

# Pragmatic functions of lengthenings and filled pauses in the adult-directed speech of Hungarian children

Andrea Deme

[Research Institute for Linguistics, Hungarian Academy of Sciences](#)  
[deme.andrea@nytud.mta.hu](mailto:deme.andrea@nytud.mta.hu)

## Abstract

*Two most common disfluencies of spontaneous speech, vowel lengthenings (VLE) and non-lexicalized filled pauses (NLFP) were investigated in the adult-directed speech of eight Hungarian children. Though VLE and NLFP might seem to be similar vocalizations, recent investigations have shown that their occurrences might differ remarkably in child speech and may also change as a function of age. Based on these findings, in the present study the functional analysis of VLEs and NLFPs was performed. It was hypothesized that in child speech the two phenomena have roles not only in speech planning, but also in discourse management, and that they show functional distribution. The analysis provided evidence that VLE is more common than NLFP. VLE often tends to mark discourse events and may play a role in turn-final floor-holding strategies, while NLFP is mostly connected to speech planning, and occasionally, it may also participate in turn-taking gestures, as well.*

**Keywords:** *Child speech; vowel lengthening; filled pause; floor-holding; floor-ceding; turn-taking; turn-allocation.*

## 1. Introduction

Lengthenings (hereafter, LE) and filled pauses (hereafter, FP) are probably the two most common phenomena of spontaneous speech (see e.g. Ecklund 2001, Horváth 2004). However, while FP has been in limelight for a relatively long time, and is a topic of ongoing dispute, LE is less in the scope of interest. Regarded both as disfluencies, LEs are often treated similarly to FPs. Due to this prevailing tendency, further analysis or detailed comparison of the two phenomena is rarely elaborated on. The objective of the pre-

sent study is to continue the analysis and comparison of LE and FP initiated and proposed by Deme (2012) and Deme and Markó (2013) (see Section 1.3) through addressing the question of their functional distribution. The analysis is limited to the domain of child speech since it has been given less attention so far (regarding LEs and FPs). Comparing the results of research in child speech to previous findings on adults can reveal important aspects regarding not only the functions, but the acquisition of the two phenomena, as well. For the sake of a more extensive analysis, distinguishing between lexicalized and non-lexicalized FPs on the one hand, and differentiating among many kinds of segment LEs (vowel LE, consonant LE, syllable LE, etc.) on the other, the investigation is narrowed down to *vowel lengthenings* (hereafter, VLE), as in *répalevest* [re:palevɛʃt] 'carrot soup', and *non-lexicalized (vocal) filled pauses* (hereafter, NLFP): *ő* [ø:], *mm* [m] and *öm* [øm]. In order to see whether there is enough evidence for the rough generalization treating LEs and FPs or VLEs and NLFPs as one category, we start with a brief overview of some examples of the available literature.

### ***1.1 LEs and FPs in adult speech***

In the majority of the fundamental studies of the issue, FPs are defined as disfluencies: artifacts of planning processes which help the speaker obtain time to plan his/her speech, and to execute processes of lexical access; therefore, FPs are in connection with cognitive load and cognitive effort or the difficulty of the task the speaker has to carry out (Maclay and Osgood 1959; Goldman-Eisler 1968; Clark and Fox-Tree 2002; Markó 2004; Gósy 2006; Corley and Stewart 2008). In other studies the function of floor-holding is also suggested. The authors propose that FPs help the interlocutors in turn-taking (especially in floor-holding) as well (Maclay and Osgood 1959; Schegloff 1982). In later works, Corley and Stewart (2008) argued, that FPs are important in attracting the listener's attention to the upcoming word, thus (in accordance with Clark and Fox-Tree 2002) FPs should be considered as intentionally planned and executed, independent items of language, namely words (not only as involuntary and automatic correlates of mental processes). To summarize, a wide range of functions for FPs have been proposed, including the domain of speech planning and pragmatics, as well, but there is no general agreement on their status.

