

## SPEECH RATE IN PHONETIC-PHONOLOGICAL ANALYSIS OF PUBLIC SPEECH (USING THE EXAMPLE OF POLITICAL AND MEDIA SPEECH)

HOTIMIR TIVADAR

Faculty of Arts, University of Ljubljana, Slovenia

TIVADAR, Hotimir: Speech rate in phonetic-phonological analysis of public speech (using the example of political and media speech). *Journal of Linguistics*, 2017, Vol. 68, No 1, pp. 37 – 56.

**Abstract:** The speech rate is comparatively ignored in linguistic and phonetic research and monographs. Most often it is discussed from the viewpoint of feeling, linguistic sense (a slow, fast, or suitable speech rate) and mainly in connection with rhythm, which includes volume and stress. The speech rate depends on the topic and purpose of communication, as well as the personal (and colloquial) attributes of the speaker. With the development of electronic media and the technical revolution, the speech rate is becoming more and more important, especially due to the significance of speed and the rapid life tempo. On television, seconds are worth thousands or even millions of dollars/Euros, which makes the speech rate and the passing of information all the more important. Nevertheless, the speech rate must be appropriate to the language and the topic so that listeners and viewers can understand the message. Values that will be presented in this article are an important point of reference for Slovenian and other languages. The rate of Slovenian speech in regards to measurements is mostly 4.5 – 6.5 syllables per second, deviations are, of course, also possible.

**Keywords:** phonetics, phonology, public speech, speech rate, rhetoric, Slovenian speech, electronic media

### 1 INTRODUCTION – CONCERNING THE SPEECH RATE

Most often we talk about the speech rate within the confines of speech articulation and speech perception. The rate of pronunciation (and consequently, speech) is more or less tied to the very process of articulation and perception in the so-called anatomical (medical and logopaedic) sense: how fast and in what manner do we use the speech apparatus to form units and how these formed units are then received (for example, Crystal, 1997). The speech rate depends on many factors. First and foremost, it depends on the speaker's character (individual characteristics), is he or she prepared (mastery of the topic), the quality of the text (rehearsed reading (ad lib/extempore), sentence-phrase-text complexity (topic difficulty) and, last but not least, language characteristics (or of the dialect/sociolect). Taking all of this into account makes the neglect of realistic measuring of the speech rate and its positioning into regular instrumental phonetic measurements somewhat

understandable, but not excusable. The speech rate is more often addressed in Rhetoric and the theatre, where the effects of speed are tied to the interpolative (also aesthetic) function. The speech rate is also important in the sense of comprehending the spoken text, which becomes even more important when media speech is taken into consideration. Speech rate or articulation is positioned among the non-linguistic or paralinguistic markers, which are considered as additional vocal value of a text. Rate depends on the type of speech – communication with addressees, such as listeners or viewers (pragmatic function). In its relative value (in simple terms, fast – means happier content, slow – means more sombre or celebratory content) rate is more universal (general parameters) and less arbitrary (more defining) than classical linguistic communicative tools (Sabot – Zimmermann, 2002, pp. 9 – 10). The rate of syllables per second is distinctly tied to a specific language and its character system – from phonemic, accentual and lexical to the syntactic elements of the said language, which was the purpose of this article. The aim is to obtain data based on representative, living speech by well-established public individuals.

### **1.1 The Speech Rate and its Phonological Value**

After reviewing the phonetic and phonologic monographs and grammars (Pauliny, 1997; Král', 2005; Vuletić, 2006; Collins-Mees, 2013; Clark – Yallop – Fletcher, 2007; Ladefoged, 2001; Toporišič, 1976 – 2000; Crystal, 2011), it was observed that the speech rate and the articulation rate are barely mentioned. David Crystal claims: „Variations in tempo provide a third suprasegmental parameter. It is possible to speed up or slow down the rate at which syllables, words, and sentences are produced to convey several kinds of meaning“ (Crystal, 2011, p. 177). A faster speech rate is in many languages supposedly categorised as a state of emergency („urgency“), while a slower speech rate is considered as depicting „deliberation or emphasis“.

The speech rate, together with pitch and loudness, forms the rhythm of the language, which is formed in a different way in each language or through various interchanges of certain parameters. In English, it is predominantly formed through equal interchange of stressed and unstressed syllables, loudness (stress) also plays a large role, which is the main rhythm element in English. The length of syllables, which can be stressed or unstressed, are crucial in Latin languages, while in Asian languages, the basic characteristic that defines rhythm is the tone (pitch accent) (pitch height; high vs. low principle) (Crystal, 2011, p. 177). The Slovenian language possesses two types of accentual systems (tonal and stress-based) that dictate the rhythm of the speech, while in the contemporary media space, the stress-based accent is predominant. Stress position changes in Slovenian language, unlike in the Czech, Slovak or Hungarian languages, which all have their stress position on the first syllable. Rhythm in Slovenian, therefore, depends mostly on the exchange of

stressed vowel syllables and additional emphasis (words pronounced with additional stress within a sentence) that depend on the meaning; as a general rule, only stressed syllables are emphasised. Generally, a single sentence does not contain many examples of stress. An ideal example would be (stressed syllables are in bold): „*Slovenščina je slovanski jezik, ki ima devetindvajset fonemov*“.<sup>1</sup>

The speech rate or disorders in the speech rate are analysed through medical analysis of speech during certain logopaedic research such as, for example, research into stutter (Jelčič Jakšič – Onslow, 2012). Relatively few such studies have been done in orthoepy and phonetics, and in Grammars, when defining the speech rate, terms such as „normal“, „slow“, „fast“ are usually used through which the speaker's natural ability and feel are then expressed (Toporišič, 2000, pp. 553 – 554). Jože Toporišič suggests in *Slovenska slovnica [Slovene Grammar]* that a normal speech rate should be utilised according to feeling (individual perception): „Although people speak at different speed rates, we are mostly in unison when judging if someone's speech rate is fast, normal or slow“ (Toporišič, 1976, p. 460). In later editions of the Grammar he adds: „Vocal continuity is divided by pauses, tonal horizontality is animated by rising and falling tonal paths and their unequal height; stress monotony is dispersed by parts of speech that are spoken loudly, quietly or are stressed; monotony of the speech rate is changed by the person's ability to speak faster and slower; all vocalisations can typically be coloured by the subject matter, disposition of the speaker or by taking into consideration the addressee“ (Toporišič, 2000, p. 553).

The speech rate is very important in Slovenian and also other languages because of comprehension and additional emotional meaning (slow speech as an expression of sadness or solemnity, fast speech as an expression of activity or nervousness). A normal speech rate is supposed to be used during regular speech. There exists certain research regarding this, which demanded of speakers in a phonetic laboratory environment to speak in a speech rate that is normal, too fast or too slow (Horga, 2006). But what constitutes a normal speech rate? Someone, who is a slow speaker will regard as normal a pronunciation rate of, for example, three to four syllables per second (subjective aspect). For people, who normally speak a bit faster, normal would be seven syllables per second. Characterisation made by J. Toporišič of what is a normal speech rate thus depends on the linguistic feel of each individual, something that also can be found in international literature.

