabic nasal *u*, marked as [ũ], e.g., *kęs* [keũs] (Wiśniewski 2001; Dunaj 2015);
- diphthong comprising a nasalised vowel [ẽ] and a nasal semivowel with a value of non-syllabic nasal *u*, marked as [ũ], e.g., *kęs* [kẽũs] (Ostaszewska, Tambor, 2012; Wiśniewski, 2001 – as a permissible variant).

According to the research carried out by Lorenc (2016, p. 325) using experimental phonetic methods, the realisation of the letter *ę* in word-medial position (preceding a constrictive) is as follows:

- two-segment realisation (oral phase, then oral-nasal phase) – 84.21 % of realisations;
- single-segment realisation (oral phase) – 6.58 % of realisations.
- three-segment realisation (oral phase, oral-nasal phase, nasal phase) – 5.26 % of realisations;
- four-segment realisation (oral phase, oral-nasal phase, nasal phase, and finally oral-nasal phase) – 3.94 % of realisations.

- **Phonic equivalents of the letter *q* in word-medial position preceding a constrictive other than [ż] or [ś]**

In the contemporary handbooks (Wiśniewski, 2001; Ostaszewska, Tambor, 2012; Dunaj, 2015), multiple correct representations of the letter *q* in word-medial position (preceding a constrictive other than *ż* or *ś*) are provided. These are:

- diphthong comprising an oral vowel [o] and a nasal semivowel with a value of non-syllabic nasal *u*, marked as [ũ], e.g., *mąż* [moũś] (Wiśniewski 2001; Dunaj 2015);
- diphthong comprising a nasalised vowel [õ] and a nasal semivowel with a value of non-syllabic nasal *u*, marked as [ũ], e.g., *mąż* [mõũś] (Ostaszewska, Tambor, 2012; Wiśniewski, 2001 – as a permissible variant).

According to the research carried out by Lorenc (2016, p. 326) using experimental phonetic methods, the letter *q* in word-medial position (preceding a constrictive other than *ż* or *ś*) is realised as follows:

- four-segment articulation (oral phase, oral-nasal phase, nasal phase, and finally oral-nasal phase) – 45.88 % of realisations;
- two-segment articulation (oral and oral-nasal phases) – 37.65 % of realisations;
- three-segment articulation (oral phase, oral-nasal phase, nasal phase) – 16.47 % of realisations.

• **Phonic equivalents of the letters *q* and *ę* in word-medial position preceding *ż* and *ś***

In the contemporary handbooks (Wiśniewski, 2001; Ostaszewska, Tambor, 2012; Dunaj, 2015), the following are listed as correct representations of the letters *q* and *ę* in word-medial position preceding *ż* and *ś*:

- diphthong comprising an oral vowel [e]/[o] and a nasal semivowel with a value of non-syllabic nasal *u*, marked as [ũ], e.g., *część* [čeũść] (Wiśniewski 2001; Dunaj 2015);
- diphthong comprising an oral vowel [e]/[o] and a nasal semivowel with a value of non-syllabic nasal *i*, marked as [ĩ], e.g., *część* [čeĩść] (Wiśniewski 2001; Dunaj 2015);
- diphthong comprising a nasalised vowel [ẽ]/[õ] and a nasal semivowel with a value of non-syllabic nasal *u*, marked as [ũ], e.g., *część* [čẽũść] (Ostaszewska, Tambor, 2012; Wiśniewski, 2001 – as a permissible variant).
- diphthong comprising a nasalised vowel [ẽ]/[õ] and a nasal semivowel with a value of non-syllabic nasal *i*, marked as [ĩ], e.g., *część* [čẽĩść] (Ostaszewska, Tambor, 2012; Wiśniewski, 2001 – as a permissible variant).

• **Phonic equivalents of letter groups *-ęł/-ql***

The letter *ę* preceding the letter *ł* is phonically realised as *e*, e.g., *plynęła* [pɥneɫa]. The letter *q* preceding *ł* is phonically realised as *o*, e.g., *plynął* [pɥnoɫ].

• **Phonic equivalents of the letter group *-ęli***

The letter *ę* standing before the letter *ł* in this group is phonically realised as *e*, e.g., *plynęli* [pɥne'li].

- **Phonic equivalents of the letters *q* and *ę* in word-medial position preceding a non-constrictive phone**

Phonic realisation of the letters *q* and *ę* in word-medial position when preceding a non-constrictive will be labelled *consonantic pronunciation* in this book. The term *asynchronous pronunciation* will be reserved for the realisation of the polysegmental letters *q* and *ę* in word-medial position when preceding a constrictive and for realisation of polysegmental letters in word-final position.

- **Phonic equivalents of the letter *ę* in word-medial position preceding occlusive bilabial phones [p], [p'], [b], [b']**

The letter *ę* is realised as [em] in this context, e.g., *dostęp* [dostemp], *głęboko* [gʷemboko].

- **Phonic equivalents of the letter *q* in word-medial position preceding occlusive bilabial phones [p], [p'], [b], [b']**

The letter *q* is realised as [om] in this context, e.g., *kapać* [kompać], *głqb* [gʷomp].

- **Phonic equivalents of the letter *ę* in word-medial position preceding occlusive or semioclusive apico-dental phones [t], [t'], [d], [d'], [ʒ], [ʒ'], [c], [c']**

The letter *ę* is realised as [en] in this context, e.g., *będę* [bende].

- **Phonic equivalents of the letter *q* in word-medial position preceding occlusive or semioclusive apico-dental phones [t], [t'], [d], [d'], [ʒ], [ʒ'], [c], [c']**

The letter *q* is realised as [on] in this context, e.g., *kqt* [kont].

- **Phonic equivalents of the letter *ę* in word-medial position preceding occlusive or semioclusive apico-alveolar phones [t], [t'], [d], [d'], [ʒ], [ʒ'], [c], [c']**

The letter *ę* is realised as [eɲ] in this context, e.g., *męczyć* [meɲćyć].

- **Phonic equivalents of the letter *q* in word-medial position preceding occlusive or semioclusive apico-alveolar phones [t], [t'], [d], [d'], [ʒ], [ʒ'], [c], [c']**

The letter *q* is realised as [oɲ] in this context, e.g., *łączyć* [ʷoɲćyć].

- **Phonic equivalents of the letter *ę* in word-medial position preceding semiocclusive prepalatal phones [ʒ], [ć]**

The letter *ę* is realised as [eń] in this context, e.g., *pięć* [p'ɛńć].

- **Phonic equivalents of the letter *q* in word-medial position preceding semiocclusive prepalatal phones [ʒ], [ć]**

The letter *q* is realised as [oń] in this context, e.g., *bąq* [bońć].

- **Phonic equivalents of the letter *ę* in word-medial position preceding occlusive postpalatal and velar phones [k], [k'], [g], [g']**

The letter *ę* is realised as [eŋ] in this context, e.g., *lęka* [leŋk].

- **Phonic equivalents of the letter *q* in word-medial position preceding occlusive postpalatal and velar phones [k], [k'], [g], [g']**

The letter *q* is realised as [oŋ] in this context, e.g., *ląka* [ɫoŋka].

5.3 Polish semivowels

Polish semivowels are:

- non-syllabic oral *u* [ɯ], e.g., *ławka* [ɯafka], *terapeuta* [terapeɯta];
- non-syllabic oral *i* [ɪ], e.g., *jutro* [ɪutro];
- non-syllabic nasal *u* [ũ], e.g., *awans* [avaũs];
- non-syllabic nasal *i* [ĩ], e.g., *koński* [koĩsk'i];
- non-syllabic oral voiceless *u* [ɸ], e.g., *rzekłszy* [ʒekɸszy] (it is articulated when [ɸ] stands between two voiceless phones or in word-final position after a voiceless phone; it is an optional variant);
- non-syllabic oral softened *u* [ɯ̯], e.g., *weekend* [ɯ̯ikent].

5.4 Polish consonants

Bożena Wierchowska (1965, p. 69) describes consonants as phones, in articulation of which a closure, constriction, or a combination thereof, is formed in the central plane of the articulatory organs. The classification of Polish consonants is rather complicated, particularly so in comparison with Czech and Slovak classifications. Polish language has the richest inventory of consonants from among these languages – this is linked to the absence of softened

phones in Czech and Slovak. These two also utilise fewer palatal consonants. Nor do Czech and Slovak descriptions mention devoiced sonorant phones.

There are many disagreements about the Polish consonants among the current scholarly sources. The following overview of differences in classification of phones is based on the recent works of Marek Wiśniewski (2001), Danuta Ostaszewska and Jolanta Tambor (2012), Agnieszka Rosińska-Mamej, Andrzej Dyszak, Elżbieta Laskowska, and Małgorzata Żak-Święcicka (1997), and Bogusław Dunaj (2015). The most recent research results by Anita Lorenc (2018) also reveal new information about the place of articulation of the phones [ʒ] and [l], as well as about the character of the phone [l̥].

The main differences in the listed studies are:

- classification of the phonic equivalent of the letters *ch* and *h* preceding the vowels [i] and [ɨ], as in the words *Chiny*, *hiacynt*, *dach domu*: Wiśniewski (2001) considers the phones [xʰ], [ɣʰ] postpalatal. Same is concluded by Dunaj (2015), who records them as [x̥]/[ɣ̥] and describes them as postpalatal. Ostaszewska and Tambor (2012) and Dyszak, Laskowska, and Żak-Święcicka (1997), however, consider these velar softened phones – [xʰ], [ɣʰ];
- classification of the phone represented by letters *n* and *ń*, occurring before soft postpalatal phone, or letter *ń* occurring before **velar** phone, as in the words *bańka*, *sukienki*: this phone is interpreted as softened **velar** [ɲʰ] in Wiśniewski (2001), but postpalatal [ɲ̥] in Dunaj (2015);
- classification of semivowels [ɤ], [ɥ̃], [ɤ̞], [ɥ̞], [ɪ], [i̞]: in the works of Ostaszewska and Tambor (2012), and Dunaj (2015), the semivowels are included among consonants, in Wiśniewski (2001) among non-consonants, and in Dyszak, Laskowska, and Żak-Święcicka, they are presented as a standalone group;
- classification of the phones [ʒ] and [l] on the basis of place of articulation: the most recent research (Lorenc, 2018) concludes that these are articulated on the posterior gums and not on the gums in general, as stated in other publications;
- classification of devoiced sonorant softened phones, e.g., [ɱʰ]: in the works of Ostaszewska, Tambor, and Rosińska-Mamej, these are considered to be a part of Polish phonetic inventory. In the works of Wiśniewski (here with the exception of [ɲʰ]) and Dunaj, these phones are absent. Dyszak, Laskowska, and Żak-Święcicka do list these, but do note that they are a source of controversy;

- differences in the inventory of phones arising through assimilation and belonging among optional variants, such as apico-alveolar constrictive *n* [n̥] listed by Wiśniewski (2001), which arises as a facultative phonic realisation of the sequences *nw*, *nf*;
- names of phones; the phones that are defined as *apico-dental* in other texts are labelled as *dental* in the work of Ostaszewska and Tambor (2012), and *apico-alveolar* phones as *alveolar*.

5.4.1 Division of Polish consonants

In Polish scholarly literature, consonants are divided according to the following criteria:

- place of articulation,
- manner of articulation,
- voicing,
- acoustic qualities of phones,
- movement of the palatal uvula,
- movement of the blade of the tongue,
- additional articulatory movements or absence thereof.

The listed set of criteria represents the most exhaustive summary that – in this full form – is not available in any other single publication. Some of the mentioned criteria overlap: for example, the movement of the tongue blade may, but does not have to be, an additional articulatory movement. The classification on the basis of the additional articulatory movement is applied in the most recent text by Dunaj (2015 and reissues).

5.4.1.1 Division of Polish consonants on the basis of acoustic properties: sonorant consonants and consonant pairs

Sonorants are similar to vowels regarding their acoustic and articulatory properties (Dunaj, 2017, p. 17). Due to this, they were labelled neutral, transitional, “co-opened”. Maria Dłuska and Zenon Klemensiewicz claim that these phones exist “between” consonants and vowels (Dyszak, Laskowska, Żak-Święcicka, 1997, p. 61). Sonorant phones are voiced, they have a regular acoustic contour. In certain phonic contexts, they may lose their voicing. Phones characterised by qualities typical for consonants are known as (voice) paired consonants (obstruents).

Sonorants include [l], [l̥], [lʲ], [m], [m̥], [mʲ], [n], [n̥], [n̥̹], [n̥̹̹], [n̥̹̹̹], [n̥̹̹̹̹], [n̥̹̹̹̹̹], [n̥̹̹̹̹̹̹], [r], [r̥], [rʲ], and, depending on the specific publication, may include the equivalents of voiceless sonorant softened phones, e.g., [lʲ], [mʲ], [rʲ]. In addition, laryngeal phones [ɾ̥], [ɾ̥̹], [ɾ̥̹̹] may be recognised, as in Dyszak, Laskowska, and Żak-Święcicka.

Paired consonants include [b], [c], [ć], [č], [d], [d̥], [ʒ], [ʒ̥], [ʒ̥̹], [f], [g], [g̥], [x], [x̥]/[xʲ], [ɣ], [ɣ̥]/[ɣʲ], [k], [k̥], [p], [s], [s̥], [š], [t], [t̥], [v], [z], [z̥], [ž], [bʲ], [cʲ], [čʲ], [dʲ], [ʒʲ], [ʒ̥ʲ], [fʲ], [pʲ], [sʲ], [šʲ], [tʲ], [vʲ], [zʲ], [žʲ]. Every paired consonant occurs in a pair comprising a voiced and a voiceless phone, e.g., [p] – [b].

5.4.1.2 Division of Polish consonants on the basis of voicing: voiced and voiceless consonants

Movement of vocal cords, or rather the folds in the larynx, is related to the voicing of phones. When vocal folds are constricted, air encounters an obstruction, which causes it to vibrate – this is audible as a basic tone. Basic tone is labelled as voice (Wiśniewski, 2001, p. 40). If the vocal folds are open, air flows without any obstructions and the basic tone is thus not created, the articulated phone is voiceless.

Voiced consonants: [b], [d], [d̥], [ʒ], [ʒ̥], [ʒ̥̹], [g], [g̥], [ɣ̥]/[ɣʲ], [ɣ], [v], [z], [z̥], [ž], [bʲ], [dʲ], [ʒʲ], [ʒ̥ʲ], [vʲ], [zʲ], [žʲ], [l], [m], [n], [n̥], [n̥̹], [n̥̹̹], [r], [lʲ], [mʲ], [rʲ].

Voiceless consonants: [c], [ć], [č], [f], [x], [x̥]/[xʲ], [k], [k̥], [p], [s], [s̥], [š], [t], [t̥], [cʲ], [čʲ], [fʲ], [pʲ], [sʲ], [šʲ], [tʲ].

Desonorised consonants: [l̥], [m̥], [n̥], [n̥̹], [n̥̹̹], [r̥], [r̥̹].

Sonorants are voiced in independent positions, but lose their voicing in Polish language if they occur in word-medial position between voiceless phones, as in the word *czosnku*, or in word-final position following a voiceless phone, as in the word *myśl*. Loss of voicing can facultatively occur at the beginning of a word, if the sonorant precedes a voiceless phone, as in the word *msza*.