LEs, however, seem to be the "dark horse of the disfluency stable" (Ecklund 2001). These phenomena are rarely mentioned or analyzed independently, and are generally regarded as simple disfluencies similar to FPs: vocalizations, which are the acoustic correlates of planning processes by signaling the difficulties the speaker encounters while speaking (see e.g., Horváth 2004; Giannini 2003; Esposito 2006). It is a telltale sign that the previous short description practically contains everything that is attributed to LEs in the literature. There is little amount of functions proposed and examined, also, there is no really accurate definition available. On the contrary, most definitions are not only non-extensive, but also fairly inconsistent which underlies the "underestimation" of LEs: most of the studies define LE based on to objective duration (using the terms "length" and "duration" in their descriptions), but apply the subjective auditory judgment of the researchers themselves in designating the phenomenon (see e.g. Ecklund 1999; Bell et al. 2000).

This unbalanced presence of LEs and FPs in the scientific discourse should warn the researcher to raise doubts about how well-founded the approach to handle LE and FP as two identical means of speech might be (NB no substantial evidence is provided). In addition, despite the proposed similarities of the two phenomena, there are some functions suggested for FPs which are not investigated regarding LEs at all. The discourse-related roles are a case in point – in the present proposal it will be suggested that these are the main functions of VLE in child speech.

### ***1.2 LEs and FPs in child speech***

In child speech less data on FP is provided than for adults, and practically no detailed studies on the analysis of occurrences and functions of LE have been conducted. The interpretation of FPs in children is similar to those found for adults, like "look to the novel referent" or "pay attention to the following word" (Kidd et al. 2009, in accordance with Corley and Stewart 2008). Independent analysis of LEs, however, are practically missing from the literature, thus no particular functions (typical of child speech, as well) are assigned to them.

As a matter of fact, items of discourse-management as such seem to be less frequently addressed in the child language literature. Items of discourse pragmatics may include discourse markers in the strict sense (here-

after, DMs; referring to lexical items that are imposing a relationship between discourse segments, see Fraser 1999), and other lexical and non-lexical means, as well, which can be used for controlling turn-allocation or can be part of floor-holding or floor-ceding strategies (e.g. marking turn starts or turn ends).

Broadly speaking, studies investigating the discourse-management of children can be divided into three main groups. The first group of works covers mainly the development of timing and pausing as cues of discourse management skills. They investigate gaps, overlaps, and the effectiveness of interruption in children's speech (Ervin-Tripp 1979; Esposito 2006; Tice 2010; Tice et al. 2011). The second group of papers investigates the development of the usage of DMs, purely in the strict sense (Kyratzis and Ervin-Tripp 1999; Choi 2007; Markó and Dér 2011). Discourse functions filled with (or supported by) non-verbal items are, on the other hand, less often in the focus of research. The third group deals with these non-lexical means of discourse-management. They demonstrated, for instance, various functions of *humming* in Hungarian child speech (Markó et al. 2010) and suggested that children might also use non-verbal response marking (response-initial) means, like *uh* and *um* aiming to express floor-holding intentions (Tice 2010).

### ***1.3 Novel initiatives in the study of LFs and FPs, hypothesis***

Recently it has been demonstrated that the frequency of occurrence and positions of NLFPs and VLEs might be different within a group of children at the same age and may also vary with age (studied in 8-year-olds by Deme 2012 and in a comparison between 8-year-olds and adults by Deme and Markó 2013). Based on the results, the authors proposed that although NLFPs can be regarded as disfluency phenomena and means of speech planning by default (as it is usually suggested), VLEs cannot be treated the same way – at least in case of child speech.

They base their argument on four striking observations that are briefly summarized below in order to establish the present paper's approach and methodological considerations.