---

<sup>1</sup> TV Show previews or previews of their individual parts have several stressed syllables and are often spoken more loudly: *Še več nasprotnikov vladne pokojninske reforme. Vlada v boju za pokojninsko reformo stavi tudi na Urško Čepin*. [U. Č. is a Slovenian starlet, who filmed a provocative TV spot for the Slovenian government during a referendum campaign.] (TV Slovenija, daily news show *Dnevnik*, which aired on the 22<sup>th</sup> of May 2011 at 19.00 and was hosted by Manica J. Ambrožič, TV Slo, ><http://tv slo.si/predvajaj/dnevnik/ava2.105996338/>< (Date of access 23<sup>rd</sup> of May 2011) During this intro almost every stressed word was accentuated including the unstressed proposition *na*.

The speech rate is defined, first and foremost, as harder to measure and dependent on emotions and personal relationship: „Every speaker knows how to speak at different rates, and much research has been done in recent years to study what differences in pronunciation are found between words said during slow speech and the same words produced during fast speech. While some aspects of the speech rate are not linguistically important (e.g. one individual speaker's speech rate when compared with some other individual's speech rate), there is evidence to suggest that we do use such variation contrastively to help to convey something about our attitudes and emotions. This linguistic use of the speech rate is frequently called tempo“ (Roach, 2009, p. 88). Here Peter Roach, unlike J. Toporišič, points out measurability: „When doing research in this area it felt necessary to use two different measures: the rate including pauses and hesitations (the speech rate) and the rate with these excluded (the articulation rate). Although typing speed is often measured in words per minute, when studying the speech rate it is usual to measure either syllables per second or phonemes per second. Most speakers seem to produce speech at a rate of five or six syllables per second, or ten to twelve phonemes per second“ (Roach, 2009, p. 88).

Besides the term „tempo“, P. Roach also uses the term „rate“ in his phonetic dictionary, where he defines the speech rate in a phonetic (laboratory) sense: „The word rate is used in talking about the speed at which we speak; when studying speech in a laboratory it is usually expressed in terms of syllables per second, or sometimes (less usefully) in words per minute“ (Roach, 2009, p. 70).

### 1.1.1 Speech Rhythm

Speech rate is a part of the suprasegmental properties of a language, which possesses no special semantic value, especially not in Slovene. The speech rate creates, along with stress and emphasis, the rhythm of the Slovenian language, as it adds shades of meaning (rhetorical-theatrical view and function) and is crucial for receiving content – along with the fast pace of life and speech and the high density of content, which marks these modern times and makes the time and speech rate all the more important. In the past, international linguistics did not deal with concrete measurements and traceability of research unless it directly affected the meaning of words or sentences, which can be seen also from Crystal's definition of the speech rate and the example he uses in his *Encyclopaedia* (Crystal, 2011, p. 177):

„A rapid, clipped single syllable may convey irritation; a slowly drawled syllable, greater personal involvement.

Compare:

„Shall I leave you now?“ asked Janet. „Yes,“ snapped John rudely.

„Shall I leave you now?“ asked Janet. „Ye-e-s,“ replied John, thoughtfully stroking his beard.“

Words in the Slovenian language have a movable stress position. Word order also depends on the meaning of the spoken text (topic–focus or functional sentence perspective, Anton Breznik in a discussion on word order already at the beginning of the 20<sup>th</sup> century – see Breznik, 1908), while fixed position in the clause („stalna stava“) is also tied to the fixed position of clitics (Toporišič, 1991, pp. 534 – 537). Rhythm in Slovenian speech is created predominantly by stress and sensibly accentuated stressed syllables or words. Rate and the rhythm of speech are important in the aesthetic sense and also where speech ties in with music and singing (Kodrič – Tivadar, 2016), which have their rhythm and speed dictated by notes. Handling rhythm as an important part of speech formation is closely tied with meter, which is usually what literary texts possess, especially in lyric. Generally, rhythm is an exact exchange of individual units, but also tied to the change or release of this „exactness“ (Sabol – Zimmermann, 2002, pp. 81 – 88). When looking at the predictability and universality of media speech on the one hand and the specifics of individual languages as well as speech positions on the other, special attention was given in this article to the absolute value of the speech rate.

## 1.2 The Speech rate and Rhetoric

Usually, speakers change their speech rate through discourse (with extemporaneous speech or by reading) since stressed and emphasised words are pronounced more slowly, while less relevant information is pronounced faster. The speech rate depends on the emotional colouring of the topic or the disposition of the speaker: serious and sad things (for example, speeches during celebrations or speeches at funerals) are spoken more slowly, while happy or pleasant content is spoken faster. An important factor, which affects the speech rate, is also the temperament of the speaker (Toporišič, 2000, pp. 553 – 554). Ivo Škarić, a Croatian rhetorician and phonetician, writes that a speaker usually exerts good control over the speech rate during spontaneous or extemporaneous speech. A suitable speech rate is innate to people (Škarić, 2005, pp. 132 – 134); examples of two politicians, analysed in this article and who had not passed any formal school for speaking, do not attest to this.

The difficulty of the text must also be pointed out, which during spontaneous speech is less demanding than during official and public speech, where the topics are usually more difficult and the reaction time (unpredictability) is nowadays very short in public – the speaker must be capable of a quick and quality reaction text-wise. Another fact is that many public speeches are prepared in advance and rehearsed. This prepared text adapts („practice“) the speech rate suitably (acting during speech as if it is not being read via teleprompters).<sup>2</sup>

---

<sup>2</sup> At the same time, the politician, by moving his line of sight left and right, makes an artificial contact with the entire audience and by reading achieves the effect of fluency. The public perceives the speaker as a competent and trustworthy speaker.

According to I. Škarić, the speech rate is crucial when speech elements are understandable or the basin is ready for informational flux, which means that a suitable amount of information is given with appropriate speed in a suitably complicated manner (Škarić, 2005, p. 132). The speech rate thus depends on the topic and sentence complexity. That is why the speech rate cannot be treated the same way during spontaneous speech, prepared (extempore) speech or speech that is being read (news, speeches in congress). We must also take into account the various types of languages (dialect, sociolects and various text types). Most spoken texts in public are prepared and controlled in some way or other (Tivadar, 2006, 2011). I. Škarić also points out that it is not entirely in accordance with proprieties if we speak at „our own pace“ without regard to the co-speaker and topic. A slow speech rate creates boredom with the listener, while a fast speech rate creates nervousness (Škarić, 2005, p. 134). During speech, we must adapt to the co-speaker or listener. The speech rate, joined with loudness, is one of the most powerful expressions of affection. It works in various ways: from lengthening and stressing consonants near short vowels to express sarcasm, to lengthening loudly pronounced vowels with weakly pronounced consonants for bouts of anger (Škarić, 2005, p. 135). Dragging phonemes and speech volume also affect the speech rate – that is also why media texts can be realistically slower in regards to our general feel as they are very loud (the volume of entire spoken text is higher).