5.4.1.3 Division of Polish consonants on the basis of presence or absence of additional articulation with participation of the blade of the tongue: hard, softened, and soft consonants

- **Articulation without participation of the blade of the tongue: hard consonants**

This group includes the consonants:

[b], [c], [č], [d], [d̥], [z], [ž], [f], [g], [x], [ɣ], [k], [p], [s], [š], [t], [t̥], [v], [z], [ž], [m], [m̥], [n], [n̥], [ɲ], [ɲ̥], [l], [l̥], [r], [r̥]

- **Articulation with participation of the blade of the tongue as an additional articulation: softened consonants**

This group includes the consonants:

[bʲ], [cʲ], [čʲ], [dʲ], [zʲ], [žʲ], [fʲ], [mʲ], [lʲ], [rʲ], [pʲ], [sʲ], [šʲ], [tʲ], [zʲ], [vʲ], [žʲ]

Ostaszewska, and Tambor (2012), as well as Wiśniewski (2001) also consider [xʲ], [nʲ], [ɲʲ], [ɣʲ] to be softened. Ostaszewska and Tambor (2012) also include here the softened variants of sonorants which lost their voicing, e.g., [mʲ], [nʲ], [ɲʲ], [lʲ], [rʲ]. Dunaj (2015) does not mention these in his classification. Wiśniewski (2001, p. 58) mentions only [ɲʲ] from among these, in an example expression *czosnkiem* in Krakow-Poznań dialectal pronunciation.

According to the current research, articulation of softened labial phones is asynchronous, not synchronous as previously believed.

- **Articulation with the blade of the tongue which does not represent an additional articulatory movement: soft consonants**

This group includes the consonants:

[ć], [ź], [ś], [ż], [k], [g], [ń], [ň]

Dunaj (2015) also includes [x̣], [ɣ̣] and [ɲ̣], [ɲ̣̥] in this category.

5.4.1.4 Categorisation of Polish consonants on the basis of manner of articulation

In Polish language, these methods of articulation are distinguished: occlusion (i.e., total closure), semioclusion (occlusion and constriction), constriction (i.e., narrowing). The classification of phones is therefore as follows:

- **occlusive phones (occlusive-explosive):**

[b], [bʲ], [d], [dʲ], [d̥], [g], [g̣], [k], [ḳ], [p], [pʲ], [t], [t̥], [tʲ];

- **semiocclusive phones (affricates):**

[c], [c'], [ć], [č], [č'], [ʒ], [ʒ'], [ǯ], [ǯ], [ǯ'];

- **constrictive phones:**

[f], [f'], [x], [x']/[x'], [ɣ], [ɣ]/[ɣ'], [s], [s'], [š], [š'], [v], [v'], [z], [z'], [ž], [ž'];

- **semiopen consonants:**

➤ nasal: [m], [m̃], [m'], [n], [ñ], [n], [n'], [ń], [ń], [ŋ], [ŋ], [ŋ]/[ŋ'], [ŋ]/[ŋ'];

In addition, Wiśniewski (2001) lists constrictive variants of certain phones, Ostaszewska and Tambor (2012) mention desonorised variants of the softened nasal phones.

- lateral: [l], [l'], [l̥];
- trills: [r], [r'], [r̥].

5.4.1.5 Categorisation of Polish consonants on the basis of place of articulation

In Polish language, we distinguish the following articulatory areas: lips, tip of the tongue (teeth, alveolar ridge), blade of the tongue, root of the tongue. Information on individual phones is provided in the Subchapter *Division of Polish consonants*.

In comparison with the Czech and Slovak languages, pharynx is not present as a place of articulation, though Leokadia Dukiewicz (1995) characterises glottal stop as a phone formed in the glottis.

5.4.2 Division of Polish consonants

In this section, the characteristics of consonants resulting first from the manner of articulation and then from the place of articulation are provided.

5.4.2.1 Occlusive consonants

According to Wierzchowska (1965, p. 74), occlusion is the closure of the channel formed in the central plane of the articulatory organs. It can form in the oral cavity, nasal part of the pharynx and in the larynx.

5.4.2.1a Occlusive bilabial consonants

Occlusive bilabial consonants include the phones [p], [b] and their softened equivalents [p'], [b'].

These are articulated at (both) lips. In pronunciation of these phones, it is necessary to close the lips and subsequently open them so that the exhaled airstream can escape.

In pronunciation of the phone [p], the lips are closed more tightly as in that of [b]. The tongue rests in a nearly neutral position. The blade of the tongue is slightly domed, the muscles slightly tense. In both cases, the soft palate blocks the passage of airstream into the nasal cavity, touching the wall of the pharyngeal cavity. In pronunciation of the phone [p], the soft palate pushes more strongly against the cavity wall than in case of [b] (Karczmarchuk, 2012, pp. 108 – 112).

The phones [p'], [b'] are softened (palatalised) bilabial phones. They occur before [i] and [ɪ], e.g., in the words *pić* [p'ić], *pies* [p'ies], *bić* [b'ić], *bies* [b'ies].

In pronunciation of softened phones, lips are spread wider (Dukiewicz, 1995, p. 44). These phones have a secondary another place of articulation in addition to the lip closure. It is the blade of the tongue, which is raised to the hard palate (Ostaszewska, Tambor, 2012, p. 42). According to the current research results, pronunciation of these phones is asynchronous. This means that the movement of the tongue is delayed relative to the labial articulation (Karaś, 2010).

5.4.2.1b Apico-dental (dental) consonants

Occlusive apico-dental consonants include the phones [t], [d] and their softened counterparts [t'], [d'].

The phones [t], [d] are articulated by the tip of the tongue touching the back of the upper incisors. The tongue is flattened, lips are slightly open. In pronunciation of the phones [t'], [d'], the anterior tongue blade, immediately behind the tongue tip, touches the upper incisors. The occlusion in articulation of these softened phones thus starts deeper in the anterior oral cavity as in articulation of [t], [d] (Wierzchowska, 1971, p. 185).

Additionally, the phone [t] is articulated with more force than [d]; this is related to the stronger contact of the velum with the wall of the pharyngeal cavity in pronunciation of [t] (Karczmarchuk, 2012, p. 17). The phones [t] and [d] occur in both domestic and foreign vocabulary, their softened variants only in occur loanwords, e.g., *tir* [t'ir], *tips* [t'ips], *tiul* [t'ül]. Softened phones [t'], [d'] occur, similarly to other softened phones, preceding the vowels [i] and [ɪ].

5.4.2.1c Occlusive apico-alveolar (alveolar) consonants

The apico-alveolar consonants include those alveolar phones that are denoted with a dot under the characters [t], [d] in Polish Slavistic alphabet. These consonants are a result of the place of articulation assimilation, occurring in positions preceding alveolar phones. Examples of their realisation can be seen in the words *trzeba* [t̥šeba], *drzewo* [d̥ževo].

Articulation of these phones centres on the forming of an closure of “the tip, or alternatively, the front part of the tongue and gums or a constriction between them”¹⁸⁷ (Ostaszewska, Tambor, 2012, p. 40).

5.4.2.1d Occlusive postpalatal consonants

The category of occlusive postpalatal phones includes the consonants transcribed variably across publications as [k̠], [g̠] (Ostaszewska, Tambor, 2012; Dunaj, 2015) or [kʰ], [gʰ] (Wiśniewski, 2001; Dyszak, Laskowska, Żak-Święcicka, 1997). In pronunciation of these phones, the posterior tongue blade and the posterior hard palate form a closure (Wierzchowska, 1971, pp. 195 – 196). Both phones occur preceding vowels [i], [ɛ], e.g., *kiść*, *kiedy*, *gil*, *giez*, *plagiat*.

Phonic realisation of the letter sequences *ki/gi* is more nuanced and has to be addressed in detail. The combinations of the letters *ki/gi* and a consonant or a semivowel are realised as [ki/ɡi], e.g., *kiść* [kiść], *gips* [ɡips]. Sequences of letters containing *kie/gie* should, according to most studies, be realised without [ɪ], that is, as [kê/ɡê], e.g., *kiedy* [kêdy], while the combinations *kio/gio/kia/gia/kiu/giu* are to be realised with an [ɪ], e.g., *kiosk* [kɪosk]. According to Dunaj (2015, p. 34), the articulation without [ɪ] is disappearing, being replaced by a favoured realisation with an [ɪ] and may fall out of use entirely in the future.

5.4.2.1e Occlusive velar consonants

The consonants [k] and [g] belong to the category of occlusive velars. Their pronunciation is based on the closure realised by the tongue dorsum that ends in an explosion. The tongue is arched in the back part of the oral cavity. The lips are in neutral position (Karczmarczyk, 2012, p. 132). In Polish, the letter combinations *ky* and *gy* are exceedingly rare, particularly in contrast with Czech and Slovak. Their occurrence is limited to a handful of words.

¹⁸⁷ In original: “czubka, ewentualnie przedniej części języka z dziąslami“ lub szczelinie między nimi”.

5.4.2.1f Occlusive laryngeal consonant

One consonant missing in current Polish phonetic tables is the glottal stop. Interestingly, it can be found in Czech and Slovak tables. Despite its general absence, Dukiewicz (1995, p. 44) does characterise it. It is a phone articulated in the larynx. “The closure is formed by the vocal folds; it is interrupted by the exhaled air accumulated below them. It does not have a voiced equivalent for obvious reasons. (...) It occurs before syllabic vowels pronounced in isolation or at the beginning of a word after a pause, and it can be articulated in a middle of a word – usually at the beginning of a morpheme – following another syllabic vowel. In phonetic transcription, it is represented by the symbol ʔ: nauka [naʔuka]”¹⁸⁸ (ibid., p. 45).

5.4.2.2 Semiocclusive consonants

Semiocclusive consonants have three places of articulation in Polish language: teeth, gums, and the front part of the soft palate.

5.4.2.2a Semiocclusive apico-dental (dental) consonants

Polish language utilises four phones that can be classified as semiocclusive apico-dentals. These are the consonants [ʒ] and [c] and their softened counterparts [ʒ'] and [c']. The hard phones occur in domestic and foreign vocabulary, as in the words *dzban* [ʒban] and *car* [car]. The softened phone [c'] occurs only in loanwords, preceding the vowels [i] and [ɪ], e.g., in the word *cis* [c'is]. It is quite more problematic to provide an example of word containing the phone [ʒ']. Dunaj (2015, p. 34) claims that such words do not exist. He does provide an example of the phone as a result of voicing assimilation on word boundary, in *noc i dzień* [noz' _ i _ źeń]. Wiśniewski (2001, p. 26) provides a similar example, *nic innego* [ńiz' _ inn·ego], stating that it is a case of Krakow-Poznań pronunciation.

The pronunciation of the phones [ʒ] and [c] is similar. In both cases, lips are slightly open, the tongue is flat and touches the upper teeth. In pronunciation of [c], the tongue is pressed against the teeth more firmly than in [ʒ] (Karczmarszuk, 2012, p. 144). The position of the tongue in the pronunciation of [ʒ'] and [c'] is reminiscent of its position in pronunciation of [i] (Wierzchowska, 1971, p. 187). In contrast to Polish language, Czech and Slovak utilise only the phones [ʒ] and [c] from this category.

¹⁸⁸ In original: “Zwarcie tworzą wiązadła głosowe; blokadę przerywa gromadzące się pod nimi powietrze wydechowe. Z oczywistych powodów nie ma odpowiednika dźwięcznego. (...) Występuje ona przed samogłoskami sylabicznymi wymawianymi w izolacji lub na początku wyrazu po pauzie, bywa też wymawiana wewnątrz wyrazu – najczęściej na początku morfemu – po innej samogłosce sylabicznej. W transkrypcji fonetycznej odpowiada jej znak ʔ: nauka [naʔuka].”

5.4.2.2b Semiocclusive apico-alveolar (alveolar) or postalveolar-alveolar consonants?

According to scholarly sources (e.g., Dukiewicz, Sawicka, 1995; Wiśniewski, 2001; Ostaszewska, Tambor, 2012), semiocclusive alveolar phones include the phones [ʒ], [č] and their softened counterparts [ʒ'], [č']. The hard phones are realised in words like *dżuma* [ʒuma] and *czapka* [čapka]. The softened variants occur preceding the vowels [i] and [ɪ] in loanwords, e.g., *czip* [č'ip], *dzip* [ʒ'ip].

Recent research using the methods of experimental phonetics shows, however, that in the case of the phone [ʒ], “an articulation starts with a closure at the posterior alveolar ridge, then transitions into a constriction formed in the area of alveolar ridge. These realisations represented 65.2 % of all the observed realisations of this consonant (45 out of 69 evaluated samples)”¹⁸⁹ (Lorenc, 2018, p. 170). Only one third (33.3 %) of articulations of this phone was realised as purely alveolar. Due to this, in this text, we understand the phone [ʒ] as a postalveolar-alveolar phone.

Table 12: Place of articulation of [ʒ] according to the results of Lorenc (2018, p. 174)¹⁹⁰

Place of articulation	Phone [ʒ]
postalveolar (closure) alveolar (constriction)	65.2 % (45 out of 69 participants)
alveolar (closure and constriction)	33,3 % (23 out of 69 participants)
postalveolar (closure and constriction)	1,5 % (1 out of 69 participants)

The research carried out by Lorenc (2018) also proves the dominance of alveolar place of articulation of the phone [č] (observed in 52.2 % of cases), with as many as 41.6 % showing an articulation starting with a closure at the posterior alveolar ridge and progressing into a constriction formed at the area of alveolar ridge.

The phones [č] and [ʒ] occur in both Czech and Slovak, but sound slightly different due to difference in pronunciation. For Poles, the articulation of these phones is softer, between the articulation of the Polish [č] and [ć], [ʒ] and [ż].

¹⁸⁹ In original: “przeważają artykulacje rozpoczynające się od zadziąsłowego zwarcia, przechodzące w dalszej kolejności w szczelinę tworzoną w okolicy dziąsłowej. Realizacje te stanowiły 65,2% wszystkich wymówień tej spółgłoski (45 na 69 ocenianych).”

¹⁹⁰ Order in which the results are provided was adjusted. Other minor adjustments for increased comprehensibility of the table have also been carried out.

Table 13: Two most frequent places of articulation of [č] according to the results of Lorenc (2018, p. 174)

Place of articulation	Phone [č]
alveolar (closure and constriction)	52.2 % (84 out of 161 participants)
postalveolar (closure)	41.6 % (67 out of 161 participants)
alveolar (constriction)	

5.4.2.2c Semiocclusive prepalatal consonants

Polish prepalatal phones articulated at the anterior hard palate are [ʑ] and [č]. Examples of their phonic realisation are the words *dziadek* [ʑädek] and *ćma* [čma].

If the conditions are not suitable for assimilation, these are the phonic realisations of the letters *dż* (*podźwignęły*) and *ć* (*ćma*), or letter sequences *dzi* (*dzisiaj*), *ci* (*ciasto*). They do not occur before the vowel [y].

The phone [ʑ] is, according to Karczmarchuk (2012, p. 163), formed as follows: the tongue arches upward and the anterior blade forms a closure and then a constriction by contact with the anterior hard palate.

The phone [č] is articulated in a similar manner. The tongue is also arched upward, towards the hard palate. There, a complete closure is formed, later transitioning into a constriction (ibid. p. 157).

These phones do not occur in Czech or Slovak, but the phones [tʃ], [dʃ] are formed in a similar manner in these languages.

5.4.2.3 Constrictive consonants

5.4.2.3a Constrictive labiodental consonants

Polish language has four constrictive labiodental consonants. These are the phones [v], [f] and their softened variants [vʲ], [fʲ]. Examples of their realisation are represented by the words *wóz* [vus], *farma* [farma], *wicher* [vʲixer], *film* [fʲilm].

In the articulations of both the phone [v] and [f], a constriction is formed between the lower lip and the edge of the upper incisors (Karczmarchuk, 2012, pp. 168 – 171).

The phones [vʲ], [fʲ] are the softened labial consonants, the articulatory status of which was indeterminate for a long time. As was mentioned in the case of the phones [pʲ], [bʲ], their pronunciation is perceived as asynchronous from the point of view of contemporary research.

The phones [v'], [f'] occur before the vowels [i] and [ɪ], e.g., in the words *wiatr* [v'ɪätr], *film* [f'ɪlm].

5.4.2.3b Constrictive apico-dental (dental) consonants

The constrictive dental consonants include the hard phones [z], [s]. They do not occur before the phones [i] or [ɪ]. Examples of their realisation are illustrated by the words *zupa* [zupa], *sok* [sok]. This group also includes the softened phones [z'], [s'], which complement the distribution of the hard phones, occurring before [i] and [ɪ] in loanwords, e.g., *sinus* [s'inus], *Zanzibar* [zanz'ibar].