1. It was found that in ADS VLEs appear mostly in content words (in more than 70%), whereas in adults it is mostly the content-word-preceding function words, which tend to contain them (in more than 60% of the cas-

es). 2. In addition, in ADS, it is mostly the end of these content words (the very last syllable) where the phenomenon appears (in more than 70% of the cases). 3. VLEs in ADS were found to be most frequent in speech-session final positions (i.e. before pauses, in about 70% of the cases), while in adults it was less (about 50%), whereas the counts of VLEs in the other positions were roughly equally distributed in their material. By contrast, in ADS a great amount of NLFPs occurred in isolation (in more than 50% of the cases), while in adults, session initial and session final positions were the most frequent (about 30%–30%, respectively, thus accounting for 60% of all cases). 4. Finally, in ADS there were more NLFPs neighbored by other disfluency phenomena than VLEs (NLFPs: approx. 35%, VLEs: approx. 10%), whereas in adults VLEs and NLFPs were involved with the same frequency (in approx. 20%).

According to the above findings, it seems reasonable to argue that NLFPs and VLEs in adult speech and NLFP in child speech might have functioned as "coverage" for the difficulties of the processes of lexical retrieval (or grammatical planning), thus helping the speakers to gain time for resolution. However, this argument does not hold for VLEs in ADS, since in that case VLEs were not followed but contained by the content word and were positioned word-finally and session-finally. As the usage of VLEs in adults and NLFPs in both groups seemed to be primarily triggered by the error of a mental process, VLEs in child speech (according to the data of 8 children) seemed to have no obvious connections to error resolution. Based on their data, the authors proposed that in many cases the primary function of VLEs were discourse-related.

Motivated by the above results, the aim of the present paper is to examine the possible functions of VLEs and NLFPs in adult-directed speech of children. It is hypothesized that these means have functions over and beyond signaling planning difficulties, namely in turn-allocation. Moreover, the functions of VLE and NLFP differ. Through the present analysis some insight to the discourse management skills of children can be obtained. Providing evidence for the usage of an element in child speech with the exclusive function of managing the conversation (as suggested for VLEs in child speech) would be an important step, since that would provide direct evidence for the turn-allocation intentions of children as well.

The study targets ADS for a very simple reason. ADS is less frequently dealt with in the literature than peer conversations, because in adult–children interactions it is more the adults, who dominantly control speech timing (as, for e.g. Ervin-Tripp 1979). Though Ervin-Tripp’s argument may be valid to a certain extent, it is also true that ADS is a typical and common speech situation. In life our first experience in discourse is adult or parent-directed speech. Furthermore, ADS is a dominant part of frontal school instruction scenarios, as well, and it is often the verbal performance (carried out with the teacher) that is evaluated in the classroom. Therefore, the investigation of ADS situations is of great relevance.

## **2. Methodology**

### ***2.1. Subjects and material***

The occurrences of VLEs and NLFPs were analyzed in 8 Hungarian children’s (4 boys and 4 girls, age: 7–8) 45 minute long speech material. The corpus was recorded in quasi-interview situations, the children were asked about their holiday activities and their days in kindergarten by the adult interviewer. Designation of VLEs was carried out with a perception test involving 10 linguists (introduced in Deme 2012). The subjects were asked to listen to the speech samples using headphones in a quiet room, and meanwhile to follow the transcription of the texts presented on a screen (the transcription was orthographic, but without punctuation). The subjects’ task was to mark those vowels in the written texts which they felt to be lengthened based on their subjective auditory judgment. Vowels marked by at least 6 linguists were defined as VLE. NLFPs were identified based on the auditory perception of the author, together with the visual confirmation of a spectrogram. To avoid blending the data, only VLES occurring in function or content words were considered as VLES, while those occurring in FPs, DMs or any kinds of disfluency phenomena were counted as FP, DM or a disfluency phenomenon (and disregarded as VLE).

### ***2.2 Methods***

To determine the possible functions of the two phenomena in turn-allocation, floor-holding and floor-ceding strategies had to be detected in children’s speech. However, it was important not to label these arbitrarily since it would have led to circular reasoning: the means and formal features

causing the impression of a certain function or strategy serving as the bases of detecting it would have been found to be the means and form of that particular strategy. Consequently, the places of analysis had to be defined not on functional but on formal basis, in hope of finding clusters of congruent attributes afterwards which can be labeled as functional groups or "strategies".