A normal articulation rate, according to Damir Horga, is 4 to 7 – 8 syllables per second (Horga 1988, p. 133). This is quite a wide range of syllables per second. In public, these things are relatively more set as speech in media texts is regulated.

## **2 THE IMPORTANCE OF MEASURING THE SPEECH RATE**

Even radio speech, which has a long tradition in Slovenia (since the thirties of the 20<sup>th</sup> century), was mostly left over to feeling. Here, Mahnič (1959, p. 90) speaks of having the gift, having a good ear and a passion for words and speech: „A speaker must have enough imagination and sensibility. Although, with that said, that does not mean that reason, taste and especially sense for moderation do not have an important role in speech – they do, especially strong support and control. (...) Do not speak until you understand.“ Even on the onset of the 3<sup>rd</sup> millennium, experienced radio hosts point out that authority is also made through a balanced speech rate (Pirc, 2005), which is one of the key parameters that a good radio host should master (Sinkovič, 2010, p. 34).

The speech rate means „forming various numbers of voices per select time unit“ (Toporišič, 1992, p. 57). According to J. Toporišič, who remains the author of the sole complete (scientific) Slovenian grammar, the emphasis is on the description and feel, which is continued by younger researchers of contemporary media speech: slow speech is boring, while fast speech is hard to follow (Pirc

2005). However, when seeking an ideal speech rate for a listener, who would listen attentively to the program, there is also mention of concrete data: The ideal speed is three to five words per second, which also depends on topic difficulty or text type. Normal reading means three words per second or 140 to 180 words per minute, slower reading would be 140 to 160 and faster reading 180 to 190 words per minute (Pirc, 2005, pp. 74 – 75). Although the (instrumental) phonetics are a physical and therefore concretely measurable science, quite a wide spectrum appears in literature. For example, 4 – 7 syllables per second for the Croatian language (Vuletić, 2007, p. 72; Škarić, 1991, p. 298; also Žavbi, 2013, p. 654), which is also the result of taking into account various text types. Palková defines Czech, predominantly spontaneous speech, based on results of various phoneticians, as speech, which has a minimal speed of 2 syllables per second and a maximum speed of 4.8 syllables per second, except for speech that is read, which spans from 3.3 to 6.7 syllables per second (Palková, 1997, p. 318). For certain global languages, measurements were made that showed different values in regards to the articulation rate for extemporaneous (spontaneous) speech: Japanese (7.84 syllables per second), Spanish (7.82 syllables per second), French (7.18 syllables per second), Italian (6.99 syllables per second), English (6.19 syllables per second), German (5.97 syllables per second).<sup>3</sup>

All of this depends on the speaker and how prepared he or she is to speak as well as on education: „Differences in rates of speech between 4.4 and 5.9 syllables per second would be quite noticeable and should not be considered ‚a small range of variation‘ at all (Goldman – Eisler, 1961, p. 171). This means that the average speech rate for adults in English is between 150 and 190 words per minute (Tauroza and Allison 1990), although during conversation this figure may rise considerably, reaching up to 200 wpm (Walker 2010; Laver 1994)“ (Rodero, 2012, p. 393).

D. Horga (1996, pp. 11, 56 – 57; 1988, pp. 130, 133; see Huber, 2013, p. 218) lists data on **AR (the articulation rate)** and **SR (the speech rate)** by various Croatian and foreign researchers. Most adult speakers of English can articulate up to 500 syllables per minute or 7.1 syllables/second AR and that three English radio speakers have a similar speech rate (SR): 5.7, 5.9 and 6.0. This means that the average of all three is 5.86 syllables per second (according to Lenneberg 1967; qte. Huber, 2013, p. 218). He states that for the Croatian language, the average AR is from 5.4 to 8.3 syllables per second (according to Bakran, 1996, p. 256), when Croatian is being read the average SR is 5.2 syllables per second, while the fastest SR is supposed to be 6.9 syllables per second (Horga, 1988, p. 130). For Russian, the average AR is supposed to be 6.1 syllables per second (according to Bondarko 1984; qte. Huber, 2013, p. 218).

---

<sup>3</sup> „The speech rate is a factor which depends partially on the language employed. A recent study reported different rates for different languages (Pellegrino et al. 2011)“ (Rodero 2012, p. 393).



It is interesting that Croatian researchers assumed that the speech rate would be faster with female speakers due to the principles of articulation. This was proven to be true only with unprofessional female speakers (Horga – Mukić, 2000, pp. 118, 125; Huber, 2013, p. 220), where a faster speech rate is pointed out as being the result of a lack of pauses, which is more of a socio-phonetic cause than a cause of articulation or phonetics. This similarity in the speech rate among male and female speakers proves the control (training, calmness – for example, exactness of measuring instruments) professional speakers possess.

## **2.1 The Speech and Articulation Rate in Slovenian**

Where media speech is concerned there is a certain media standard (in Slovenian media space it is called the BBC-standard), which is 5 – 6 syllables per second. „The speed of the actual articulation movements producing sounds of speech occupies a very small range of variation between 4.4 to 5.9 syllables per second (Goldman – Eisler, 1961, p. 171). Deese (1984) reports a normal speaking rate for conversational speech to be between 5 and 6 syllables per second“ (Rodero 2012, p. 392; prim. Roach, 2009, p. 88).

Slovenian language came close to this standard when we looked at preliminary measurements of TV hosts (5 – 6 syllables per second SR, Tivadar, 2009) and the analysis in this article will either confirm or reject these values. There are few concrete data on the speech rate in Slovenia, except for preliminary measurements (Tivadar, 2009; SR should be about 5 – 6 syllables per second). Generally, the speech rate has not been measured. With every analysis of the speech rate, regardless of the language, we must point out the reality and influence of spoken text (analysis of shows aired on television) and the influence of analysed speakers. Most important is the traceability of analysed TV shows. Damjan Huber, who in his doctorate analysed speech phonetics, defines the speech rate in theory and practice and warns of the lack of measurements for this textual and phonetic parameter in current grammars and linguistic monographs. The speech rate was defined in descriptions simply as a disruptive or non-disruptive parameter (Huber, 2013, p. 103). D. Huber points out the finding by Podbevšek that when emphasising, the speech rate slows down (Huber, 2013, pp. 163, 165). D. Huber, same as D. Horga (1988, 2006), makes a difference between SR (the speech rate) and AR (the articulation rate). Huber, when analysing his text, does not introduce an actual value of the speech rate, but rather defines the analysed speakers with regards to personal feeling, for example „according to (subjective) oral analysis and recognizing the manner of speech these speakers use, we can easily confirm that for the speakers GovPz7+20 and GovNm19 a very fast tempo of speech is typical. Especially the speech made by the politician GovPz7+20 is usually very fast and fluent and by increasing the speech rate reductions and a diminishing (even disappearances) of pauses occur“ (Huber, 2013, pp. 385 – 386). With Huber, the main point was to define stress and pauses, analysing the speech rate was of secondary importance.