5.4.2.3c Constrictive dental-alveolar (alveolar) consonants

The constrictive alveolar consonants include the phones [ž], [š] and [ž'], [š']. The phones [ž], [š] do not occur in positions preceding [i] or [ɪ]. If the phone [ž] is not subject to assimilation, it is a phonic realisation of the letters *ż* and *rz*. Their realisations can be observed in the words *żuk* [žuk], *rzodkiew* [žotk'ɛf], *szary* [šary].

Softened counterparts of the hard phones occur in loanwords, e.g., *żigolo*, *szisza*. They are not used frequently in Polish language. The research carried out by Lorenc (2018) has shown the dominance of alveolar articulation of [ž] and [š]. Such articulation was observed in 87 % of participants in case of [ž] and in 73.5 % of participants in case of [š]. Other observed articulations include:

- postalveolar: in articulation of [ž] – 7.3 % of participants, in articulation of [š] – 24.7 % of participants;
- postdental: in articulation of [ž] – 4.9 % of participants, in articulation of [š] – 1.8 % of participants.

The phones [ž], [š], also labelled as alveolar and constrictive, exist also in Czech and Slovak. Their articulation differs from the Polish one, however; in Polish pronunciation, they appear softer, as if forming a transition between the phones [ž] and [ʒ], [š] and [ʃ].

5.4.2.3d Constrictive prepalatal consonants

This group consists of the phones [ʒ], [ʃ], the phonic realisations of which can be observed in the words *żima* [ʒima] and *ślimak* [ʃl'imak].

If the conditions are not suitable for assimilation, these are the phonic realisations of the graphemes *ž* (*žrebak*) and *š* (*šlimak*), or sequences *zi* (*zima*), *si* (*siano*). They do not occur before the vowel [y].

The pronunciation of these phones is relatively difficult. It requires significant effort in articulation, related to the exceptionally high tension of tongue muscles. Wierzchowska (1971, p. 192) claims that the blade of the tongue almost breaks under the strain. In Czech and Slovak, these phones are not present.

5.4.2.3e Constrictive postpalatal consonants

Phones occurring before *i* and *j* in words like *Chiny* [xiny] or phrases in which voicing assimilation between words takes place, as in *dach Jana* [daɣːana], are classified as postpalatal in the works of Dunaj (2015) and Wiśniewski (2001), and as softened velar in Ostaszewska and Tambor (2012).

In contrast with Czech and Slovak languages, the combinations of letters *chi*, *hi* are realised as voiceless (i.e., [x]) in Polish. Voiced phone [ɣ] occurs in Polish only as a result of voicing assimilation, usually between words, as in the example *dach Jana*. It exists as a voiced phone in independent positions in dialects only.

5.4.2.3f Constrictive velar consonants

There are certain issues when it comes to the number of constrictive velar consonants in Polish language. All the sources agree that the following phones belong to this group: [x] – phonic realisation of the letters *ch* and *h*, which does not occur preceding [i] and [j], e.g., in the word *chata* [xata], *herbata* [herbata]. We also have to note that, regardless of orthography, both *ch* and *h* are realised as a voiceless [x] in Polish, unless assimilation takes place. In this, Polish pronunciation is distinct from Czech and Slovak. The phone [ɣ] only occurs in Polish as a result of voicing assimilation, e.g., in the word *klechda* [kleyda]. This voiced phone does not match the Czech and Slovak [h] (*hrtan*) articulation-wise, as that phone is formed in the larynx. On the other hand, it is reminiscent of the Czech and Slovak phone formed as a result of voicing assimilation, as in the phrase *abych byl* [abyɣːbyl], articulated by the dorsum of the tongue.

The problems are caused by the softened phones [x'] and [ɣ'], which are, as previously stated, classified differently: as constrictive velars by Ostaszewska and Tambor, and as postpalatal phones by Dunaj and Wiśniewski.

5.4.2.4 Semiopen consonants (manner of articulation)

Semiopen consonants are divided into nasal, lateral and trill in most publications. A new proposal for their division is introduced in Dyszak, Laskowska and Żak-Święcicka (1997, p. 61). The authors suggest these be included among occlusive consonants, dividing them into occlusive-nasal, occlusive-lateral and occlusive-trill.

Semiopen consonants are voiced. Their voicing is lost when positioned between voiceless phones and in word-final position following a voiceless phone. In other cases, they retain their voicing even in word-final position. These sonorant phones can optionally lose their voicing even in word-initial position if preceded by a voiceless phone. Similarly to the paired consonants, sonorants have their softened equivalents that are realised in positions preceding [i] and [ɪ]. The authors diverge in their opinions on the existence of softened sonorants that lost their voicing.

5.4.2.4a Nasal bilabial semiopen consonants

In Polish language, only a single basic nasal bilabial semiopen consonant exists – [m], as in the word *mama* [mama]. Lips are closed in its articulation. The closure is accompanied by an opening of passage into the nasal cavity (Oczkoś, 2015, p. 65). Karczmarchuk (2012, p. 212) states that the tongue does not participate in the articulation actively, taking a flat or nearly flat position. Other phones belonging to this group are the softened phone [m'], occurring e.g., in the word *miasto* [m'ɨasto], and the phone [ɱ], which has lost its voicing and occurs e.g., in the word *pism* [p'isɱ]. Rosińska-Mamej (2014, p. 33), and Ostaszewska and Tambor (2012, p. 22) also mention the existence of a devoiced softened phone. The first publication uses the word *mściciel* [ɱ'ścićel] as an example of such, the other provides an example *kosmki* [kosɱ'ki]. Wiśniewski (2001, p. 27), however, interprets the latter word as an example of a hard phone that lost its voicing: [ɱ].

Additionally, he (ibid., p. 56) also lists an optional constrictive variant, which is a phonic realisation of the letter combinations *mw*, *mf*, e.g., in the word *tramwaj*.

5.4.2.4b Nasal apico-dental (dental) semiopen consonants

Two nasal dental semiopen consonants exist in Polish language: [n] and its desonorised counterpart [ɳ]. These are realised e.g., in words *noga* [noga], *piosenka* [pɨ'osɳka].

In pronunciation of the phone [n], a closure is formed by the tongue and upper teeth. The closure is accompanied by an opening of passage into the nasal cavity (Oczkoś, 2015, p. 65).

The lips are slightly open, they can become rounded when the phone precedes [u] (Karczmarczyk, 2012, p. 215). The loss of voicing in [n] takes place under the same circumstances as in the case of [m].

Other phones belonging to this group are all optional variants. These are the constrictive phone [ɲ], mentioned by Wiśniewski (2001, p. 57) as appearing in phonic realisation of the sequences *nw*, *nf* and *nch*, *ns*, *nz* (*inwazyjny*, *instynkt*), and the softened variant of [n], recorded in the Polish transcription as [nʹ]. It can facultatively appear as a result of voicing assimilation in word-final position when followed by [i] or [ɨ]. The word *must*, in such case, be pronounced with a heightened tempo, e.g., *pan Jerzy* (Wiśniewski, 2001, p. 57, citing Sawicka, 1995, p. 133).

From contrastive standpoint, it has to be reminded that in both Czech and Slovak, the letter combination *ni* is realised in two different ways, depending on the word being domestic or foreign. In domestic lexis, the phone [ɲ] realised in this sequence is equivalent to the Polish [ɲ]. On the other hand, in foreign vocabulary, a combination of [n] and [i] is articulated instead of a prepalatal phone. The tongue touches the upper incisors in this case. An example word in which [ɲ] is not permitted, is *univerzita*. A similar situation is observed with the letter sequences *ti*, *di*. More information on this issue can be found in chapters on Czech and Slovak phones.

5.4.2.4c Apico-alveolar (alveolar) semiopen consonants

Two phones belong to the group of nasal alveolar phones. The first is alveolar *n*, which is recorded as [ɲ] in Polish transcription. Its place of articulation is the alveolar ridge. According to Dunaj (2015, p. 35), it occurs primarily before alveolar phones [č], [ž], as in the word *mączka* [moɲčka]. Wiśniewski (2001, p. 58) also takes note of optional realisations of this phone before the phones [š] and [ž], e.g., in the word *inżynier*. However, the codification status of this pronunciation variant is not mentioned either in the *Wielki słownik poprawnej polszczyzny* [The great dictionary of correct Polish], or in Dunaj (2006). The same is true for the constrictive alveolar *n* mentioned by Wiśniewski (2001, p. 58) as a facultative phonic realisation of the sequences *nsz*, *nż*.

5.4.2.4d Prepalatal and postpalatal semiopen consonants

This group comprises the phone [ɲ] and its voiceless counterpart [ɲ̥]. The phone [ɲ] is a phonic realisation of the grapheme *ń* and sequence *ni*. It does not occur preceding the vowel [y]. In some publications, e.g., by Dunaj, this category also includes the phone [ɲ̥], which can occur in

Krakow-Poznań pronunciation of the word *sukienki*, and the phone [ɲ] in the word *czosnkiem*. Other authors, e.g., Ostaszewska, Tambor, and Wiśniewski, interpret the phones in these contexts as softened velar phones.

The pronunciation of the phone [ɲ] is discussed in more detail in Wierzchowska (1971, pp. 194 – 195): “In pronunciation of the phone [ɲ], the soft palate behaves in a similar manner as in nasal apical and labial consonants, that is, it takes an active position (it stays arched) and is slightly distanced from the back wall of the pharyngeal cavity. The contact of the tongue and palatal ridge is rather wide. The closure formed by this contact is recorded on palatograms in the form of a wide band moving across the hard palate.”¹⁹¹

5.4.2.4e Velar semiopen consonants

The authors of the sources cited agree that the phone [ɲ] and its voiceless variant [ɲ̥] belong to this category. These phones occur as phonic realisations of the letter sequences *nk*, *ng*, e.g., in the word *bank*. In Warsaw pronunciation, this phone does not occur on morphemic boundaries, as it does in Krakow-Poznań pronunciation; compare [pańenka] – [pańɛŋka], [p'ɪ'ösuka] – [p'ɪösŋka] (Wiśniewski, 2001, p. 59).

However, the authors of Polish phonetic handbooks do not agree on the status of the velar softened [ɲ̥] and its voiceless counterpart. In their works, Ostaszewska and Tambor (2012) and Wiśniewski (2001) include these two among the velar semiopen consonants. In these publications, the phones appear in the same contexts where Dunaj (2015) identifies the phone [ɲ̥], e.g., in the word *bańka*.

5.4.2.5 Lateral semiopen consonants

This group comprises the phone [l], softened [l'], and desonorised [l̥]. They are realised e.g., in the words: *las* [las], *lis* [l'is], *myśl* [myśl̥].

In some texts, a voiceless counterpart of the softened phone is also included among these (Rosińska-Mamej, 2014, p. 35; Ostaszewska, Tambor, 2012, p. 22). An example of its occurrence can be found in *wymyślcie* [vymyśl̥'ce] and *umyślnie* [umyśl̥'ne].

Most Polish publications classify the phone [l] as alveolar. However, Lorenc (2016, p. 335) has experimentally observed a postalveolar articulation of this phone. Earlier, only

¹⁹¹ In original: “Przy wymawianiu głoski [ɲ] podniebienie miękkie zachowuje się podobnie jak przy nosowych spółgłoskach przedniojęzykowych i wargowych, to znaczy przybiera pozycję czynną (pozostaje zagięte) i odchyła się lekko od tylnej ściany jamy gardłowej. Kontakt języka ze sklepieniem jamy ustnej jest bardzo szeroki. Zwarcie języka ze sklepieniem jamy ustnej zapisuje się na palatogramach w postaci szerokiego pasa, przebiegającego w poprzek podniebienia twardego.”

Wierzchowska (1980) reported this area as the place of articulation of [l]. Additionally, Lorenc (2016, p. 335) was the first to confirm that this phone is retroflex. The softened and desonorised phones are formed in accordance with the principles of softening and devoicing of sonorant phones. From contrastive point of view, it has to be noted that the phone [l] is articulated slightly differently in the other West Slavonic languages.¹⁹²

Authors of phonetic publications also include the apical [ɭ] and its desonorised variant in this group. It seems, however, that this pronunciation is restricted to dialects in the contemporary usage.

5.4.2.6 Trill semiopen consonants

These phones are realised e.g., in the words *rak* [rak], *riksza* [r'ikša], *wiatr* [v'jätɾ]. In certain publications, a voiceless counterpart of the softened phone is also included among these (Rosińska-Mamej, 2014, p. 35; Ostaszewska, Tambor, 2012, p. 22). As an example of its occurrence, the word form *Piotrkiem* [p'jotr'kēm] is provided in the first of the listed sources. Additionally, Dyszak, Laskowska, and Żak-Święcicka (1997) add to this group the phones articulated in the pharynx: [r̠], [r̠̥], [r̠̥'].

Wierzchowska describes the pronunciation of the phone [r] as follows: “In articulation of [r], the tip of the tongue vibrates. The edges of the tongue adhere to the inner surface of the upper teeth and gums. The surface of the tongue is slightly tilted to the inside in its predorsal part. The tip of the tongue hits the alveolar ridge. The period of contact for the tip of the tongue is very short, only approximately 0.01 s.”¹⁹³ (1971, p. 168).

5.5 Pronunciation of consonant, vowel and mixed clusters

This subchapter introduces the pronunciation of selected vowel and consonant clusters. It is based primarily on the paper by Dunaj (2006), recommendations of the *Wielki słownik poprawnej polszczyzny* [The great dictionary of correct Polish] and handbooks by Tomasz Karpowicz (2018), Ostaszewska and Tambor (2012), and Markowski (2004). These are supplemented by the spoken language corpus Spokes and research outputs available in the Polish scholarly sources, mainly by Więcek-Poborczyk (2014).

¹⁹² Cf. description of the phones in chapters on Czech and Slovak phones.

¹⁹³ In original: “Przy wymawianiu głoski [r] wibruje koniuszek języka. Boki języka przylegają do wewnętrznych powierzchni górnych zębów i dziąseł. Powierzchnia języka jest w części predorsalnej lekko wkleśnięta. Koniuszek języka uderza o dziąsła. Czas przywarcia koniuszka języka jest bardzo krótki, wynosi ok. 0,01 sek.”

5.5.1 Pronunciation of consonant clusters containing consonants with varying voicing

Two situations need to be distinguished in this regard: phonic context with different voicing of paired consonants, and the presence of a voice paired consonant alongside a sonorant phone or a voiced semivowel.

In the first case, unification of phones in their voice (voicing assimilation) takes place. An example of such is the word *odkopać*, in which the voiced [d] is immediately followed by a voiceless [k]. The voiceless [k] influences the voiced [d], and as a result, both are articulated without voicing, as [otkopać]. A similar process can be observed in the word *jakby*, in which a voiceless [k] is followed by a voiced [b]. This word is pronounced [ɟagby].

Voicing assimilation also takes place when a sonorant or a semivowel stands in word-medial position, between two voiceless phones or in word-final position after a voiceless phone, as well as – facultatively – in word-initial position before a voiceless phone.¹⁹⁴ However, if a sonorant occurs in word-final position and is not preceded by a voiceless phone, it retains its voicing – in contrast to paired consonants, which always become devoiced at the ends of words. In other cases when a sonorant occurs alongside a true voiceless phone, voicing assimilation does not take place. The cluster stays non-unified in its voicing. Such situation can be observed in the word *kultura*. The phone [l] here retains its voicing even though it is followed by a voiceless phone.

