

The temporal characteristics of teenagers in the various spontaneous speech genres

Laczkó Mária

Faculty of Paedagogy, University of Kaposvár, Hungary

The speech tempo is one of the most explored areas of spontaneous speech research. The researchers refer to speech rate as a measure of the entire cognitive and articulatory activity involved in the production of an utterance, and the articulation rate for the amount of speech produced in the time actually taken to articulate it. In other words the tempo of speech is the rate at which utterances and their smaller units are pronounced. Consequently tempo of speaking is usually defined as speaking rate or as articulation rate. Speaking rate as a gross rate refers to the entire speaking phase including pauses versus articulation rate as a net rate refers to phases of articulation excluding pauses.

Both of them are influenced by different factors, regarding the speaker's characteristics like his/her age, gender, individuality, physical/emotional condition or the characteristics of his/her pauses occurring in the spontaneous speech. The topic of the speech, the speaking context and type of the text, consequently the style of the speech can also have an effect on speaking and articulation rates.

The effect of the age on speech tempo has already proved in Hungarian language and the results showed significant differences among the people with various age including the teenagers whose both speech and articulation rate was the highest. There are also some experimental results regarding the different speech tempo values in various types and styles of the texts including the spontaneous speech, interviews, conversations, or reading some kind of text and reading news.

It is still a question what is the speech tempo of teenagers in the various speech genres like and how it is characterized by various types of the pauses and hesitation phenomena in the various communication situations which require different cognitive activities and skills. In other words the question is whether it is possible to claim that their fast speech tempo in Hungarian language can also occur in the various communication situations and to what extent. So how can their speech tempo depend on the type of the text and speaking style. Our previous hypothesis was that the speed of teenagers' speech samples in the given communication situations will be fast too, however it can also be determined by the type and style of the texts: the fastest tempo categories can occur in the narrative speech samples, the shortest tempo categories can describe the processes reading aloud. We have also thought that the tempo categories have close interrelation with speech planning process, and

the examined communication situations require different cognitive activities in terms of planning, consequently the differences can also be seen in tempo rates.

In order to answer the questions and to discuss the hypothesis the series of experiments were carried out with the participation of the same aged secondary school children (teenagers). Their mean age was 16,7 years, the students' age was between 16 and 17.

Their speech samples (approximately 3 minutes per person) were recorded in three communication situations: in narrative, rhetorical speech and in reading aloud. In the first case the students had to speak about the family life after they had 1,5 minutes to think of the given topic. In the second communication situation the teenagers had to memorize their texts written in advance, and they had to tell them by heart to the audience. In this case they previously had to choose one between two kind of topics (the value of family nowadays or the use of Internet versus books) in order to collect their arguments and discuss the topic, so they have enough time for the preparation of their speech. In the case of reading aloud they had to read the short text which was given to them before reading, however they have time for looking at all the text. The number of the students taking part in the experiments was 6-6, and in all three communication situations the same teenagers' speech was digitally recorded.

The analysis was based on the determination of speech rates, articulation rates, types and duration (length) of pauses (silent pauses and hesitation phenomena) and their functions (start/continue the speech, mistake and correction, uncertainty) in each situations in terms of each children. For the acoustic analysis the Praat program was used, while the statistical analysis was done by the SPSS 13.00 version. The tempo categories were measured by the number of sounds per seconds, the duration of pauses was given in milliseconds. Our preliminary hypothesis was proved, as the results show that the style of various examined genres of speech have different effect on temporal parameters of teenagers's speech both regarding the speaking rates, articulation rates and also the frequency, the types, the duration and the function of pauses. The speed of teenagers in terms of different texts was not only fast as it has been proved before but it varied depending on the types and styles of the texts. Both the number and length of the silent pauses and hesitation phenomena were different in the various communication situations and we have

also found some differences in terms of the function of hesitation phenomena occurring in the different speaking styles. Our paper is focused on the presentation of our data observed and results, and we also emphasize the consequences both in linguistic and pedagogical aspects.

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