### 3 MEASURING THE SPEECH AND ARTICULATION RATE IN INFLUENTIAL SPOKEN TEXTS – DEFINITION OF MATERIALS AND SPEAKERS<sup>4</sup>

The political speakers analysed in this article and the following table are influential politicians who regularly appear in the media and influence the general public also in terms of speech.

Code	Position	Gender	Education	Regional background	Experience
Speaker 002m	The first president of the Republic of Slovenia	Male	Graduated lawyer	The Prekmurje region	34 years in high politics
Speaker 003m	The current president of the Republic of Slovenia	Male	Graduated lawyer	The Primorska region	30 years in high politics
Speaker 003z	The First Female Prime Minister of the Republic of Slovenia	Female	MA Economist	The Štajerska region	5 years in high politics
Speaker 004m	The president of Russia	Male	Graduated lawyer		25 years in high politics

In contemporary phonetic and phonological analysis, exact data of influential speakers in Slovenian and global media space should be specified. During research, we took into account various types of speakers. In this article we will point out two of the most recognisable types of speakers globally and in Slovenia – speeches by politicians and TV hosts. If we take into account the rhetorical tradition from the Roman times (for example, speeches by Cicero), we can see that politicians and rhetoricians were important in the past as well. As phoneticians, we will present concrete data, generally without evaluating their significance. Speakers are anonymous but their role in society is defined. The values of speeches made by politicians will be compared to speeches made by TV hosts, who also exert enormous influence on the viewers and listeners in contemporary society; some are heralds of truth of sorts, which was something that priests used to do and who had a different medium – a book (written language from the invention of print onwards is intended for the general public) and the pulpit (spoken language for the general public in the church).

---

<sup>4</sup> Data was collected and statistically processed within undergraduate and master studies on the Department of Slovenian Studies between 2010 to 2015 (authors of term papers and theses are U. Gluščič, K. Dragoljevič, J. Šter, M. Toplišek, M. Goršič, Š. Bizjak, N. Lebar ...).

### 3.1 Research Methods and Measured Parameters

All speakers were measured based on the same methodology of measuring syllables per second in order to facilitate the comparison with other investigations (Rodero, 2012): their texts were intended for the public; they were divided into texts, which were read or not read (for example, Tivadar, 2011); all speakers spoke the literary language; we measured the speech rate (and the articulation rate), we pursued uniform pronunciation – rare deviations (speeding up or slowing down) were ignored since in our case they were conditioned by the individual mistakes made by the speaker; values were limited to a single decimal. The Praat voice-analysis software was used to obtain measurements for each speaker and their speech. These speakers and the shows that were analysed are considered to be representative and present an important starting point for further research. Data was combined and statistically processed in the same way and displayed in tables. A joint characteristic of all spoken texts was the dialogic element: ostensible (reading from a teleprompter (TV hosts and politicians) „looking the public in the eye“) or actual (dialogue).

### 3.2 The Speech Rate of TV Hosts

First, we took into account speakers coming from the National Television (RTV Slovenia) who work during prime time and come from TV shows of the highest quality (*Odmevi*, *Dnevnik* – reading from a teleprompter) and who read (hosted segments, reading from a teleprompter) or host short interviews (non-read speech).

#### 3.2.1 Extempore in Daily News *Odmevi*<sup>5</sup> – *Odmevi* 6. 5. 2015, 001m<sup>6</sup>; *Odmevi* 8. 1. 2013, 001z<sup>7</sup>

During the analysis of the recording of the two *Odmevi* shows (6<sup>th</sup> of May 2015, 8<sup>th</sup> of January 2013) it came to light that the quality and clarity of articulating voices and words are affected also by the speech rate. The TV hosts in the analysed parts of the recording do not speak at the same rate, rather the rate changes, especially with the male speaker. Findings are presented in Table 1. The speech rate (SR) of 001z alternates from 4.3 to 5.4 syllables per second, while the articulation rate (AR) alternates from 5.7 to 6.4 syllables per second (one shorter part reaches even 7 syllables per second). Based on these measurements we can state that the speech rate of the female TV host changes significantly throughout the analysed examples. Most of the time and by taking into account the type of show the female TV host speaks with the media speech rate of 5–6 syllables per second, which during certain parts, where words are heavily emphasised, drops down in speed while elsewhere it speeds up. Consequently, the words that the TV host pronounces with more emphasis and

---

<sup>5</sup> Archive of the shows is accessible on [www.rtvsl.si](http://www.rtvsl.si)

<sup>6</sup> 001m – professional speaker on television: male (*gender*), graduated lawyer (*education*), Koroška (*regional background*), 4 years a reporter on the radio and 34 years on television (*experience*).

<sup>7</sup> 001z – professional speaker on television: female (*gender*), PhD in history (*education*), Štajerska (*regional background*), more than 20 years of work on television (*experience*).

with a slower rate of speed are more articulate (clearer, excessively formed lips) than the words the TV host pronounces with a higher (too fast) speech rate: || *Dóbar večér u štúdiu gospót | predcédnik vláde Jánes Jánša. || Očítki | zapísani | v zaključnem | poročilu | Komisije za preprečevanje korúpcije so húdi* (only during the underlined part does **the speech rate reach even 7 syllables per second**) {em}, bóste odstopili?.

Table 1: The speaker's speech rate (SR) and the articulation rate (AR) in the TV show Odmevi (RTV Slovenia) female speaker 001z and male speaker 001m during extemporaneous (not read) speech:

<b>001z, Odmevi, 8. 1. 2016</b>	<b>SR (syll/sec)</b>	<b>AR (syll/sec)</b>	<b>AR/SR</b>
<i>Introduction to the show</i>	<b>4.4</b>	<b>5.7</b>	<b>1.29</b>
<i>Central part of the show</i>	<b>5.3</b>	<b>6 – 6.4</b>	<b>1.17</b>
<b>001m, Odmevi, 6. 5. 2015</b>			
<i>Introduction</i>	<b>5.2</b>	<b>6.9</b>	<b>1.32</b>
<i>Central part (questions)</i>	<b>5.6</b>	<b>7.7</b>	<b>1.37</b>

Speaker 001m's speech rate changes often. Speech is at times almost too fast to perceive, especially during the second part (Since the beginning of the question (*Je rés také hudó?*) and by the end the speaker's speech rate is 7.7 syllables per second),<sup>8</sup> when the speaker cannot pronounce the word „treh“ (number three). With the changing of the speech rate the clarity and quality of articulation changes, since with a faster tempo the time for articulation or time intended for forming speech shortens.