A specific phonic realisation of a letter sequence comprising a letter corresponding to a voice paired consonant and a letter corresponding to a sonorant phone has to be mentioned in context of voicing assimilation. This is the case of the first person plural verb forms in past tense and in imperative, e.g., *zrobiliśmy*, *piszmy*. In Krakow-Poznań pronunciation, the phone occurring before the sonorant becomes voiced, e.g., [zrob'il'izmy]. The frequency of such pronunciation is growing also among journalists and film actors, where it was not common in the past. The voiced realisation existing alongside the voiceless one is in agreement with the Polish language norm (more on this topic in Ostaszewska, Tambor 2012 pp. 65 – 67; Wiśniewski, 2001, pp. 98 – 108, Więcek-Poborczyk, 2014, p. 82).

5.5.2 Pronunciation of two identical subsequent vowels

If two letters representing the same vowel stand directly next to each other (with the exception of the letters *u* and *i*), they are phonically realised in accordance with orthography, e.g., *dookoła*,

¹⁹⁴ Cf. Subchapter 5.4.2.4 *Polish Semiopen consonants*.

feeria. Some publications talk about a glottal stop possibly occurring in between the vowels (Karaś, Madejowa, 1977, p. XXX).

It appears that this situation does not generally pose significant difficulties to Poles, though a frequent error is observed in pronunciation of the lexeme *zoo* as [zo]. The research done by Więcek-Poborczyk (2014, p. 168) shows that the pronunciation of these combinations is realised in accordance with the norm in most cases (84%) in the members of Parliament.

5.5.3 Pronunciation of geminate consonants

Dunaj (2006, p. 169) states that there are two possible correct pronunciations of geminate consonants. The first, and more frequent, is the pronunciation with a lengthening of the consonant, the second is a clearly distinguishable pronunciation of two instances of the same phone.

5.5.4 Phonic equivalents of letter pair *au* in domestic and foreign vocabulary

The main issue with the phonic realisations of letter combination *au* among speakers is not distinguishing between domestic and foreign word stock. In foreign words, this combination is realised as [aɯ], i.e., the letter *u* is pronounced in the same manner as the letter *ł*. However, in domestic vocabulary, the same letter combination is articulated in accordance with orthography, i.e., *u* is articulated as [u].

Examples of words in which the *au* letter combination is pronounced [aɯ] are *pauza*, *aplauz*, *dinozaur*, *restauracja*, *szlauch*, *hydraulik*, *laur*. Examples of domestic pronunciation – [au] – are the words *zaufanie*, *zauważać*, *naumyślnie*, *nauczyć się*, *nauka*, *nauczycielka*.

Authors of handbooks specifically warn about the incorrect pronunciation of the words *hydraulik*, *laur*, *laurka*, *nauka*. Many Poles pronounce the lexeme *hydraulik* as [hydraul'ik], not [hydraɯl'ik]. The form recommended by linguists is not heard as often as would be desirable. Spokes corpus contains only 8 instances of the lexemes *hydraulik*, *hydraulika*. None of those is pronounced in accordance with the recommendations.

Another problematic word is *laurka*, which is a word of foreign origin, and should therefore be pronounced [laɯurka]. This, however, is not the correct pronunciation. As Karpowicz (2018, p. 49) explains, the word *laurka* is a hybrid comprising three syllables: *la-ur-ka*, meaning that the letter *u* is realised here as a vowel [u]. In the Spokes corpus, all three instances of this word are articulated with a [ɯ].

A frequent error is also the incorrect pronunciation of the word *nauka* as [naŭka]. It is a domestic word, and as such, the *u* in it should be realised as a vowel [u]. Another mistake in pronunciation of this word in native speakers is the placement of stress on the first syllable.

The extent of troubles with realisation of the *au* letter combination is evident in questions with which Poles turn to language counsellors. This topic is also frequently addressed in language handbooks.

5.5.5 Phonic realisation of letter pair *eu* in domestic and foreign vocabulary

The letter pair *eu* is realised with the letter *u* pronounced as [u] in domestic vocabulary, e.g., *nieubrany*, *nieufność*, *nieustanny*, *nieudacznik*, *nieuk*, *nieuwaga*, *niezaufany*.

The realisation of this cluster in words of foreign origin is more troublesome. It depends on whether the cluster forms a syllable, is a diphthong, or stands on a morphemic boundary. In the first case, the letter *u* is realised as [ɯ], that is, it matches the phonic realisation of the letter *ł*. In the second case, the *u* in it should be realised as a vowel [u].

This realisation can be observed, e.g., in the words *muzeum*, *liceum*, *panaceum*, *trofeum*, *jubileusz*. Thirdly, the letter *u* in the *eu* cluster is realised as a part of diphthong [eɯ], e.g., in the words *pseudonim*, *pneumatyczny*, *neurotyczny*, *Europa*, *terapeuta*.

5.5.6 Phonic realisation of letter pairs *ai*, *ei*, *oi*, *ui*, *ii*, *yi*

Phonic realisation of letter pairs *ai*, *ei*, *oi*, *ui*, *ii*, *yi* depends on multiple factors. Of import are:

- whether a word is of foreign origin;
- where are the letter pairs positioned (in word-final or medial position);
- what word class does a word belong to and what grammatical case does it occur in (Dunaj, 2006, pp. 164 – 165).

a) Orthographic pronunciation

Dunaj (2006, p. 165) recommends careful pronunciation in nouns, verbs, and adjectives formed with the prefixes *do-*, *na-*, *po-*, *wy-*, *za-*, *anty-*, *pre-*, *pro-*, *re-*, e.g., *poinstruować*, *poirytowany*. In the Spokes corpus, a pronunciation with a weak pronunciation of [ɪ] can be heard. In these cases, an analysis with digital tools would be required to properly verify the recordings. Więcek-Poborczyk (2014, p. 169) observed as many as 53 % of research cases showing erroneous realisation (with an [ɪ]) of these words.

b) Orthographic pronunciation and pronunciation with [ɪ]

Dunaj (2006) includes in this category the words of the *kroić* type (as well as the verbs *bać się* and *stać*) and domestic words in which the letter sequences *ai*, *ei*, *oi* occur in word-medial position, e.g., *naiwność*. He lists the pronunciation with [ɪ] as primary, a careful orthographic pronunciation as secondary. In words of foreign origin (e.g., *reinkarnacja*), he switches the order, recommending the orthographic pronunciation as primary and pronunciation with [ɪ] as secondary.

c) Pronunciation with [ɪ]

Dunaj (2006) includes in this category the forms of singular masculine and feminine nouns in genitive, dative and locative cases (e.g., *bez Mai*), as well as the forms of plural masculine nouns in genitive (e.g., *pokoi*) and some pronouns. It seems that, in this regard, Poles have trouble with orthography more so than with pronunciation, evidenced by the large number of questions on correct spelling addressed to language counsellors.

5.5.7 Letter pairs *ao*, *eo*, *uo*, *ae*, *oa*, *ua* – orthographic pronunciation

Dunaj (2006, p. 166) states that the subject letter combinations should be realised in accordance with their orthography. An insertion of another sound element – a pharyngeal closure or a weak labial segment, i.e., a weakened sound matching the phone [ɰ] – before the second vowel is also deemed permissible. phonic realisation with a strong labial element, i.e., the phone [ɸ], is not acceptable, however.

Karpowicz (2018, p. 50), on the other hand, emphasizes that the pronunciation with an additional element matching the weakened articulation of [ɰ] does not comply with the model norm. He does admit, though, that field research shows its presence in articulation of these combinations. According to the *Wielki słownik poprawnej polszczyzny*, only the orthographic pronunciation is deemed correct in words containing the letter combinations *ao*, *eo*, *uo*, *ae*, *oa*, *ua*.

Corpus excerption of example words in Dunaj (2006, p. 16) shows that the phonic realisation of lexemes beginning in *aktual-* (*aktualy*, *aktualnie*, *aktualnia*, *aktualności*) mostly contains the phone [ɰ] in between the vowels. In these cases, only 5 out of 45 (approximately 11%) realisations can be classified as pronunciation with a weak labialised element.

Similarly, in the case of *kontynuować*, corpus excerption shows that approximately 20% of all realisations contain a weakened phone [ɰ], a clearly articulated phone [ɰ] can be heard in the rest.

The research into the pronunciation of the letter combinations *ua*, *ea* and *uo* (Więcek-Poborczyk, 2014, p. 166) carried out among the members of Parliament shows that the largest number of non-normative pronunciation realisations takes place in pronunciation of these sequences. Out of all the observed realisations of the letter sequence *ua*, 54% were erroneous. It was observed that the most commonly mispronounced word is *sytuacji*.

5.5.8 Pronunciation of foreign vocabulary with letter sequences comprising a vowel, letter *m* or *n* and a constrictive

In the words of the *instytut*, *kunszt*, *awans* type, a dual pronunciation is permissible: either in accordance with orthography ([instytut]), or with a nasalised vowel ([ĩŋstytut]) (Dunaj, 2006).

5.5.9 Phonic realisation of *ń* preceding *s*, *z*, *sz*

Authors of studies on correct pronunciation frequently pay attention to the pronunciation of the phonic equivalent of *ń* positioned before constrictives. Orthographic pronunciation is deemed erroneous in these cases. Nasal timbre of *ń*, described as non-syllabic and nasal in later publications, is seen as correct. An example of such are the words *pański* [paɲsk'i] and *koński* [koɲsk'i].

5.5.10 Combinations of *bi* + vowel in foreign vocabulary

In words containing a combination of cluster *bi* and a vowel (*biologia*, *biblioteka*), [ɪ] is pronounced after the softened phone in contemporary Polish, i.e., [b'ɪɔlog'ɪä], [b'ibl'ɪoteka].

Earlier studies mention also a previously heard bisyllabic pronunciation, [b'iɪolog'a] (Karaś, Madejowa, 1977, p. XXXVII). This pronunciation is perceived as obsolete by Dunaj (2006).

Spokes corpus search for words starting in *bio-* revealed 60 examples of the lexemes *biologia*, *biotechnologia*, *biografia*, *biopsja*, *biologiczny*, *biologicznie*, *biosfera*, *bioprąd*, *biograficznie*, *biowital*, *Biomer*, *biorytm*. In all examples, [b'ɪɔ] pronunciation was realised.

5.5.11 Phonic realisation of letter sequences *ke*, *ge* as *ke*, *kie*, *ge*, *gie*

Words with letter sequences *ke* and *ge* are pronounced according to their orthography. The following words serve as examples: *Gerwazy*, *geometria*, *gen*, *generał*, *gestykulacja*. Dunaj (2006, p. 167) and Karpowicz (2018, p. 51) claim that in Polish, among the oldest generation,

a few words are retained that carry evident markers of older soft pronunciation, e.g., the word *inteligencja* pronounced as [intel'ig'encja].

On the other hand, words containing the letter sequence *kie* and *gie*, e.g., *kiedy*, *gielda*, can be realised in two ways: with and without [ɨ], e.g., [k'edy] or [k'ɨedy], [g'eɯda] or [g'ɨeɯda] (Dunaj, 2006; Karpowicz, 2018).

5.5.12 Pronunciation of nouns ending in -izm/-yzm – singular locative forms

The authors of the *Podręczny słownik poprawnej wymowy polskiej* [Concise dictionary of correct Polish pronunciation] deem two forms acceptable: *-iźmie* and *-izmie*. They classify the first pronunciation type as highly pedantic, the second as pedantic. The current compendium *Wielki słownik poprawnej polszczyzny* informs that the form *-iźmie* is used more frequently than *-izmie*. In the Spokes corpus, there are 10 examples of the relevant form, e.g.: *pacyfizmie*, *organizmie*, *socjalizmie*. All the examples are pronounced with a [ż].

5.5.13 Phonic realisation of *sp-* group in word-initial position in *spieszyć się*

The *Wielki słownik poprawnej polszczyzny* [The great dictionary of correct Polish] mentions two pronunciation options for this group: the model *spieszyć się* and the colloquial *śpieszyć się*. Instances extracted from the Spokes corpus confirm the dominance of the *spieszyć się* form over the *śpieszyć się*. Out of 35 instances, only 5 realisations contained the cluster *śp* in word-initial position, out of which one was dialectal.

5.5.14 Sonorisation of consonants in loanwords

Markowski (2004, p. 160) provides a large number of example words in which erroneous change of voiceless consonant into its voiced counterpart takes place. The greatest degree of uncertainty from among these is caused by the word *bransoletka*, which many Poles pronounce with [z] instead of [s]. In the Spokes corpus, all instances of the lexeme *bransoletka* (14) are pronounced with the consonant [z]. Based on the observations of language reality carried out so far, it can be pointed out that the erroneous pronunciation is more frequent in younger and middle generations. Pronunciation with [s] has been observed in older speakers. The research in question is not concluded, however, and representative conclusions thus cannot be drawn yet.

5.5.15 Permissible simplifications of some phones and consonant clusters

Creators of the norm permit certain simplifications of specific phones and consonant clusters. Simplification of the phones [ɯ], [ɯ̯] (phonic realisation of the grapheme ł) in the endings of verb forms, e.g., *gniótl*, *wiódl*, is permissible in colloquial speech, but in careful pronunciation, this phone has to be realised in full (Dunaj, 2006; Markowski, 2004). Similarly, simplification of phonic realisations of the letter sequences *-wsk-*, *-wstw-* into *-sk-* and *-stw-*, e.g., in the words *językoznawstwo*, *warszawski*, is permissible in colloquial, but in this case also in pedantic pronunciation. In both pronunciation types, it is also allowed to simplify the phone clusters represented by *trz*, *drz* in writing into *czsz* and *dżż* if they occur in word-initial or medial position. Non-simplified realisation is dominant in pedantic pronunciation, simplified articulation is more common in colloquial pronunciation (Dunaj, 2006; Markowski, 2004).

5.6 Stress

In contrast to Czech and Slovak, in both of which it is fixed on the first syllable, stress is stable in Polish language, occurring on the penultimate syllable (i.e., the language is paroxytonic). In some word groups, stress is placed on the ultimate syllable, or on the antepenultimate or preantepenultimate syllable.

- **Words with stress on the preantepenultimate syllable**

This category comprises the verbal forms of first and second persons plural conditional, e.g., *zrobilibyśmy*, *zrobilibyście*.

- **Words with stress on the antepenultimate syllable**

This category comprises:

- verbal forms of singular in all persons and third person plural conditional, e.g., *zrobiliby*, *zrobiliby*;
- foreign nouns ending in *-yka/-ika* (nom. sg. forms), e.g., *matematyka*, *fizyka*, *muzyka*;
- verbal forms of first and second persons plural in past tense, e.g., *robiliśmy*, *robiliście*;
- numerals 400 – 900.

- **Stress on ultimate syllable is found in:**
 - certain abbreviations, e.g., *UW*, *Pekaes*;
 - words prefixed with *eks-*, *arcy-*, *wice-*, e.g., *eksmąż*, *wicemistrz*;
 - certain loans from French, e.g., *foyer*, *jury*.

Unstressed words also exist in Polish language, taking a position before a stressed word (proclitics) or after a stressed word (enclitics). They form a single stress group with the relevant stressed word. Proclitics include, e.g., the particle *nie* and monosyllabic prepositions *do*, *nad*, *pod*. Enclitics include, among others, the monosyllabic forms of pronouns and adverbs, e.g., *mi*, *ci*, *go*, *mu*, *ją*, *tu*, *tam*.

5.7 Intonation

Intonation is the **pitch modulation of tone** (Wiśniewski, 2001, p. 124), also known as sentence stress. In Polish, it is not standardised, however, the most common stress markers of sentence endings are stabilised (Ostaszewska, Tambor, 2012, p. 95).

The basic intonation melodemes of Polish language include the **rising intonation** (so-called anticadence) and the **falling intonation** (cadence). Their essential feature is the change of tone from lower to higher and vice versa.