For this purpose, in the first approach two places of supposedly different "transition relevance" (Sacks et al. 1974) were selected for analysis: the "places of grammatical completion" (PGC) (derived from Denny 1985) and the "places of possible turn ends" (PTE). In fact, both PGC and PTE share the property of grammatical completion or grammatical finiteness (i.e. they are points at which the utterance can be regarded as syntactically complete). However, while PGC was defined as a point of finiteness, which is not followed by a silent pause (SP) of any length, PTE was determined as a point which is followed by an SP. According to the results of Tice (2010), who demonstrated the tendency of children using longer gaps in conversations, it was expected that PGC cannot serve as a real turn-end, while PTE can. After dividing points of grammatical completion to the classes of PGC and PTE it turned out that this suggestion holds: indeed speaker exchanges occurred only in PTE in our material. This means, that practically every speaker-exchange contained an SP, and every PGC was localized between the speech segments of children.

Based on these pilot results PGC and PTE were retained as the points of analysis and two suppositions were formulated. First, it was suggested that the properties of PGC (namely the lack of an SP, the intonation contour, etc.) serve as a means of compensation strategy for the transition relevance implied by the grammatical finiteness. Thus, inspection of these properties might help us to get closer to floor-holding strategies in children. Second, it was assumed that PTE (with an SP and somewhat greater transition relevance) can be the point of the realization of 1. floor-ceding intentions, in which case means to *compensate for* the transition relevance (probably including the SP, as well) have to be present, or 2. floor-holding intentions, in which case means to *enhance* the transition relevance of this position have to be present. Accordingly, at PTE two separate set of properties were predicted which supposedly attend on the two distinct functions

of floor-holding and floor-ceding, whereas at PGC there is only one dominating setting expected which supposedly coincides with case 1 at PTE.

The analysis involved the inspection of the  $f_0$ -contour (one of the most salient variables of intonation) and the presence of LEs and FPs was determined.

The distribution of the total number of LEs and FPs was also assessed with regard to the function of marking discourse events and their appearance in speech planning strategies (by using the additional criterion of the presence of adjacent disfluencies, DPh, as suggested by Deme and Markó 2013). In this phase of analysis, the terms "turn start" and "turn extension" were introduced. *Turn start* refers to the event at which speaker exchange occurs and the second interlocutor (the child) starts a new turn. *Turn extension* covers those events at which there is no speaker exchange after a PTE and the child is extending his/her turn. Adhering to the premise presented in Section 1.3, every NLFP was associated with speech planning functions and was defined as DPh by default, but was labeled so only in those cases in which there were no other (secondary) functions suspected. If there were other possible functions specified, NLFP got the label of this function. VLEs found at discourse marking positions and not accompanied by (or participating in) other DPhs were always labeled as discourse marking elements.

At this point, in order to provide a more complete picture of the discourse events occurring in ADS and to be able to relate the results obtained for discourse marking VLEs and NLFPs to discourse events of ADS in general, other lexical DMs (namely, DMs in the strict sense, see Fraser 1999) were also sorted out and analyzed. These DMs were only used to contextualize the children's discourse-management strategies more accurately.

### **3. Results**

In the speech material of children VLEs appeared more often than NLFPs on average (a VLE occurred once in every 56 vowels, while a NLFP was present every 32 seconds) with great variability across speakers (Figure 1): there is one child, who uses VLEs (G1), another one uses both VLEs and NLFPs with the same frequency (B1), a third one uses NLFPs more than twice as often as VLEs (B2), and a fourth one whose use of VLEs was al-



most equally rare (G2). The figures of frequency seem to be remarkably different from those reported in adult speakers. On the one hand, the average frequency of VLEs in children is twice as high as in adults; on the other hand, the ratio of VLEs to NLFPs in children is reverse that of adult's (cf. Deme and Markó 2013).