### 3.2.2 Speech Rate by both TV Hosts of Odmevi (001m, 001z) when Reading in Comparison with a Reading Done by a Female TV Host of the Show TV Dnevnik

We anticipated that reading (during introduction segments between various topics where there are almost no pauses, therefore no difference between the articulation rate – AR – and the speech rate – SR) would mean uniformity and that the speech rate would be more uniform. The speech that was read by the TV host 001m was **6.5 syllables per second**, while the speech that was read by the female TV host was **5.5 syllables per second**. Here it must be pointed out that the reading done by the female TV host in other shows was more or less constant, while the reading of the male TV host 001m was faster during certain segments (even up to 7 syllables per second) or slower (6 syllables per second); it could be said that the reading done by the speaker 001m was made with a rate of 6 – 7 syllables per second and that he occasionally speeds up or slows down. We did not discover any

<sup>8</sup> When doing listening and perception analysis and grading (un)accessibility of commercials all students partaking in the survey (more than fifty during 2013 and 2015) classified as too fast and unintelligible the speech at the end of (regulated) parts of commercials for medicine („*Pred uporabo natančno preberite navodilo, o tveganju in neželenih učinkih se posvetujte z zdravnikom ali s farmacevtom*“), which is spoken at 8 – 9 syllables per second, there are practically no pauses in this part. These instructions are much faster also in other languages.

correlations with difficulty or text type. We could say that this inconsistency is his individual characteristic, he reads by using his own uneven speech rate.

**3.2.2.1 The Speech Rate on TV-Dnevnik<sup>9</sup> – Reading from a Teleprompter**

These is practically no difference between articulation and speech when hosts on television read from a teleprompter (if we measure up to a tenth of a syllable, which is the only sensible thing to do); longer pauses are made during the journalistic article, which follows the introduction made by the TV host.

Table 2: The speech rate (SR) and the articulation rate (AR) in the show TV Dnevnik (RTV Slovenia) by female speaker 002z when reading the speech:

TV Dnevnik, 002z <sup>10</sup>	SR (syll/s)	AR (syll/s)	AR/SR
Introduction	6	6	1
Text begins	6.4	6.4	1
Central part of text	6.7	6.7	1

**3.3 Comparing the Speech Rate of TV Hosts when Reading or Speaking Extempore in TV News Shows**

The most important conclusion of the analysis of TV hosts is that the speech rate, when reading, does not change with both female TV hosts 001z in 002z, while the male speaker 001m displays a certain unevenness with his speech rate, which is his individual characteristic, a way of speaking. Pauses during reading are short or are often missing therefore they do not affect the significant difference between speech and articulation. (less than 2 % of the value).<sup>11</sup> Speech by the TV host that was not read depended on the reaction and the speech of the co-speaker, therefore there is a bigger correlation between articulation and speech.

Table 3: Comparing Speech Rate Between Two Hosts of Odmevi and the Host of TV-Dnevnik

Speaker	Reading news or introductions (AR ≈ SR)	Ad lib		
		AR	SR	SR/AR
001z	5.5 (no pauses ...) syll/s	5.7 – 6.4	4.4 – 5.3	1.17 – 1.29
001m	6 – 7 syll/s (fluctuation in speed)	6.9 – 7.7	5.2 – 5.6	1.32 – 1.37
002z	6 – 6.7 syll/s	/	/	/

<sup>9</sup> Dnevnik, 22. 5. 2011 ob 19.00, host 002z (TV Slo, ><http://tvslo.si/predvajaj/dnevnik/ava2.105996338/>< (Date of access: 23. 5. 2011.) TV show Dnevnik airs on TVS1 daily at 19.00. We analysed the introduction title (up to 01.04 min), introduction of the topic (07.50 min till 08.09 min) and the discussion with a guest (09.43 min till 12.25 min).

<sup>10</sup> 002z: female (*gender*), professor of French (*education*), Štajerska (*regional background*), 20 of work on the television (*experience*).

<sup>11</sup> Measurements per 2 tenths make no sense for a practical applicative standpoint since we cannot tell the speaker to slow down his or her speech by 0.02 syllables per second.

The speech rate is approximately 5 syllables per second, while the articulation rate with speaker 001m increases even up to 7 syllables per second and even over 7.5 syllables per second. However, this makes pauses appear more often and they last longer, but his division and emphasis (stress) are very suitable and even when the speaker is articulating fast, his speech is very much understandable.

### **3.4 Speech Rate of the Most Recognizable Politicians<sup>12</sup>**

Some of the most recognisable public speakers in Slovenia are politicians; we can make a comparison with the USA, where public appearances in terms of content and expression are one of the most important factors when running a candidacy. That is why we will present a synthetic analysis of Slovenian politicians and their speech rate. We analysed the most visible representatives, Slovenian presidents through various periods, when they were, for the most part, also trained in proper speech: along with the first president (speaker 002m) and the current president, also former prime minister and speaker of parliament (speaker 003m), we also added the former female prime minister (speaker 003z), who only has a few speaking experiences (only three years). We compared and contrasted their speeches also with some foreign languages. We measured the speech rate (with pauses) as well as their articulation rate (no pauses, articulation time), and we also took into account if the speech was spontaneous or read.

#### **3.4.1 Speaker 002m**

We analysed his speech from the beginning of his career (1968) and then a later statement and speech in 3<sup>rd</sup> century, when he was already the former president of the republic and a well-known politician. What is most obvious is that he has a comparable speed between articulation and speech similar to TV hosts only during short statement in recent times, due to excitement the speech is also faster, otherwise he makes long pauses and so the speech rate is also suitably slow.

---

<sup>12</sup> We analysed the following Slovenian politicians: a) speaker 002m – male (*gender*), graduate lawyer (*education*), Prekmurje (*regional background*), more than 40 years of public appearances in politics, first 20 years on a state level mostly in Serbo-Croatian (*experience*); b) speaker 003m – male (*gender*), graduate political scientist, international relations (*education*), Primorska (*regional background*), more than 30 years of public appearances in politics, only first five years on a state level also in Serbo-Croatian, last 15 years also in English (*experience*); c) speaker 003z – female (*gender*), Masters in Management (*education*), Štajerska (*regional background*), first female Slovenian prime minister – only for a single year, now an MP for 2 years, 3 years of public speaking experience (*experience*).

Table 4: The speech rate (SR) and the articulation rate (AR) of the first president of Slovenia, speaker 002m (all clips available on: Youtube)

	SR (syll/s)	AR (syll/s)	AR/SR
Statement during the invasion of Czechoslovakia 1968 – extempore speech <sup>13</sup>	4	5.8	1.45
Statement during the Day of Uprising Against Occupation celebration – spontaneous speech, answers to journalist questions <sup>14</sup>	5.8	6.9	1.19
Speech during a celebration titled <i>70 let pod svobodnim soncem</i> (reading from papers) <sup>15</sup>	3.8 <sup>16</sup>	6.1	1.6

### 3.4.2 Speaker 003m

Table 5: The speech rate (SR) and the articulation rate (AR) of the current president of Slovenia, speaker 003m:

	SR (syll/s)	AR (syll/s)	AR/SR
Confrontation with Janša – free speech <sup>17</sup>	5.8	6.8	1.17
Electoral speech for the 2011 elections – reading of a teleprompter <sup>18</sup>	5.4	6.6	1.22

With the current president, who is also currently the most popular politician in Slovenia, one can notice an equal ratio between the speech rate and articulation when reading or when speaking extemporaneously. With the current president, the use of a teleprompter (looking at the camera as a TV host) is standard and is usually used also when addressing citizens. He makes longer pauses especially when ending phrases and particularly sentences. Pauses and stress are an individual characteristic of the current president, which is often imitated (Radio Gaga; RTV Slovenia; [www.rtvlo.si](http://www.rtvlo.si); Urbanc, 2013). Despite pauses and stresses, his speech is not significantly slower from that of the hosts of daily news shows.

