Speaking rate in Czech TV weather forecasts

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Speaking rate is one of the important prosodic phenomena. Together with pauses involved in the division of speech into smaller units, it contributes to the degree of intelligibility of speech. Therefore it is a significant element of interpersonal communication.

Speaking rate shows extensive variability, which is manifested both among speakers and in the same individual/speaker. There are many factors that affect speaking rate, both extralinguistic (age, gender, geographical background etc.; conf. e.g. Trouvain 2003 and Verhoeven et al. 2004) and intralinguistic (length of the intonation phrase (Quené 2005), syllable structure (Pfitzinger 2006), position within the unit (Dankovičová 2001). It is not easy to explain the influence of these factors on the speaking rate directly, because some factors may suitably complement each other, but they may also act against one another (conf. Kohler 1986).

Speaking rate has long been the subject of research in Czech, but usually only as single experiments conducted on different speech materials. The observed tendencies cannot therefore be easily generalized to Czech. Our analysis of speech in TV weather forecasts is a contribution to the verification of the tendencies and influence of the selected factors on the speaking rate.

Newsreaders and other media speakers, including weather forecast speakers, are taken as promoters of the standard speech. Regarding speaking rate, there is evidence that speech pronounced on the Czech radio and TV has accelerated in the last decades. The mean speech rate of radio newsreaders in 1996 was 5.3 syll/s (Bartošek 2000) and 6.2 syll/s in 2002 (according to Palková, published in Palková et al. 2003). The mean speech rate of Czech TV weather forecast was 5.6 syll/s (Balkó 2001).

Studies suggest that there was no difference between men and women in speaking rate (Bartošek 2000, Poukarová & Veroňková 2017) but the values measured in the professional speakers were much higher than in non-professional speakers (cf. e.g. Balkó 1999, Veroňková-Janíková 2004). The objective (measured) speaking rates could be compared with the subjective evaluation of the audience. With regard to weather forecasts, listeners tended to rate slower speech more positively (Machač 2008).

The observed aspects also include the variability of the speaking rate in the linear division of speech into the introduction – central part – conclusion. The results did not show any evident tendency. For some speakers, the central passage was slower, for some faster than the neighboring parts (see Balkó 2001 for weather forecast, Rubovičová 2014 for professional interpreters or Hrachová 2016 for voiceovers).

The present paper provides data on the speaking rate of 4 speakers (2 men and 2 women) of Czech TV weather forecasts on newer material compared to Balkó (2001), so the potential tendencies for accelerating speaking rate can be monitored. In addition to speech rate (speaking rate including pauses), it also examines articulation rate (excluding pauses) and pause volume. As far as pauses are concerned, their position in the structure of the text will also be monitored with regard to the suitability of syntactic and semantic relations. The baseline domain for the articulation rate measurement are breath groups and tone units (Dankovičová 2001). The variability of speaking rate will also be monitored within the structural parts introduction – central part – conclusion (see above).

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