Cadence is typical for declarative sentences and variable questions in Polish (Wiśniewski, 2001, p. 124); anticadence occurs in polar questions and inconclusive utterances (Wiśniewski, 2001, p. 124), for example:

Jem obiad. ↘

Jedziesz autobusem czy taksówką? ↘

Jedziesz autobusem? ↗

6 Application of orthoepic principles in speech practice

The final chapter of this book reflects the authors' approach to research into the phonetic aspects of their native languages – primarily orthoepy – as well as their individual educational activities in this area. Just as the scholarly approaches to the topic and practical experiences of the individual authors differ, so does their treatment of the partial subchapters herein. Some parts introduce findings from the educational process, both of native speakers and foreigners who are studying the given language at the authors' home institutions or who participated in pronunciation workshops organized in the course of the project that also resulted in publishing of this text; one of the subchapters also reports on the results of long-term cooperation with institutions representing different fields of activity and points to frequent shortcomings in speech of their workers – public speakers; author of another subchapter pays greater theoretical attention to current orthoepic issues as viewed through the prism of sociolinguistics, pondering the shifts in pronunciation norm of selected phenomena and evaluating them in relation to the codified norm. This approach complexly clarifies the application of orthoepic principles in speech practice from multiple angles.

6.1 Deviations from Czech orthoepic norm in selected speaker groups

Pavčina Kuldánová

The descriptions of the orthoepic principles of Czech language (cf. chapter 3) mentioned certain deviations from the required pronunciation of selected phenomena at both segmental and suprasegmental levels, which can be registered in native speakers in those types of communication that require the literary language. We discuss these in more detail in this subchapter, while relying mainly on the current results of our own longitudinal observation of the speech delivered by public speakers. We focus primarily on the acoustic aspects in their assessment, as these are violated more frequently in contrast to other linguistic levels and are paid less attention to. However, we do not discuss the overall sound culture of speech professionals here (such discussion should also include vocal quality, vocal onsets, breathing techniques, hesitations, etc.). Considering the focus of this publication, this description is limited to the elements related to violation of the orthoepic norm (although these sometimes cannot be separated from other acoustic means).

The observed groups of speakers include teachers at various types of schools (especially from Ostrava region, but from other regions of Moravia and Bohemia as well), future teachers

(students in various programmes at the Faculty of Education of the University of Ostrava , most frequently the pedagogy for kindergartens and for the first and second primary education stages), as well as newsreaders and presenters of journalistic programmes in public audio media, press spokespersons from various institutions, and theatre actors. The communication studied is observed not only via media, but also through personal meetings – during lessons, training of teachers and press spokespersons, direct cooperation with National Moravian-Silesian Theatre when preparing premiere performances and cooperation with newsreaders from Ostrava Television Studio.

Since our assessments of sound culture among public speakers with specific examples of shortcomings have previously been published (more recently e.g., Kuldanová, 2018a and 2018b), we list only the basic types of the most frequently occurring non-functional deviations from the pronunciation norm¹⁹⁵ observed at schools, in media and theatres. We draw attention to these deviations because the representatives of the aforementioned professions are perceived as prominent speech (and phonetic) role models and persons who significantly influence the overall language culture. Our findings indicate that not all of them fulfil this role, i.e., the effect of their influence on the culture of language cannot be considered positive.¹⁹⁶ The causes of specific deficiencies are diverse (dialectal influence, negligent or incorrect articulation, fast pace of speech, ignorance of orthoepic principles, etc.), but they have a common root – the absence of speech and vocal education at primary schools, even though it is supposed to be an integral part of this level of education (for further information on this topic, cf. e.g., Kuldanová, 2017).

¹⁹⁵ In our assessment, we take into account the statements made by Zdena Palková (1994, p. 320). The manner of phone articulation in Czech language plays a substantial role in the final impression from speech. The manner of pronunciation may be explicit, full or significative, negligent. “To a large extent, the degree of care in pronunciation in a specific speech depends on the speaker’s abilities; furthermore, the listener also usually evaluates them as an expression of the speaker’s personal culture”. The basic level of literary pronunciation consists of a set of standards that are not marked dialectically and ensure the necessary degree of formal exactness. “Regarding the stylistic strata on the correctness – negligence axis, the essential criteria for selecting the forms from the listener’s point of view are the comprehensibility and explicitness. This realistic approach, respecting the needs of practical spoken communication, results in a fact that the codified form of Czech pronunciation is recognized in the public consciousness and its violation is viewed as the inability of the speaker”.

¹⁹⁶ We would like to highlight the fact that not all communication carried out by public speakers can be considered “model”; it is important for both the native speakers and foreigners learning Czech, as these are the people who frequently look for support of proper pronunciation in listening to audio media. (This publication does not deal with the foreigners’ obstacles in mastering the proper pronunciation observed in lessons for foreigners, as these are very diverse and individual, and are always associated with “phonetic base” of their native languages and potential interlingual interference.)

6.1.1 Deviations observed in teachers and students of teaching study programmes

The breakdown of shortcomings observed in students of pedagogy comes from several years of examining the quality of their speech delivery in seminars on Czech phonetics, language culture, rhetoric and orthoepy and vocal education (their speech presentations – both read aloud and spontaneous, prepared and unprepared, formal and informal – were assessed). The list of shortcomings observed in teachers is based on the information acquired in courses related to phonetic aspects of Czech language within the supplementary studies at the Faculty of Education of the University of Ostrava and trainings dedicated to language culture:

- consonant pronunciation disorders: there is an increasing number of students with improper articulation, especially articulation of alveolar consonants (listed here in order from the most to the least frequent types of dyslalia): lambdacism – the most widespread disorder, various forms of sigmatism, rhotacism and rotacismus bohemicus, incidence of incorrect articulation of phones [d], [t], [n] is also increasing; the articulatory disorder situation is similar in teachers, however, this group differs in frequency of their occurrence – it is comparable to students among the youngest age group of teachers, the articulation disorders are less frequent in middle-aged teachers (40 years old and up):
- improper articulation of vowels and phone clusters as a result of articulatory negligence (weakened articulation of phones or their elision) or due to the influence of native dialect: inappropriate quality or quantity of vowels, undesirable consonant assimilations (especially the so-called Moravian voicing assimilations):
- deviations in use of prosodic means: incorrect intonation contours in reading aloud, incorrect phrasing, improper placement of logical stress and sometimes word stress, high speech tempo, violation of word stress – especially in improvised speeches, generally high speech tempo and incorrect intonation in certain persons. An insufficient ability to fully read aloud is observable chiefly among students – they are sometimes incapable to logically segment the text even after preparation (with possibility of using marks for pauses, sentence stresses and intonation) – they read according to punctuation marks, not the meaning (they create pauses at the positions of commas), or they make illogical pauses due to improper breathing techniques; the students employ incorrect intonation both in inconclusive pauses and at the ends of utterances (inappropriate rising intonation at the end of sense units, i.e., anticadence instead of conclusive cadence or semicadence, but more frequently falling conclusive cadence instead of semicadence; they lack awareness of the different intonation contours of rogative sentences – especially the variable questions are formed incorrectly); students from the Silesian dialectal region tend to

frequently shift word stress to the penultimate syllable; the unawareness of the orthoepic rules pertaining to the stressing of prepositions is also repeatedly observed, as is the improper use of logical stresses (which is frequently placed on incorrect words or is omitted altogether, other times used redundantly); the overall voice modulation tends to be careless, the students do not know how to purposefully change the pace and dynamics based on the meaning of the text (their incorrect phrasing and modulation often results from a lack of understanding of the text – they cannot distinguish relevant information from irrelevant, they are unable to comprehend the meaning of the text without aid).

6.1.2 Deviations observed in newsreaders and presenters

The following shortcomings are identifiable in speech delivered by newsreaders and presenters of news and journalistic programmes of public broadcast media (radio broadcasting station *Radiožurnál* and television channels ČT1 and ČT24, where we focused on programmes broadcast from Prague and Ostrava studios):

- non-orthoepic pronunciation of vowels and vowel clusters: overtly open or closed pronunciation of vowels (due to influence of dialect, common Czech¹⁹⁷), violation of vocal quantity (lengthening of final vowels preceding a pause is more frequent than erroneous shortening), elision of vowels or their weakened pronunciation (due to negligent articulation, incorrect form of lip aperture, high speech tempo), unawareness of orthoepic principles is also demonstrated in improper use/neglecting of glottal stops;
- improper consonant articulation: it is observable in articulation of certain alveolar phones, especially [l], which sounds hard, as well as in overtly hissing pronunciation of sibilants [s], [z], [c], or in vibrants [r] and [ř], which are articulated with either insufficient trill, or, in case of [r], with excessive trill;
- non-orthoepic pronunciation of consonant clusters: weakened articulation or complete elision of phones, incorrect simplification of the consonant cluster, undesirable consonant assimilation changes (both voicing and articulatory);
- lack of proficiency in use of prosodic means – intonation, phrasing, logical stress, speech tempo: incorrect intonation is evident especially in inconclusive pauses, in which the falling conclusive cadence occurs instead of appropriate inconclusive semicadence,

¹⁹⁷ *Common Czech* is one of the non-literary (non-standard) forms of Czech language, levelled non-literary language of Central Bohemia (it is an interdialect that evolved as a result of the development of the Bohemian dialect); today, it is used not only in private, non-public communication, but frequently also in public speech, in which only the literary language has been previously used.

incorrect intonation of questions, and utterance endings are not correctly signalled by intonation and subsequent utterances follow without pauses – the listeners receive a barely comprehensible flow of information without meaningful partitions; certain newsreaders show a stereotyped intonation for sentences with various communicative functions, certain female speakers even show “singing” intonation – the intonation is oscillatory and the manner of speech does not correspond with the communicate type; illogical phrasing – the pauses are shifted to incorrect positions (the pauses are sometimes redundant or omitted altogether); inconsiderate placement of logical stress – it is either shifted to words with meaning of lower significance, or almost every lexical word is emphasized – the so-called “chanted speech” is becoming more frequent.

The listed deficiencies can make it difficult for the listeners to comprehend the information being communicated – especially the negligent articulation of vowel clusters and simplified articulation of consonant clusters causing a meaning change in words, failure to apply the signals of conclusiveness or inconclusiveness of the utterance, and inconsiderate placement of logical stresses.

Regarding the aforementioned shortcomings observed in the television and radio news environments, it is possible to conclude that there is an evident difference in the most frequent errors made by speakers from Ostrava and Prague studios. The Prague centre is typified by a larger amount of errors in vowel articulation resulting in meaning changes and incorrect phrasing and intonation. Inability to appropriately utilise prosodic means is a prevalent shortcoming at Ostrava centre, incorrect articulation of phones is only an issue of specific individuals.

6.1.3 Deviations observed in theatre actors

The actors from the Ostrava theatre showed the least number of pronunciation errors from among the compared professions, nevertheless, specific phenomena were observed in this group as well, some more frequently, others only on individual basis. The most frequently occurring types of non-functional deviations from the orthoepic norm are listed, taking into account the basic principles of stylized stage speech and disregarding accidental errors and mistakes:

- all actors sometimes produced incomprehensible phrases or entire lines, articulatory mumbling which resulted in the omission of a phone or phones (syllables), “swallowing” of words or its parts, weakened, reduced articulation of phones; the cause of these issues is usually the insufficient articulatory effort or higher tempo; certain actors demonstrated

negligent articulation more frequently at rehearsals, yet such articulation almost never occurred during public performances (however, according to the actors, such mumbling is sometimes purposeful, as they use it to cover forgetting the script on their part);

- non-orthoepic articulation of vowels and vowel clusters (violation of quality and quantity of vocals due to the local Silesian dialect, as well as common Czech by actors from Bohemia), the issues with glottal stops were rather rare;
- non-orthoepic articulation of consonant clusters: undesirable consonant assimilation changes (both voicing and articulatory);
- deviations in consonant articulation: the actors do not usually demonstrate these, only some of them manifest a more hissing articulation of sibilants [s], [z], [c] or hard articulation of [l];
- prosodic means: some actors showed incorrect intonation – questions were pronounced with indistinct intonation (close to declarative sentence intonation), non-functioning fluctuations in melody (“intonation leaps” to high pitch in women), use of falling conclusive cadence in place of inconclusive semicadence;
- certain deviations are typical “acting speech mannerisms” (these are observable in older actors): voiceless articulation of voiced consonants (in males) or articulation of open vowel [a] instead of other vowels (in females) which arise mostly from the actors’ increased emotional involvement and the effort to overemphasize expressions (if these are not considered speech affectation in certain actresses).

The listed deviation types observed by auditory analysis of selected public speaker groups (both the current teachers, presenters, actors, and the future professionals in case of students) correspond with the orthoepic issues discussed in the scholarly literature. These are dealt with by employees of various universities in Bohemia and Moravia, but especially at the Institute of Phonetics at the Faculty of Arts, Charles University in Prague,¹⁹⁸ where the researchers base their analyses of phonetic and prosodic phenomena on precise instrumental measurements. For example, Marie Krčmová (2008, pp. 202 – 208) states that orthoepic difficulties occurring in combining morphemes manifest at morpheme boundaries, i.e., word boundaries, boundaries of prepositions and following words, boundaries of prefixes and bases and parts of compounds. She adds that “the more pedantic the pronunciation, the more acoustically emphasized these boundaries” and states that, in such cases, the combinational principles are “somewhat

¹⁹⁸ Cf. e.g., Janoušková, Veroňková (2008); Pořízka, Kopečková (2018); Štěpánová (2013a); Veroňková (2004; 2012); Veroňková, Janoušková (2010).

regionally differentiated, the regional pronunciation not always viewed as a literary doublet”.¹⁹⁹ Orthoepic elements requiring increased attention include connecting of pairs of vocals or a consonant and a vocal belonging to different syllables, pitfalls of assimilatory changes (voicing issues in case of combining consonants with sonorants or with *v*), as well as articulatory assimilations that result in the simplification of the pronunciation of two identical or different consonants and more complex consonant clusters. Regarding prosodic means, she points out the vitality of the overall acoustic segmentation of the entire utterance via pauses, stresses and intonation.

In her summary of frequent deviations from literary pronunciation examined in speech of students “aspiring to become professional speakers”, Veronika Štěpánová points out, on the suprasegmental level, “the application of inconclusive melodeme in places where the conclusive melodeme is expected” and “non-orthoepic stressing, rapid tempo and inappropriate placement of breathing pauses”.²⁰⁰ Regarding segmental level, she emphasizes high frequency of speech errors, deviations in the quantity and quality of vocals, omission of glottal stops, non-orthoepic voicing and articulatory assimilations, simplification of consonant clusters, and complete omissions of consonants. “The largest number of deviations from the literary standard that can be considered pronunciation deficiencies are caused by negligent and untrained articulation, others occur as a result of the speaker’s belonging to a specific dialectal group. Conversely, fewer analysed phenomena can be attributed to the exaggerated effort of an untrained speaker to speak correctly”²⁰¹ (Štěpánová, 2019, pp. 218 – 219).

Ultimately, the enumeration of problematic phenomena by various authors points not only to the need for a more thorough familiarization with the acoustic qualities of the spoken language in elementary and secondary schools, but also to the necessity of monitoring the current pronunciation norm and of its comprehensive description, which could result in modification of certain orthoepic principles in a future, modern pronunciation codification handbook.

¹⁹⁹ In original: “čím je výslovnost pečlivější, tím více se tyto hranice zvukově signalizují”; “poněkud odlišeny regionálně, přičemž ne vždy je regionem podmíněná výslovnost chápána jako spisovná dubleta”.

²⁰⁰ In original: “mají ambici stát se profesionálními mluvčími”; “užívání neukončujícího melodému tam, kde by byl na místě melodém ukončující”; “neortoepické přízvukování, překotné tempo řeči a nevhodné umístování nádechových pauz”.

²⁰¹ In original: “Největší počet odchylek od spisovné normy, které lze považovat za výslovnostní nedostatky, je způsoben nedbalou a netrénovanou artikulací, další jsou projevem nářečního původu mluvčích. Méně analyzovaných jevů lze přičíst naopak přehnané snaze nepoučeného mluvčího o korektní mluvu.”