<sup>13</sup> (002m) – O INVAZIJI NA ČEŠKOSLOVAŠKO, 1968. Available on the webpage: <https://www.youtube.com/watch?v=W5GhWjpY4wc> (accessed on 8. 5. 2016)

<sup>14</sup> 27.04.2015 Non-read statement by (002m) during the Day of Uprising Against Occupation celebration, <https://www.youtube.com/watch?v=wIqzWZnCV04> (accessed on 8. 5. 2016). Speaker is visibly excited when answering delicate questions by the journalist.

<sup>15</sup> (002m), keynote speaker, 9. 5. 2015, part 1. available on the webpage: <https://www.youtube.com/watch?v=9uvC7g5rhuw> (accessed on 8. 5. 2016)

<sup>16</sup> A consequence of long pauses, meant also for clapping and cheering.

<sup>17</sup> Confrontation in the show Tarča, 20. 8. 2008, partly accessible on Youtube, <https://www.youtube.com/watch?v=id-1p44fZC0>.

<sup>18</sup> Clip during elections in 2011, Archive RTVSLO. Reading, RTV SLO. Borut Pahor, SD – Slovenski demokrati. (voter address) RTV 4D. (<http://4d.rtvlo.si/arhiv/volitve-2011/121389105>).

### 3.4.3 Comparing the Speech rate of Speaker 003z, in Slovenian and English

Due to particularly slow and uneven speech filled with a number of fillers, we looked at several performances of the speaker 003z when analysing the speech rate in Slovenian and we looked at one in English.<sup>19</sup> Her speech often features filler (especially the „ə-sound – prolonging the semivowel“), also vocal reductions (of consonants and vowels), but particularly dropping the final syllables. She speaks slowly (approximately 2x slower than TV hosts), pauses and fillers occur often, especially the use of the ə-semivowel (SR = 3.1 – 3.3 syllables per second, AR = 3.7 syllables per second in Slovenian and SR = 2.2 – 3.3 syllables per second, AR = 2.5 – 3.9 syllables per second in English). The speech of one of our currently most recognisable politicians is slow in English and in Slovene. Articulation in English is even slower, which along with numerous phonetic mistakes show the lack of knowledge when it comes to the foreign language. However, her speech is also slow when reading and when speaking extemporaneously (with a written basis). This means that slow speech is also her individual characteristic and at the same time also a rhetorical and phonetic incapacity (lack of training in rhetoric and articulation).

Table 6: Speech rate (SR) and articulation rate (AR) of speaker 003z

	SR (Syll/s)	AR (Syll/s)	AR/SR
Performance on CNN – English <sup>20</sup>	2.2 – 3.3	2.5 – 3.9	<b>1.13 – 1.18</b>
Speaking freely (average of several interviews) <sup>21</sup>	3.1 – 3.3	3.7	<b>1.12 – 1.19</b>
Reading speech <sup>22</sup> (during press conferences and during election for prime minister – reading) <sup>23</sup>	3.1 – 3.5	3.8	<b>1.08 – 1.22</b>

<sup>19</sup> Interview on CNN (10. 4. 2013, accessible on: <http://www.youtube.com/watch?v=xwim7J5eEsM>) was classified as bad and was criticised in Slovenian media from a phonetic (articulation and normative wise) as well as rhetoric standpoint, but less so from the sociolinguistic view (why a discussion in English on CNN).

<sup>20</sup> Very inaccurate speech, therefore such a wide span.

<sup>21</sup> (003z) – interview, STUDIO 5 – NET TV, accessed on 8. 5. 2016 at: <http://www.youtube.com/watch?v=tcGTQ1Mpt60> ; Požareport – guest (003z), 14.2.2013, accessed on 8. 5. 2016 at: <http://www.youtube.com/watch?v=7UZd-Qcv3VE>.

<sup>22</sup> Here it should be pointed out that the clips make it obvious that the speaker is looking at sheets of paper and at the public at the same time, but the speaker's speech is inaccurate also during statements. This is a kind of speech reading as with TV hosts, but much more inaccurate with a lot of fillers („ə-sound – dragging the semivowel“).

<sup>23</sup> (003z) confirmed as the new prime minister, 27. 2. 2013, accessed on 8. 5. 2016 at: <http://www.youtube.com/watch?v=EAPm95mA55c>; Press conference by 003z, 29. 10. 2012, speech during election on the position of president of a political party. Accessed on 8. 5. 2016 at: <http://www.youtube.com/watch?v=KeARrdP2c-8>; Press conference by (003z), 14. 2. 2013, Accessed on 8. 5. 2016 at: <http://www.youtube.com/watch?v=zhvdPmpgiDk>



**3.4.4 Speech by an Influential Politician in Another Slavic Language, 004m (Russian)<sup>24</sup>**

As a contrastive comparison, we shall show the speech rate in another Slavic language, Russian (004m).<sup>25</sup> There are but few differences in manners of speech both when reading or speaking extemporaneously. A speech in Kremlin is somewhat slower than a conversation (most likely it is partly scripted) in a show, also there are fewer pauses during reading. Nevertheless, these differences are minimal and harder to trace. When speaking extemporaneously on a show, the articulation rate is higher than the speech rate. The articulation rate is 3 words per second or 9 syllables per second, while the speech rate is three words per second or 6 syllables per second. The speech in Kremlin features almost no differences between the speech rate and the articulation rate (the articulation rate and speech are 2.5 words or 8 syllables per second).

Table 7: The speech rate (SR) and the articulation rate (AR) of the current presidents of Slovenia and Russia, speaker 003m and speaker 004m:

	SR (Syll/s)	AR (Syll/s)	AR/SR
Speaking freely – confrontation – Slovenian president	5.8	6.8	1.17
Speaking freely – confrontation – Russian president	6	9	1.5
Reading from a teleprompter or papers – Slovenian president	5.4	6.6	1.22
Reading from a teleprompter or papers – Russian president	8 syll/s	8 syll/s	1

It is obvious that the speech of Russian politicians is mostly faster in articulation (higher AR) then with Slovenian politicians, this is due to the influence of language, temperament and the personal style of both presidents (relaxed, down to earth style: strong, leadership style). Pauses were longer during the talk show.

<sup>24</sup> With the 004m, reading is quite unpredictable, a more expansive research in terms of rhetoric of his public speeches should be done in the future.