6.2 Current topics in Slovak orthoepy

Patrik Petráš

In this subchapter, we deal with the most frequent pronunciation deviations from the codified, literary Slovak pronunciation observable in the contemporary speech. Concurrently, we pay attention to the causes of these deviations. Some current issues in Slovak orthoepy (e.g., pronunciation of the phone [ɾ], or the intonation of Slovak sentences) are not satisfactorily resolved, we are therefore paying increased attention to these. We are observing these topics through the prism of sociolinguistics. For example, in case of intonation forms of declarative sentences that do not match the codified conclusive cadence, we pose a question whether these have to be automatically evaluated as erroneous – without taking their function into account.

We base the description of pronunciation deviations primarily on own language performance research carried out on university students of philologically and pedagogically oriented study programmes in Slovakia, and on public speakers, chiefly media employees (presenters, newsreaders, etc.). Our observations are supplemented by statements and evaluations

of other linguists.

Dialectal bases tied to Slovak speakers' regions of origin have a significant impact on contemporary pronunciation. It should be noted that, in recent years, a restructuring in dominance, or influence, of dialectal macroareas on standard Slovak can be observed. Central Slovak used to have a defining role for development of literary Slovak in the past, serving as the foundation for Štúr's codification²⁰²; today, the “core” position is held by the “Western Slovak”. Ľubomír Kralčák (2015, p. 89) states that “in political, cultural, and – most prominently – mass media centre, the language with Central Slovak dialectal foundation is under an unceasing influence of spoken form of Slovak, into which elements of Western Slovak dialectal base permeate”.²⁰³ This spoken literary Slovak is then dispersed through media into other regions of Slovakia and becomes understood, and gradually fixed, as the spoken norm among the language users. According to the author's observations, an average language user in Western Slovakia considers diphthongs (especially those with an *i* segment) to be one of the most prominent indicators of the literary language. Kralčák then reports that it is the Western

²⁰² On this topic, cf. 2.2.2 *Codification of literary Slovak by Ľudovít Štúr*.

²⁰³ In original: “jazyk so stredoslovenským nárečovým základom je v slovenskom politickom, kultúrnom a najmä masovokomunikačnom centre v prevažnej miere pod nepretržitým vplyvom hovorenej podoby slovenčiny, do ktorej presakujú prvky západoslovenského nárečového základu”.

Slovak communicants who are the source of hypercorrect forms, such as *plieseň* (correctly *plesen*), *čiasník* (correctly *čašník*), *šialka* (correctly *šálka*) etc. (ibid.).

Kralčák (ibid., p. 90) points out that today, the form most capable of spreading macroareal elements nation-wide is the spoken form of Slovak in official and semi-official communication aiming at literariness intentions, or the standard variety.

He perceives the following phenomena as a manifestation of the fact that the Western Slovak dialectal base participates on the shaping of the spoken literary Slovak:

- pronunciation of central *l* in positions of soft *l'*;
- weakening of the *u* segment in the articulation of the diphthong *ô* [uo], or its replacement with a long vocal *ó*, e.g., *móžem*, *vóbec* instead of the correct forms *môžem*, *vôbec*;
- constituting of a diphthong *io* as a result of paradigmatic analogy, e.g., *o babiom lete*, but also forms *s väčšiou*, *o lepšiom*, which the author observed in spontaneous, as well as some premeditated speeches in mass media (televised weather reports).

6.2.1 Segmental level of contemporary Slovak

In the context of vowel pronunciation, we can most commonly observe the **violation of quantity** as a result of a higher speech tempo or efforts to shorten lengthy words, idiomatic expressions or commonly used collocations.²⁰⁴ Shortening, or failure to apply quantity can be observed chiefly among Eastern Slovaks – this is one of the basic markers of Eastern Slovak dialects (e.g., dialectal forms *rubac*, *lupac* instead of literary forms *rúbať*, *lúpať*). Shortening in dialectal lexis can then extend into shortening in otherwise literary words. Western Slovaks, on the contrary, tend to incorrectly apply lengths under the influence of their dialects, as in the forms *voják*, *ból*, *krájá* (correctly *vojak*, *bol*, *krája*), as pointed out in *Pravidlá slovenskej výslovnosti* [Rules of Slovak pronunciation] (Kráľ, 2009, p. 42).

From among the most frequent errors in **pronunciation of diphthongs**, the one that warrants mentioning is the replacement of diphthongs with long monophthongs, e.g., *porádná* instead of *poriadna* (coupled with violation of rhythmic law), *lepšé* instead of *lepšie*, *cudzú* instead of *cudziu*, etc. Others include the pronunciation of diphthong as a bisyllabic coupling of two short vowels or epenthesis of the consonant *j* into the so-called *i*-diphthong.²⁰⁵

Though the **hard vocal onset** and **glottal stop** do not occur in literary Slovak except for several specific cases²⁰⁶ according to the *Pravidlá slovenskej výslovnosti* (Kráľ, 2009, p. 46),

²⁰⁴ On this topic, cf. 4.1.2.1 *Quantity of vowels*

²⁰⁵ On this topic, cf. 4.1.2.3 *Pronunciation of diphthongs*

²⁰⁶ On this topic, cf. 4.1.2.4 *Pronunciation of vowel clusters in Slovak*.

the research by Ľubomír Rendár (2015) carried out on television news recordings has confirmed that they do occur in speech practice. The author identified them in the following phrases, for example: *životným optimizmom, a ten, a teraz, majiteľom a peniaze, mala aj podľa*: [životním ʔoptimizmom], [ʔa_ten], [ʔa_teraz], [majiteľom ʔa_peňaze], [mala ʔaj_podľa].²⁰⁷ Rendár further observed whether glottal stops occur also in word-medial positions on the recordings of texts read by university students of Slovak language and literature. In this manner, he identified articulation of glottal stop in the following, among others: *vysokoakostnej, naaranžované, ktovieako, neefektívne*: [visokoʔakostnej], [naʔaranžované], [ktovieʔako], [ňeʔefektívne]. Rendár's research thus proves that the hard vocal onset and glottal stops occur frequently also in positions other than word boundaries.²⁰⁸

In the context of the consonantal system, the **pronunciation of soft (palatal) *l'*** is possibly the most discussed topic in Slovak orthoepy. We can state that the articulation of this phone is disappearing from contemporary Slovak, especially in positions where the softness is not marked with a caron, e.g., *lebo, les, lipa* pronounced as [lebo], [les], [lipa] instead of the codified [l'ebó], [l'es], [l'ipa] (these are the so-called phonologically weak positions).²⁰⁹ In official speeches, for example in the nationwide media broadcasts (chiefly in the news), the pronunciation of the phone [l'] is usually observed in cases where the softness is marked with a caron in writing, e.g., *veľa, ľahký, ľavica* pronounced as [vela], [l'axkí], [l'avica]. In less official communication, or in common colloquial communication, the soft *l'* is disappearing also in these positions: [vela], [laxkí], [lavica]. From the point of view of regional differentiation, soft *l'* is more easily preserved in areas where it is supported dialectically (e.g., Eastern and Central Slovak dialects). Dialect is not the only factor deciding the “support” of pronunciation of the soft *l'*. Siniša Habijanec (2017, p. 216) points out that the rural connotations associated with the [l'e], [l'i] pronunciation has also influenced the speakers of dialects, who avoid this pronunciation in urban or socially prestigious environments. Pronunciation-wise, the failure to pronounce soft *l'* is one of the most criticised shortcomings, or rather, it used to be one of the most commonly criticised pronunciation errors in the past. For example, Vlado Uhlár claimed that the situation in pronunciation of *l'* is unsatisfactory as early as in 1940, criticising primarily the educational practice (Uhlár, 1940, pp. 204 – 211). He took note of the negligence of pronouncing *l'* in cities and some other areas also later, paying special attention to failure to pronounce *l'* in syllables containing the vowels *e* and *i*, *í*, and diphthongs *ia*, *ie*, *iu*, where the

²⁰⁷ Cf. in detail Rendár (2015, pp. 7 – 71).

²⁰⁸ Cf. in detail *ibid.*, pp. 74 – 77.

²⁰⁹ On the codified pronunciation of *l* – *l'*, cf. Subchapter 4.2.3.5 *Hard and soft consonants*.

softness is not marked with a caron (Uhlár, 1958, pp. 91 – 102). More recent scholarly texts also contain critical evaluations of insufficient softening of *l'* or its replacement with a so-called hard *l*, pointed out also directly by Ábel Král' in the *Pravidlá slovenského pravopisu* (2009, p. 68). According to Ján Kačala (1997, pp. 65 – 72), a part of Slovaks considers *l* and *l'* to be so close, that they do not distinguish between them in pronunciation (and sometimes in writing) and identifies both with *l*. He registers the failure to distinguish these phonemes even in those cases where they distinguish among minimal pairs, as in *lavica – l'avica*, *rola – roľa*, *lad – l'ad*, etc. Kačala warns that the phone [l'] has a fixed position in the Slovak phonetic system, it is functionally, linguo-geographically, and codificationally justified, and it is therefore necessary to strengthen its systemic position in everyday communication practice. Rendár (2006, pp. 51 – 60) states that even though soft *l'* appears with ever diminishing frequency in common communication and in public speeches, it is still supported even in less cultivated communication (especially in East and Central Slovakia). In the speech of actors, presenters, commentators, and other public speakers, he considers the codified pronunciation of *l'* to be individual (in Rendár's opinion, important factors here are the individual's dialectal background and adopted speech habits), but hard or weakened – semi-soft – pronunciation is gaining prominence. The most problematic is the pronunciation of *l'* in the so-called weak positions, i.e., when the palatal *l'* occurs before the vowels *e*, *i*, *í* and diphthongs *ia*, *ie*, *iu*. Slavomír Ondrejovič (2019, pp. 154 – 155) also concludes that the living norm of the cultivated Slovak language requires the pronunciation of palatal *l'* preceding back vocals, consonants and stop, but when preceding the vowels *e*, *i*, *í* and diphthongs *ia*, *ie*, *iu*, non-palatal pronunciation is common in most cases, and he evaluates the palatal pronunciation in these positions as frequently strongly marked. Habijanec (2017, p. 216) also evaluates the articulation of the sequences [l'e], [l'i] as irreversibly marked today.

Regarding the softness correlation of *t'*, *d'*, *ň*, *l' – t*, *d*, *n*, *l*, cases of **incorrect softening of other consonants** are to be observed, especially the articulation of soft *t'* instead of hard *t* in the demonstrative pronouns *tie*, *tieto*. Their pronunciation as [t'ie], [t'ieto] is a frequent occurrence, replacing the codified pronunciation [tie], [tieto].²¹⁰

In speech practice, **incorrect direction of voicing assimilation** is also observable in certain situations. Such pronunciation is frequently influenced by the speaker's native dialect. For example, assimilation of prepositions *s/so*, *k/ku* preceding personal pronouns, where it should not take place, is a typical characteristic for Eastern Slovak dialects. Especially among

²¹⁰ On the codified pronunciation of *t – t'*, cf. Subchapter 4.2.3.5 *Hard and soft consonants*.

speakers with this dialectal base, pronunciation of phrases *s ním, s ňou, s nami, s vami, so mnou, ku mne* as [z_ńím], [z_ňou], [z_nami], [z_vami], [zo_mnou], [gu_mne] can be noticed.²¹¹ Another factor influencing pronunciation is the nationality of the speaker, or rather their native language. In Slovak language environment, frequent **substitution of voiced *h* with voiceless *ch* [x]** can be observed in native Hungarian speakers. This substitution then influences the direction of voicing assimilation, e.g., in the words *rozhodnúť, rozhlas*, which these speakers pronounce as [rosxodnúť], [rosxlas] instead of [rozhodnúť], [rozhlas]. The opposite situation – articulation of [h] instead of [x], regardless of the impact of native language, can be observed in less cultivated communication, for example the pronunciation of the word *nechať* as [ňehať] instead of [ňexať]. These cases are also highlighted by the *Pravidlá slovenskej výslovnosti* (Kráľ, 2009, p. 61).²¹²

The next pronunciation phenomenon worth mentioning is also dialectally preconditioned, this time especially by Western Slovak dialects. It is the **substitution of bilabial [u] in syllable-final position with a [f]**, which results in such pronunciations as [kr̥f], [pr̥fki] instead of [kr̥u], [pr̥uki] in the words *krv* and *prvky*.²¹³

Simplification of consonant clusters that should not be simplified according to the valid codification also ranks among the more frequent pronunciation deviations. This is chiefly the case of consonant clusters *stn, stň, zdn, zdň, štň, ždň, stl, zdl, stľ, ctň*, which occur e.g., in the words *čestný, miestny, vlastne, šťastný, prázdniny, starostlivý, týždňový*, etc. In the pronunciation of these clusters, we can observe the elision of consonants *t, d*, so that the example words are pronounced as [česní], [m̥iesni], [vlasne], [šťasní], [prázňini], [staroslivi]²¹⁴, [tížňoví] instead of [čestní], [m̥iestni], [vlastne], [šťastní], [prázdnini], [starostľiví], [tíždňoví]. The stabilised exception from the rule of non-simplification in this case is the pronunciation of numerals, so that the numerals *šestnásť, šestnásti* (cardinal numeral), *šestnásty* (ordinal numeral) are correctly pronounced as [šesnášť], [šesnášťi], [šesnásti], however, non-simplified pronunciation [šestnásť], [šestnásťi], [šestnásti] can also be heard. Consonant clusters *šs, žs, sš, zš, zž, sč, čs, zč* are also occasionally simplified, when, for example, the words *černošský, kováčsky* are pronounced as [černoskí], [kovácki] instead of [černošskí], [kováčski]. This

²¹¹ On the direction of voicing assimilation preceding personal pronouns, cf. Subchapter 4.2.3.3 *Voicing assimilation*.

²¹² On assimilation of consonants [x], [ɣ] ([h]), cf. Subchapter 4.2.3.3 *Voicing assimilation*.

²¹³ On pronunciation of the consonant *v* and its variants, cf. Subchapter 4.2.3.2 *Consonant v and its pronunciation variants*.

²¹⁴ On pronunciation of soft *ľ* preceding *i, í, e, ia, ie, iu* cf. earlier parts of this chapter.

pronunciation error is evaluated as a sign of uncultivated speech by the *Pravidlá slovenskej výslovnosti* (ibid., p. 77).²¹⁵

6.2.2 Suprasegmental level of contemporary Slovak

The most prominent pronunciation deviations on suprasegmental level can be observed in the area of word and contrastive stress placement, but chiefly in sentence melody. We have to keep in mind, though, that these suprasegmental phenomena act as a single complex and form the intonational colouring of the sentence.

In literary Slovak, the main stress of a word is positioned on the first syllable and is fixed, i.e., it does not change its position.²¹⁶ In certain speaker groups, however, we can identify the **stressing of penultimate syllable in a word** (if it has three or more syllables) preceding a pause inside a sentence or at its end. It is a characteristic central Slovak stress, which Marta Bugárová (2001, pp. 17 – 22) considers a sentential melody phenomenon. She documents the difference between Central Slovak melody and literary Slovak melody on the example sentence *Nikto sa ťa nezastáva*, where the characteristic Central Slovak stress occurs on the word *nezastáva*. The typical pitch rise takes place on the penultimate syllable *tá*, followed by a fall on the last syllable. In literary Slovak, the stress is on the first syllable, *ne* (here a rise in pitch relative to the preceding syllable occurs) and then the pitch falls until the end of the word and the utterance. Especially in contemporary media communication, we can observe the **use of sentence stress, or rather contrastive stress in a sentence not taking into account the semantic structure of the utterance**. In this regard, *Pravidlá slovenskej výslovnosti* [Rules of Slovak pronunciation] (Král', 2009, p. 89) lists an example sentence *Denná teplota sa bude pohybovať okolo dvadsať stupňov*, in which the sentence stress should, considering the comment of the utterance, be placed on the word *dvadsať*, not *stupňov*, as can be observed in the television forecasts according to Král'.