<sup>25</sup> President of Russia, clips: reading – Выступление Владимира Путина по вопросу принятия Крыма в состав России (marec 2014). *Youtube*. Accessed: April 2014. [https://www.youtube.com/watch?v=REX\\_9TK0H08](https://www.youtube.com/watch?v=REX_9TK0H08); Spontaneous speech – Путин ПРО ПИНДОСОВ АМЕРИКАШЕК („Россия 24“, interviewed by Nikolaj Zlobin). *Youtube*. Accessed: April 2014. <https://www.youtube.com/watch?v=aqP9Wr8UJrk>. The author is in possession of the video, which is currently not accessible on the Youtube platform.

## 4 DISCUSSION AND CONCLUSION

The data presented in this article is mostly a starting point for further phonetic and rhetoric research. The data are not absolute. However, they are traceable. On the basis of the measurements presented in this article we can summarize the following:

- The speech rate depends also on the type of speech (written basis, the purpose of spoken text) and is standardised for speakers on the national TV: the speech rate and articulation (AR = SR) of media speakers during reading is 5.5 – 7 syllables per second, while with extemporaneous speech there is a difference with professional speakers on the national television and it is between the articulation rate and the speech rate (AR = 5.7 – 7.7; SR = 4.4 – 5.6), the speech rate is lower with extemporaneous speech. Most of the time, the speech rate and articulation in media is between 5 and 6.5 syllables per second, which confirms preliminary measurements (5 – 6 syllables per second). The most recognised politician in Slovenia comes close to these values (speaker 003m).
- The speech rate by the other two politicians analysed in the research – first president, 003m, who spent a significant part of his career speaking publicly in Serbo-Croatian language and the former female prime minister, 003z, who has only been in politics for a short time, feature an uneven articulation (AR) and for the most part a slow speech rate (SR). It is highly important to have speaking experience as well as being trained in speech.
- The speech rate and the articulation rate of female (TV hosts) speakers varies, so we cannot speak of equality according to gender. They are also not faster than their male counterparts. Thus the differences in the speech rate or articulation (SR, AR) between the sexes cannot be confirmed. We can, however, speak of a unified media standard.
- The speech rate and the articulation rate of the former female prime minister, 003z, did not differentiate in Slovenian or in English, which shows the influence of individual articulation capability and linguistic capability. This also tells of the relative incapability when it comes to rhetoric and phonetic abilities in a foreign language as well as Slovenian, but this is mostly a starting point for further research.
- The rate of a political speech in Russian and Slovenian differs significantly – the (reading) speech by the Russian president, 004m, is significantly faster than that of the Slovenian president, 003m (Russian: SR = AR = 8 syllables per second, Slovenian: SR = 5.4 syllables per second, AR = 6.6 syllables per second).
- Based on the representative sample of speakers analysed in this article it can be presupposed that Slovenian is a language with a relatively slow speech rate. Assumptions that speakers of Slovene are significantly faster on commercial televisions still need to be looked at (preliminary data shows that during

conversation TV hosts speak even as fast as 7.9 syllables per second – creating tension also through the speech rate (TV show Svet on the commercial television Kanal A, 17. 5. 2013).

## Bibliography

- BREZNIK, Anton: Besedni red v govoru. Ljubljana: Kat. bukvarna (Dom in svet) 1908. 64 pp.
- HORGA, Damir: Latentna struktura brzine izgovora. In: Govor = Speech, 1988, V/2, pp. 129 – 142.
- HORGA, Damir: Utjecaj tempa na vremenske karakteristike govornih odsječaka. In: Kapitoly z fonetiky a fonologie slovanských jazyků: příspěvky z pracovního vědeckého setkání na XVI. zasedání Komise pro fonetiku a fonologii slovanských jazyků při Mezinárodním komitétu slavistů. Eds. Z. Palková, J. Janoušková. Praha: Univerzita Karlova, Filozofická fakulta, 2006. pp. 153 – 166.
- HORGA, Damir – MUKIČ, Igor: Neki vremenski parametri govora u dnevnicima HTV-a. Govor = Speech, 2000, 17/2. pp. 105 – 127.
- HUBER, Damjan: Poudarek in pavza v standardnem slovenskem govoru (disertacija). Ljubljana: Oddelek za slovenistiko 2013. 500 pp.
- BAKRAN, Juraj: Zvučna slika hrvatskoga govora. Zagreb: Ibis grafika 1996. 313 pp.
- COLLINS, Beverley – MEES, Inger: Practical phonetics and phonology : a resource book for students. Milton Park, Abingdon, Oxon, New York: Routledge 2013. 329 pp.
- CLARK, John – YALLOP, Colin – FLETCHER, Janet: An introduction to phonetics and phonology. Malden – Oxford – Carlton: Blackwell 2007. 487 pp.
- CRYSTAL, David: The Cambridge encyclopedia of language. Cambridge: Cambridge University Press 1997. 516 pp.
- JELČIČ JAKŠIČ, Suzana – ONSLOW, Mark (Eds.): The science and practice of stuttering treatment : a symposium. Chichester; Ames: Wiley-Blackwell 2012. 253 pp.
- KODRIČ, Karmen Brina – TIVADAR, Hotimir: Instrumentalna fonetična analiza pétiš samoglasnikov in pravorečje popularnega pétega besedila popevke. In: Muzikološki zbornik/ Musicological Annual. Ljubljana: University Press, Faculty of Arts 2016, Vol 51, No 1. pp. 147 – 169.
- KRALJ, Ábel: Pravídlá slovenskej výslovnosti: systematika a ortoepický slovník. Martin: Matica slovenská 2005. 423 pp.
- LADEFOGED, Peter: A Course in Phonetics. 4th ed. Fort Worth, Texas: Harcourt Brace College Publishers 2001. 289 pp.
- PAULINY, Eugen: Krátka gramatika slovenská [úvod napísal a text upravil a doplnil Ivor Ripka]. Bratislava: Narodné literárne centrum – Dom slovenskej literatúry 1997. 211 pp.
- PIRC, Tatjana: Radio. Zakaj te imamo radi. Ljubljana: Modrijan 2005. 283 pp.
- RODERO, Emma: A comparative analysis of speech rate and perception in radio bulletins. Text & Talk, An Interdisciplinary Journal of Language, Discourse & Communication Studies. 2012. Volume 32, Issue 3, pp. 391 – 411.
- MAHNIČ, Anton: Živa slovenščina. Ljubljana: Knjižnica Mestnega gledališča 1959. 115 pp.
- SABOL, Ján – Zimmermann, Július: Akustický signál – Semióza – Komunikácia. Prešov: Prešovská univerzita v Prešove, Filozofická fakulta 2002. 141 pp.
- SINKOVIČ, Natalija: Smernice za kulturo govora (na primeru Radia Slovenija). Maribor: Oddelek za slovanske jezike in književnosti Filozofska fakulteta Univerze v Mariboru 2010. pp. 33 – 35.
- ROACH, Peter: English phonetics and phonology. Glossary (A little Encyclopaedia of Phonetics). 2009. Dostopno na internetu: <http://www.ling.upenn.edu/~gene/courses/530/readings/Roach2011.pdf>
- ŠKARIČ, Ivo: Fonetika hrvatskoga književnog jezika. In: Povijesni pregled, glasovi i oblici hrvatskog književnog jezika. Eds. S. Pavešić – I. Škarić – S. Težak. Zagreb: HAZU Globus 1991. pp. 63 – 376.