Furthermore, in contemporary television news broadcasts (especially of private channels), there can be observed an **inappropriate contrastive stress placement on the parts of the utterance** that lead to dramatization of the utterance, which manifests in an increased intensity and various melodic rises on syllables of the emphasized parts. We consider this phenomenon to be one of the characteristic speech elements of specific newsreaders, who present the so-called field reports in the news broadcasts (either live or pre-recorded).

²¹⁵ On pronunciation of consonant clusters, cf. Subchapter 4.2.3.7 *Consonant clusters*.

²¹⁶ On codification of stress, cf. Subchapter 4.3.1 *Stress*.

In the traditional conception, Slovak sentence intonation tends to be evaluated on the axis of intonationally neutral – intonationally marked – intonationally incorrect sentences. According to Bugárová (2001, p. 54), if the situation is normal, without prominent emotions, the utterances also have a neutral character, without intonation disruptions and allowing for a fluid perception of information. Such utterances are characterised by a conclusive cadence. In a marked utterance, emotional stance of the speaker to the reality is represented. Markedness can thus be signalised by both lingual and paralingual acoustic means, e.g., lengthening of vowels, emotional pauses in the utterance, etc. Bugárová evaluates the utterances without a clear conclusion as incorrect; in these, a tendency to raised pitch can be noticed.

This traditional evaluation of intonation contours is deemed dated today, especially in the area of television news broadcasts, where a great variability of content focus of the reports is evident, and with it a variety in their intonational portrayal. In our opinion, such rigorous evaluation of intonation realisations of utterances cannot be expected, as it does not sufficiently reflect the communication focus of the utterances modulated.

Research into intonation variant in television news broadcasts was carried out by Marcel Olšiak. He observed a regularly repeated, stereotypical violation of correct melody in ends of sentences. Instead of an expected fall at the end of an utterance, the voice is raised on the last two syllables, and as a result, the pitch of the final word exceeds that of the previous segment. This mechanical intonation rise on the final word or phrase in a sentence was a repeating non-functional contour of the final sentence segment, which the listener perceives as an oscillation, or “singing”. If this phenomenon recurs, it appears stereotypical, monotonous (Olšiak, 2008, p. 179). The intonational fragmentation of sentences with the intent to emphasize certain part of the utterance are evaluated as stereotypical by the author. In his opinion, the announcer frequently fragments sentences in incorrect places, which can result in perception of sentence conclusion signal at the place of fragmentation. The sentence then continues, however, specifically starting from a raised pitch position, which is reminiscent of an intonational onset of a new sentence. Olšiak also warns of the risk of adopting the so-called reading intonation, which the announcer can acquire as a result of repeated and regular loud reading. This phenomenon is tied to the expressive perspective. Sentence melody is flat in this case, the reading appears unnatural, modal signalisation of the utterance type usually only appears at its end, acoustic signalisations of the topic and the comment are absent. Presenters and newsreaders are attempting at a certain relaxation, spontaneity, or declamatoriness according to the author, with the aim of increasing familiarity towards the listener; use of further intonation elements is connected with these efforts. The mentioned markedness can be observed

especially in less serious topics. In these cases, efforts to push voice to a lower position is characteristic, resulting in an inability to articulate such an interval of melodic fall as would be necessary for a conclusive cadence of a declarative sentence (ibid., pp. 180 – 181).

Ábel Král' also takes a critical stance towards the intonational realisation of media speeches, pointing out the marked intonational forms in the delivery of radio and television speakers on the basis of comparison with neutral intonation of a declarative sentence. In his opinion, this is a marked stereotype, where media workers “intonate the last rhythmic group of an utterance with a rising or raised neutral melody, frequently also with rising, or non-falling intensity”²¹⁷ (Král', 2001, p. 261). This intonation stereotype reminds of a signal of inconclusive melody, but is not the same. From a phonological point of view, he evaluates this type as facultative, or individual variant, to which no specific language function can be assigned (ibid.). Král' supports his claims by recorded examples from the broadcasts of the public-service radio *Slovenský rozhlas*, as he himself states, primarily intending to provide objective facts on long-criticised errors “of language culture in the area of Slovak sentence intonation in the *Slovenský rozhlas*, *Slovenská televízia*, and *Markíza*”²¹⁸ (ibid., p. 275).

Helena Čertíková penned a reaction to this paper (2002, p. 74); she considers the breaking of the natural melodies to be vogueish, a certain “aesthetic ideal” in her own words, that private media started promoting in Slovakia and which is gradually starting to appear also in speech of news presenters and youth show hosts of the *Slovenský rozhlas*. She attempts to analyse the reasons for this state and concludes that the situation is unfavourably influenced by the fact that presenters with experience from private companies, having previously acquired the marked intonation of these media, frequently come to work for the *Slovenský rozhlas*. Similarly, the students of journalism, she continues, frequently listen to private radio broadcasters, possibly even cooperate with them. As a result, they naturally adopt the defective intonation. In her opinion, these workers are influenced by a quite strong intonation stereotype, which impacts not only the sentence melody, but also its overall rhythm, resulting in violation of natural speech demarcation by stresses on peaks of stress groups, syllabified speech, and accentuation, “pushing” of the final syllables of sentences. The author also noticed the substitution of melodies with force, translating into strictly dynamic contrastive stresses and pushing of terminal syllables replacing melodic falls (ibid., pp. 74 – 75). She does not agree with the

²¹⁷ In original: “posledný rytmický takt vety alebo súvetia (výpovede) intonujú so stúpavou alebo zdvihnutou rovnou melódiou, často aj so stúpajúcou, resp. neklesajúcou intenzitou”.

²¹⁸ In original: “jazykovej kultúry v oblasti intonácie slovenskej vety v Slovenskom rozhlase, v Slovenskej televízii a v Markíze”.

ranking of media on the basis of defective intonation frequency suggested by Král' (2001, p. 275) (that is: *Slovenský rozhlas, Slovenská televízia, Markíza*). In Čertíková's opinion (2002, p. 76), from the language and speech culture point of view, *Slovenský rozhlas* is still in the best shape.²¹⁹

Slavomír Ondrejovič also replied to Král's study, pondering whether intonation can even be codified in the same manner as other sound phenomena, or if it requires an individual approach, whether the orthoepic situation is the same (at the time of writing of the discussed paper) as it was at the time of writing the *Pravidlá slovenskej výslovnosti* (1984) (Ondrejovič, 2002, p. 77). Ondrejovič notes that the media have the greatest influence on norm development (not only intonational and acoustic), and also reminds that the area of intonation is sometimes seen as a phenomenon that is more mutable and variable in realisation, as well as harder to record and codify than segmental sound level (ibid., p. 78).

He also highlights the dual function of intonation: the first function is related to the communicated content, the second to the overall emotional state of the speaker, with the two overlapping in spoken utterances (ibid., p. 79). In Ondrejovič's opinion, the cadence of declarative sentences (and similarly of imperative sentences and variable questions) is truly falling in Slovak language, with the tone starting to fall at the stressed syllable of the comment of the utterance and continuing to fall until its end. However, he notes that the melodic fall does not need to end at the lower end of the speakers register as in a declamative expression. The melodic forms singled out are characteristic for this type, but they are not the only ones possible. While unmarked cadence occurs in a neutral utterance as a simple form of its conclusion, marked cadence mediates additional information – by the shift of sentence stress from the final position, among other things. The most important role is played here by a functional application of intonation contour, not its contrasting with an abstract model. To illustrate this, the address sentence *Dobry deň, vážení poslucháči* can be imagined with a cadence that is not perceived as falling without a negative effect (ibid.). The media broadcasts, the author claims, “are not only about informing, but about the presenter's speech affecting the listener along the intentions of persuasive effect and eliciting a pleasant atmosphere”²²⁰ (ibid.). Ondrejovič therefore states that, in media environment, only those intonation forms can be deemed incorrect that

²¹⁹ At the time of publishing of Král' and Čertíková's papers, *Slovenský rozhlas* and *Slovenská televízia* were independent institutions. At present time, they form a unified institution *Rozhlas a televízia Slovenska (RTVS)*. Available at: <https://www.rtv.s.org/o-rtvs/organizacna-struktura>. [cited 13. 2. 2022].

²²⁰ In original: “nejde len o úlohu informovať, ale aj o to, aby prejav moderátora pôsobil na poslucháča v zmysle persuzívneho efektu a vyvolal príjemnú atmosféru”.

have a negative effect on the listeners – the described oscillating intonation schemata do belong to this category (ibid., p. 80).

We provide two examples of speeches from Slovak language news broadcast by private television channels, on which we attempt to prove that even the declarative sentence intonation not identifiable with the codified conclusive cadence is not necessarily erroneous, as it can be used to signalise positive connotations of the presented information and positive, friendly attitude of the presenters towards the viewers.²²¹

The provided examples come from introductory blocks of news show that consist of contact elements (greetings, welcomes) and the so-called introductory information, i.e., information on an event that took place that day. The efforts to positively attune the viewers can be observed also in the affirmative formulations of the introductory information. In some cases, the newsreaders directly signal to the viewers that they have good news to deliver, stating one immediately within the introductory information. Such case is represented in the following example:

Example 1:²²²

JZ: *Blíži sa víkend a s ním aj dobré správy.*

MCh: *Počasie už bude pripomínať jar a bodku za zimou dávajú aj meteorológovia.*

JZ: *Prijemný dobrý večer pri sledovaní Televíznych novín na Markíze.*

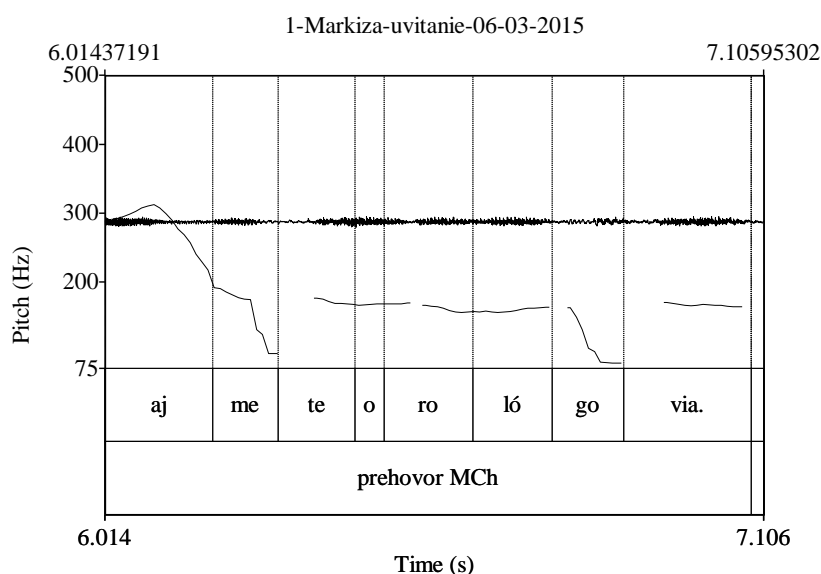
MCh: *Dobrý večer.*

In this example, the most interesting melodic contour is evident in the utterance *Počasie už bude pripomínať jar a bodku za zimou dávajú aj meteorológovia*, especially its final part *aj meteorológovia*. The particle *aj* introduces the word *meteorológovia* with its weaker melodic rise relative to the previous segment. This word, with an atypically high number of syllables for Slovak language, concludes the utterance with a positive content, which can be seen as the main reason for absence of the melodic fall expected in a conclusive cadence. Melodic curve of the segment *aj meteorológovia* points to a very weak melodic fall (cf. also Graph 1), but it is unobservable from an auditory point of view. In general, this word can be evaluated as more or less maintaining a single melodic level. In this case, the melody is primarily a reflection of a positive topic, but it could be said that it also expresses the positive attitude of the presenter – these two facts being naturally linked.

²²¹ A more detailed analysis of the examples provided available in Petráš (2016, pp. 55 – 70).

²²² The initials JZ and MCh denote the turns of the presenters that took turns reading.

Graph 1: Melody of the terminal segment of the first utterance of MCh in the Example 1:



The following speech is also an example of presenting positive information in television news broadcast, again manifesting also in the intonational realisation of the utterances.

Example 2:²²³

PŠ: Dnes v noci si |109 ms| pospíme o hodinku menej.

ZP: Mení sa čas a to znamená, že dni budú odrazu |64 ms| čarovne dlhé.

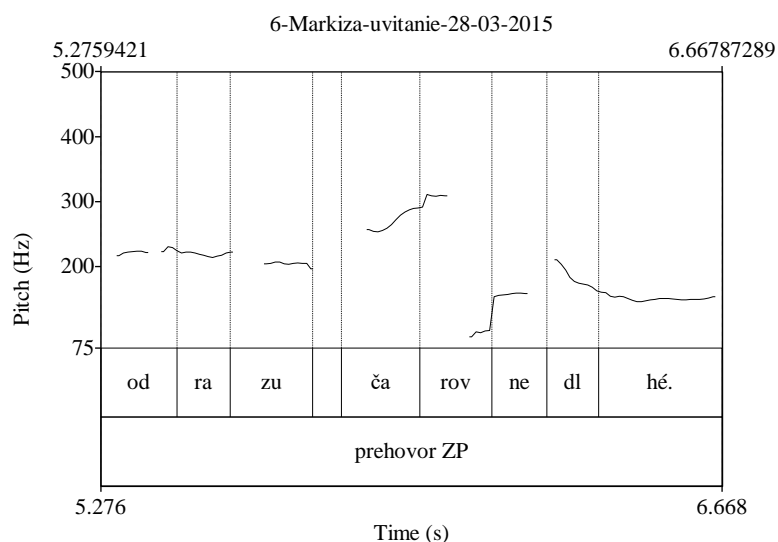
PŠ: Ešte predtým sú tu ale naše Televízne noviny.

ZP: No a aj dnes sme tu pre vás s aktuálnymi informáciami, sme radi, že ste s nami.

Intonation-wise, this speech contained multiple interesting segments. With regard to the outlined goal of this discussion, we focus solely on the contour of the utterance *Mení sa čas a to znamená, že dni budú odrazu čarovne dlhé*. Possibly the most transparent manifestation of the positive emotional state of the presenter, as well as her attempts at a kind of “declamation” effect, is evident in the terminal segment *čarovne dlhé*. This part was melodically raised (cf. Graph 2); the last syllable [hé] does not show a noticeable melodic fall, the syllable maintains a relatively high pitch, which is emphasized by its increased duration (304 ms). We believe that, in this case, it is possible to talk about empathic signs in the given utterance. Melodic contour of the analysed segment is recorded in the Graph 2.

²²³ In the example 2, significantly lengthened words or syllables occurred. These are marked with an understroke. Duration of pause in milliseconds (ms) is reported in between vertical bars in the places where such pauses occurred.

Graph 2: Melodic contour of the final segment of the utterance by the presenter ZP in the Example 2



Even though this melodic contour is not an explicit example of a conclusive cadence, we find it appropriate to perceive it as being in agreement with the function of this utterance – it is an introductory block of a news show, where the newsreaders try to act in a friendly, declamatory manner and are therefore emphasizing the positive aspects of the introductory information, which they actuate also melodically.

We believe that the analysed samples showed that the intonation is a rather mutable phenomenon that cannot be codified to the same extent as the segmental dimension of the sound level of language, that it can express also particular communicative functions (e.g., establishing of an amicable contact with the receiver, inducing of a pleasant atmosphere, etc.). Because of this, an approach to this phenomenon needs to be more differentiated.

6.3 Pronunciation issues among Polish native speakers – selected topics

Milena Hebal-Jeziarska

In this subchapter, certain language phenomena are described that cause difficulties to native Polish speakers, particularly students of philology. The description is based on observations from the seminars of orthophony carried out as a part of the *Orthophony of West Slavonic Languages* grant project and courses on phonetics. There were 100 participants in the seminars. These were primarily university and secondary school students. The selection of topics was determined by the exercises carried out in the seminars and courses. Most of the tasks were prepared for use in the phonetic seminars carried out as a part of the grant. These are collected in the *Orthoepy of West Slavonic Languages. Practical Exercises* (2020). In the end of this

subchapter, we include a brief reflection on the seminars of Polish pronunciation for Czech and Slovak students not studying Polish language.

6.3.1 Pronunciation of vowels

It would seem that Polish vowels should not cause trouble to Poles. Yet, most studies point to their erroneous articulation. This problem pertains to Poles not working with their voices, as well as public speakers, including actors, singers and reporters. The authors of publications dealing with stage pronunciation and artistic logopaedics point to the following errors, among others: voiceless vowel pronunciation (Doleżyńska-Walczak, Doleżyński, 2020, p. 505; Nowakowski, 1997, p. 108); changes in phone timbre: vowels [a], [o] reminiscent of the vowel [u] in pronunciation, vowel [i] realised acoustically similarly to the vowel [y], wide pronunciation of vowels [i], [y], [u] crossing over into [e] and [o] (Doleżyńska-Walczak, Doleżyński, 2020, p. 518; Nowakowski, 1997, p. 105); partial or total vowel reduction (Luboń, 2020, p. 540; Nowakowski, 1997, p. 104).

The main issue observed in students is not phone substitution, but rather weak articulation of vowels, which leads to incomprehensible speech in certain cases. This issue is also reported by speech therapists and pronunciation coaches (Majkowska, 2004, p. 104; Toczyska, 2016). This phenomenon is linked to incorrect opening of the mouth.

6.3.2 Pronunciation of phones in word-final positions

In this subchapter, we deal with two pronunciation error types occurring in word-final positions preceding a pause. The first is the weakened articulation of phones following a consonant in such position, which often leads to phone reduction. The second is the pronunciation of voiced phones at ends of specific words.

Among students, reduction of the semivowel corresponding with the grapheme *ł* occurs frequently. This is true for the position in which a voiced or voiceless variant of the phone [ɤ] follows a consonant, as in the words *pomysł*, *biegł*, *piekł*. These cases are problematic also for professionals. Due to this, experts on stage speech also pay attention to this issue. Paweł Nowakowski (1997, p. 119) observed elision of this phone in verb and noun forms among the then-young generation of actors in as much as 87 % of realisations. A high percentage of semivowel [ɤ] reduction, including its voiceless variant, was observed in the middle generation of actors (94 % of realisations). It can be assumed that the problems with this semivowel realisation only worsened with time.

Despite the fact that word end ranks among the weakest articulatory positions, in some words, a voiced realisation can be noticed in speech practice. Bogusław Dunaj (2013, p. 29) provides a list of words in which a voiced consonant is pronounced in terminal position: *blog, kod, log, mag, smog, snob*. According to Dunaj, this is caused by the efforts to distinguish these words from the forms *blok, kot, lok, mak, smok, snop*.

It can be concluded from the observations that the voiced phone pronunciation takes place also among the educated speakers trying to use a careful form of Polish, e.g., in medical practitioners – [kod] (i.e., *code* – of a recipe), university lecturers – [kod] (*code* of a course). In phonetic seminars, the students were given a task to read aloud sentences into which they were to insert pairs of words distinct only in the orthographic word-final letter *kod/kot, miedź/mieć*. Majority of respondents articulated a voiced consonant in *kod* and *miedź*. The result was certainly influenced by orthography.

Examples of fill-in-the-gap exercises (Hebal-Jezińska, 2020, p. 44):

Dla tych, którzy znali, wszystko było jasne. ²²⁴

Z ostatniej stodoły uciekł do puszczy. ²²⁵

6.3.3 Phonic realisation of letters *ą* and *ę*

A lot has been written on phonic equivalents of the letters *ą* and *ę*. Rules of phonic realisation of these letters can be found in virtually every study on Polish phonetics or art of pronunciation. Despite this, the awareness of this topic among general populace has not been improving for an extended period of time and the reaction of first-year university students learning these rules is always more or less the same. At first, they are surprised, sometimes even expressing they feel as if having been lied to, that they were unaware of this for such a long time. This is true for almost all students, regardless of the correctness of their pronunciation of the phonic equivalents of the letters in question.

When asked the initial question of the seminar dealing with phonic realisation of the letters *ą* and *ę* – “what are these letters?” – most students answer “vowels”. The causes for the wrong interpretation of their status and lack of knowledge of the rules by which they are governed has to be sought chiefly in school curricula, in their emphasis on the orthographic aspect (Karpowicz, 2018, p. 38), as well as in teaching listening based on phonematic principle (Dukiewicz, 1995, p. 35). Teachers we interviewed confirm Karpowicz’s argument (2018,

²²⁴ NCPL: Siemion, Piotr. *Finimondo – komedia romantyczna*. Warszawa, 2004.

²²⁵ NCPL: Grzegorzcyk, Jan. *Chaszcze*. Kraków, 2009.

p. 38): “(...) in teaching orthography of words containing *q* and *ę*, attention is paid to their spelling to such an extent that they are pronounced incorrectly in order not to forget how they should be properly written.”²²⁶

“In order not to forget all the ‘tails’, we all articulated these phones not with just significant, but even excessive nasality, for example, the noun *tęcza*, which we tried to pronounce as [**tęcza*] to memorize the correct spelling and avoid an orthographic error [**tencza*].”²²⁷ This error is made also by some teachers of Polish as a foreign language.

The authors dealing with research into pronunciation agree that errors in phonic realisation of *q* and *ę* are quite frequent (Karpowicz, 2018, p. 38; Sambor, 2020, p. 481; Smoleń, 2008, p. 199, Więcek-Poborczyk, 2014, p. 181). They occur both in careful and colloquial speech (Karpowicz, 2018, p. 38). Since there is a high likelihood that the readers will attempt to look up information on *q* and *ę* in the section devoted to vowels, the rules of phonic realisation of these letters is included in that section. The incorrect realisations occur in both word-final and word-medial positions. The authors of handbooks warn about the erroneous realisations of the letter *q* in word-final position, e.g., [ido] or [idom], [idou] (in prs. 3 pl.), and of the letter *ę* in the same position, e.g., [idem], [ideu] (prs. 1 sg.), as well as their erroneous realisations in word-medial positions preceding non-constrictive phones.²²⁸

Exercises for phonic realisation of the letters *q* and *ę* prepared and delivered within the grant seemed so difficult to students that they required the answers to them be recorded in the exercise book prepared specifically for these workshops. Another issue appeared in the form of the pronunciation rules and orthography awareness. Students that had articulated the equivalents of these letters correctly beforehand became lost in the tangle of various rules after learning about the phonetic system rules. An exercise that required insertion of the words *tępo*, *tempo* and a poem excerpt with an increased frequency of the letters *q* and *ę* in various positions proved especially difficult.

²²⁶ In original: “(...) przy uczeniu ortografii *ą* i *ę* zwraca się uwagę na zapis do tego stopnia, że wypowiada się niepoprawnie, żeby nie zapomnieć, jak powinno być ortograficznie.”

²²⁷ In original: “Żeby nie zapomnieć o ogonkach, wszyscy wymawialiśmy te głoski nie tyle z wyraźną, ile wręcz z przesadzoną nosowością, np. staraliśmy się, żeby rzeczownik *tęcza* za brzmiał [**tęcza*], dzięki czemu mieliśmy zapamiętać poprawną pisownię i uniknąć błędu ortograficznego [**tencza*].”

²²⁸ Cf. Subchapter 6.3.1 *Pronunciation of vowels*.

The students were to deal with these tasks (Hebal-Jeziarska, 2020, p. 42):

Witold Gawdzik, *Z ortografii chcesz mieć pięć...* (excerpt)²²⁹

Z ortografii chcesz mieć pięć,

Więc wbij w głowę, zapamiętaj:

Dętka, cętka, węzeł, chęć,

Kołędnicy, kądziel, święta.

Fill in the correct words into the gaps and then read the sentences aloud.

a) *Tępo, tempo*

- *Utkwione gdzieś, w brudnej błonie okienka, wyblakłe ślepie Adamusa patrzyły i nieruchomo*²³⁰.
- *Wytrzymuje pan takie pracy*²³¹.

In reading the words containing *q* and *ę* preceding non-constrictive phones, the students also tended to articulate polysegmental phones instead of the correct pedantic pronunciation in lexemes with positive or polite content. The words *piękny, dziękuję* are examples of this.

An experiment was also carried out²³² among people who were not explained the rules of phonic realisation of the letters *q* and *e* before participating in the exercise. The goal of this experiment was to find out how the knowledge of orthography influences the phonic realisation of these letters. Forty-five native speakers of Polish participated in this experiment: secondary school pupils, students of philology, persons with philological education, and an actor.

The task was divided into two parts. In the first, the participants were to label what they saw in pictures with a single word. They were asked to answer as fast as possible. The following objects and persons were depicted in the pictures: *angle, trumpet, pigeon, heel, tooth, teeth, fifteen, screwdriver, nurse, priest, spider, hand*.

The second part of the task was to carefully read aloud the written down words labelling what was previously depicted: *kąt, trąbka, gołąb, pięta, ząb, zęby, piętnaście, śrubokręt,*

²²⁹ Gawdzik, Witold. *Ortografia na wesoło i na serio*. Warsaw, 1998.

²³⁰ NCPL: Kruczkowski, Leon. *Kordian i cham*. Warsaw, 1979.

²³¹ NCPL: Krajewski, Marek, Czubaj, Mariusz. *Róże cmentarne*. Warsaw, 2009.

²³² We would like to thank the students of the Institute of Western and Southern Slavic Studies of the University of Warsaw and the pupils of LO CLXII, as well as all the others who participated in this exercise.

pielęgniarka, ksiądz, pająk, ręka. Additional words *dziękuję* (*thank*; prs. 1 sg.) and *piękny* (*beautiful*; sg. nom. masc.) were included in the list on the basis of earlier observations.

The results of the experiment obtained by listening shown that 50 % of participants realised the letters *q* and *ę* in word-medial position preceding a non-constrictive incorrectly in the second part of the exercise. Those participants who realised the words erroneously in both parts of the exercise were excluded from the results. It can thus be concluded that the pedantic pronunciation is hypercorrect for many speakers, that is, it is incorrect from codification point of view. Influence of orthography significantly contributes to this erroneous pronunciation. A rather intriguing observation was made in the group of secondary school pupils, in which a part of the participants was interested in the topic and a part was not. The correct phonic realisation of the letters *q* and *ę* in this group is owed to the lack of interest in the topic, “neglectful” pronunciation, and a greater physical distance between the pupils and the lecturer. It was these group that succeeded in the second part of the exercise. On the other hand, pupils that attempted to articulate the letters correctly and clearly in question produced an erroneous pronunciation. Physical distance between these and the lecturer was smaller than in the previous group. Their phonic realisation of the letters *q* and *ę* should have been in accordance with orthography and not that of polysegmental phones, as the letters *q* and *ę* stood in word-medial positions preceding non-constrictive phones in the lexemes used.

6.3.4 Phonic realisation of *dż*, *drz*

Many handbooks contain recommendations how to phonically realise the letter sequences *dż* and *drz* (Markowski, 2004; Karpowicz, 2018).

In seminars, students were to correctly read aloud the words: *dżem*, *dżinsy*, *budżet*, *Andrzej*, *drzazga*, *drzemać*, *drzemiący*, *drzewo*, *drzwi*, *drzwiczki*, *Jędrzejów*, *mędrzec*, *nozdrza*, *odrzucić*, *podrzucić*, *przedrzeć*, *w zanadrzu*, *wydrzeć*, *zdrzemnąć się*.

The greatest difficulties were caused by the lexeme *drzwi*, which almost all students realised as [dʒv'i], and not [ʒv'i] as recommended, nor the colloquial variant [ʒʒv'i]. The Spokes spoken language corpus search confirms that the pronunciation deemed erroneous is the most frequent.

Another word causing trouble in pronunciation was the word *budżet*, which a part of the participants pronounced [buʒet]. Other words caused no significant trouble to most of the participants. Some erroneous realisations, for example, of the words [dżem], [Aɳʒeɪ] occurred, but were infrequent.

6.3.5 Pronunciation of selected lexemes containing letters combinations *au, eu, ou, ai, oi, ei, oi*

The combinations of the subject vowel clusters were discussed in the section dealing with pronunciation of vowels and consonants. In the seminars, these words were the most troublesome for Polish students: *hydraulic, neutralny*. All the students pronounced the words *hydraulic* and *neutralny* as [hydraul'ik] and [neutralny] instead of [hydrauli'k] and [neʊtralny].

6.3.6 Pronunciation of numerals

The numerals in the range from 400 to 900 caused problems in both stress and pronunciation to students. They were not sufficiently aware that the stress in these words is positioned on the antepenultimate syllable.

Tendency towards erroneous pronunciation in accordance with orthography was obvious in the phonic realisation of the numerals 500, 600, as well as 50, 60, and 15.

The issues with pronunciation of numerals among teachers of Polish as a foreign language is discussed in detail by Marcin Maciołek (2015).

6.3.7 Pronunciation of selected lexemes

One of the words causing trouble to students and pupils was the word *pojedynczy*. Most participants were not aware that the word is correctly pronounced with a [ɲ] or a [n].

Pronunciation of the word *jabłko* also proved troublesome. In the *Wielki słownik poprawnej polszczyzny* [The great dictionary of correct Polish], the form *jabłko* [japʊko] is deemed correct, as well as less frequent *jabłko* [jɒbʊko]. All the participants pronounced it in the form deemed less frequent. Of note is also the exercise in which the correct form of lexemes *standard, standardowy, standardowo* were to be filled in. Declension forms such as *standardy, standardzie* were to be used. The goal of this exercise was to verify whether the students will articulate the phone [t] or [ć] in the lexeme *standard* in cases other than nominative and in the lexeme *standardowo*, e.g., *standarty* [standarty], *standarcie* [standarće], *standartowy* [standartovy] instead of *standardy* [standardy], *standardzie* [standarżé], *standardowy* [standardovy]. The latter realisations are proscribed by the *Wielki słownik poprawnej polszczyzny*. Despite this, a quite significant tendency towards such pronunciation has recently been observed especially among the middle and older generations, as well as in the media. None of the seminar participants pronounced these words incorrectly. It can thus be concluded that this error is not as frequent in the younger generation.

Orthophonic seminars are organised only sporadically in Poland. They are rare even at universities. Most students evaluated such seminars as necessary, providing new knowledge and improving language awareness. Workshops on pronunciation of Czech and Slovak languages aimed at their native speakers proved popular. Seminars on Polish language pronunciation for Czech and Slovak students not learning Polish language were also interesting for the participants. The greatest surprise for them was learning that monophthongal nasal vowels do not exist in Polish. Pronunciation of individual Polish phones was not easy for the students; with pronunciation of the vowels [i] and [y] being the most problematic. It was hard for the participants to perceive the difference between the two. From among consonants, articulation of the phones [t] and [d] turned out to be troublesome due to the fact that their pronunciation is more alveolar in Czech and Slovak. Students also had trouble with pronunciation of alveolar and prepalatal phones. In Czech and Slovak, these phones are articulated with a different tongue position – with the tongue touching the alveolar ridge/palate in a different place. Additionally, differences were observed in phonic realisations of the letters recorded in Polish as *h/ch*, *j*, and *l*. Despite all these difficulties, students voiced great satisfaction with the classes where they could try out the pronunciation of phones of a language belonging to the same language family, that is, the West Slavonic languages.

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Orthoepy of West Slavonic Languages (Czech, Slovak and Polish)

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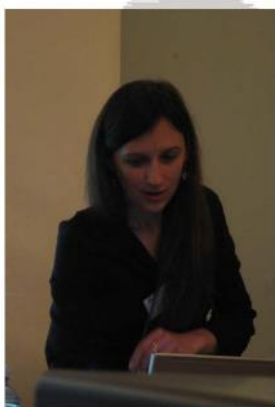
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