- ŠKARIČ, Ivo: V iskanju izgubljenega govora. Ljubljana: Šola retorike 2005. pp. 130 – 132
- TIVADAR, Hotimir: Slovenski medijski govor v 21. stoletju in pravorečje – RTV Slovenija vs. komercialne RTV-postaje / Slovene media speech in 21<sup>st</sup> century – RTV Slovenija vs. commercial RTV Stations. In: Kapitoly s fonetiky a fonologie slovanských jazyků. Praha: Filozofská fakulteta Karlovy univerze 2006. pp. 209 – 226.
- TIVADAR, Hotimir: Vzpostavitev razmerij med govorom in branjem, recitacijo in igranjem. In: Obdobja 30. Meddisciplinarnost v slovenistiki. Ljubljana: Znanstvena založba Filozofske fakultete 2011. pp. 489 – 495.
- TIVADAR, Hotimir: Napovedovalska delavnica. Ljubljana: Izobraževalno središče RTV Slovenija 2009. 28 pp.
- TOPORIŠIČ, Jože: Slovenska slovnica. Maribor: Založba Obzorja 1976. 588 pp.
- TOPORIŠIČ, Jože: Slovenska slovnica. Maribor: Založba Obzorja 1991. 739 pp.
- TOPORIŠIČ, Jože: Slovenska slovnica. Maribor: Založba Obzorja 2000. 923 pp.
- TOPORIŠIČ, Jože: Enciklopedija slovenskega jezika. Ljubljana: Cankarjeva založba 1992. 384 pp.
- TOPORIŠIČ, Jože: Slovenska slovnica. Maribor: Založba Obzorja 2004. 923 pp.
- URBANC, Maja: Politični govor kot javni diskurz (na vzorcu drugega kroga predsedniških volitev). Ljubljana: Oddelek za slovenistiko (diplomsko delo) 2013. 41 pp.
- VULETIĆ, Branko: Lingvistika govora. Zagreb: FF press 2007. 178 pp.
- VULETIĆ, Branko: Govorna stilistika. Zagreb: FF press 2006. 175 pp.
- ŽAVBI, Nina: Analiza odrskega govora – primer Bergerjeve uprizoritve Hlapcev (komentirana izdaja). In: Slavistična revija, Vol. 31/No 4, pp. 651 – 664.

## Resumé

### TEMPO REČI VO FONETICKO-FONOLOGICKÝCH ANALÝZACH VEREJNÝCH PREJAVOV (na príklade politických a mediálnych prejavov)

Tempo reči bolo vo fonetických výskumoch do začiatku tretieho tisícročia len zriedkavo považované za dôležité kritérium pri opise jazyka. V poslednom období je výskumov zameraných na tempo reči čoraz viac, pretože v súvislosti s rozvojom elektronických médií a technickou revolúciou sa tempo reči stalo oveľa dôležitejšou stránkou jazyka. Jednak vzhľadom na rýchle tempo života, ktoré charakterizuje súčasnosť, a jednak vzhľadom na skutočnosť, že táto jazyková stránka vstúpila do ekonomických súvislostí – v televízii má totiž každá sekunda hodnotu tisícov, resp. miliónov dolárov či eur. Vo viacerých lingvistických výskumoch a monografiách stojí kategória tempa reči ešte stále v úzadí a je často reflektovaná z aspektu pocitu či jazykového citu (pomalý, rýchly, primeraný prejav). Tempo reči je však závislé od kontextu, témy, zámeru komunikácie a osobných charakteristík hovoriaceho. V súčasnom verejnom prejave sa práve vďaka pripravenosti textov dá tempo reči predpokladať, nakoľko vo verejných médiách je tempo reči v dôsledku školenia hovoriacich a čítania z televíznej elektronickej čítačky štandardizované a rovnomerné. Rovnomerné a primerane rýchle čítanie je typické tiež pre iných hovoriacich, ktorí sú pripravení a čítajú z teleprompteru (t. j. priesvitnej tabule na čítanie, ktorú používajú politici pri verejných vystúpeniach, najmä v USA) alebo z listov. U neškolených hovoriacich, ktorí nehovoria z teleprompteru, resp. nedokážu čítať z listov, je tempo reči do veľkej miery závislé od ich osobných charakteristík a je veľmi nerovnomerné, čo je v príspevku predstavené na príklade dvoch hovoriacich (002m a 003z).

V príspevku sa na základe analýzy reprezentatívnych textov vplyvných slovinských hovoriacich prezentujú exaktné hodnoty tempa reči. Analýza predstavuje prvý výskum tempa reči tohto druhu v slovinčine. Kontrastívne sme analyzovali aj reč slovinského hovoriaceho v angličtine a reč vplyvného ruského politika v ruštine. Pomocou programu Praat a transkripcie textov sme získali reálne hodnoty, ktoré budú základom na ďalšie analýzy. Tempo reči, resp. artikulácie, sme merali v slabikách za sekundu (slab/s). Analyzovaní hovoriaci boli anonymní, ale zreteľne sociálne charakterizovaní (pohlavie, vzdelanie, dialekt, verejné vystupovanie a úloha v spoločnosti). Merali sme tempo reči (speech rate – SR), ako aj rýchlosť artikulácie (articulation rate – AR). Pri mediálne čítanej reči nie je rozdiel medzi SR a AR (vzťah sa rovná 1), pretože prestávky pri televíznych správach sú veľmi krátke, resp. vôbec sa nevyskytujú (ekonomický faktor času; otázna však je zrozumiteľnosť týchto textov pri percepcii). Výsledky predstavené v tomto príspevku potvrdzujú, že v národnej televízii je prejav v slovinčine štandardizovaný a nejestvujú rozdiely v tempe reči v závislosti od pohlavia. Mediálnemu štandardu sa svojím prejavom približuje aj najvplyvnejší slovinský politik (hovoriaci 003m). Podľa našich analýz je tempo reči (a artikulácie) pri čítaní u mediálnych hovoriacich 5,5 – 7 slab/s, pri nečítaných textoch zväčša 5 – 6,5 slab/s, a to: AR = 5,7 – 7,7 slab/s; SR = 4,4 – 5,6 slab/s, čo je porovnateľné s našimi predbežnými výskumami, ktoré mediálne tempo reči v slovinčine určovali medzi 5 a 6 slab/s. Rýchlosť politického prejavu v slovinčine a ruštine sa výrazne odlišuje – reč ruského prezidenta (004m) je podstatne rýchlejšia ako reč slovinského prezidenta (003m) – ruský: AR = SR = 8 slab/s; slovinský: SR = 5,4 slab/s, AR = 6,6 slab/s).