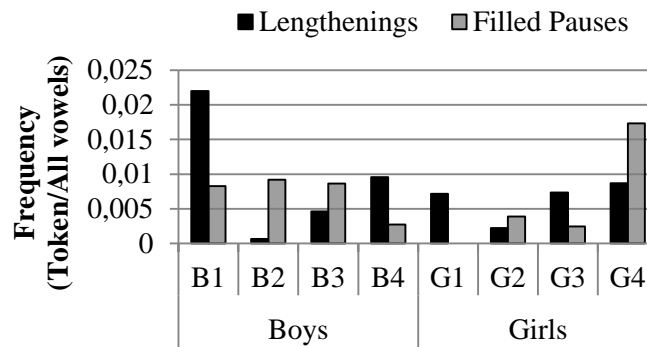


Figure 1. Frequency of occurrence of LEs and FPs per speaker.

As a general observation, it can be stated that no NLFPs were found in PGC and PTE marking functions, so possibly no significant role is played by NLFPs in turn-ending or turn-extending gestures in ADS. VLEs, however, have several appearances at these places (more than 10% in PGC and more than 24% in PTE) (Figure 2).

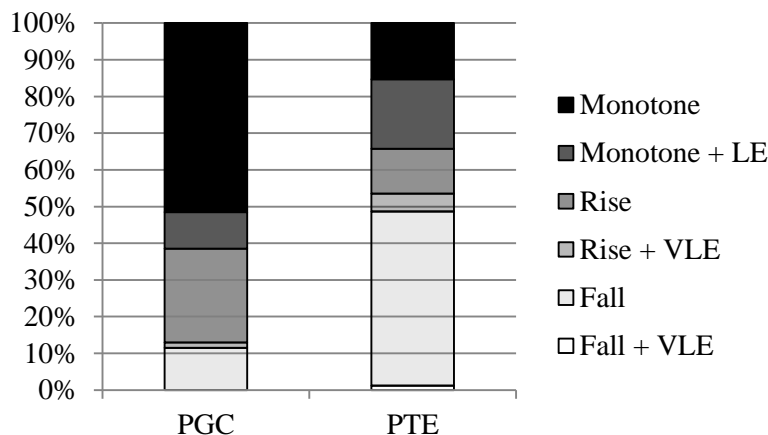


Figure 2. Summary of the properties observed at PGC and PTE.

The typical (and practically: only)  $f_0$ -contours found at PGC were monotonic (in 61.5%) and rising (in 26.5%). Monotonic and rising contours are interpreted as part of the compensatory strategies for the transition relevance of this position (cf. Section 2.2). Moreover, it is suggested that VLE might act as a means of floor-holding. The claim is supported by previous findings of the literature. As Varga (2002) states in his fundamental work on Hungarian intonation, the contour types of rise and monotone imply that the unit is not complete but a preparation for something complete or significant that follows, while fall suggests that the stretch of speech has come to an end. In her investigation of spontaneous speech Markó (2005) also found that rising contour is a common means at the end of speech sessions and clauses with the most probable indication of the willingness to continue. Nevertheless, intuitively, as well, one may suggest that monotonic and rising contour signify infiniteness in intonation, as opposed to fall, which is more likely to express finiteness. Since these contours are frequently accompanied by VLE (both at PGC and PTE), VLE is supposed to be a marker of this compensatory/floor-holding strategy as well. (However, the proportions of the appearance of VLE also suggest that in most cases the intonation-contour and the lack of an SP provide a probably sufficient signal, and VLE might only serve as a secondary marker; 10% of PGCs and 22% of PTEs are marked by VLEs.)

If the previously described cluster of monotonic and rising contours (with or without VLE) acts as one functional group, it can be concluded that there are two distinct and dominant clusters of properties occurring at PTE, as expected: 1. monotone and rise (with or without VLE) and 2. fall (with VLE, in a very few cases). Similarly to PGC, we suggest that the first group accounts for the strategy of compensation/floor-holding, while the second expresses floor-ceding intentions through giving the impression of finiteness conveyed by the descending ("final-sounding")  $f_0$ -contour (in accordance with the findings of Beattie et al. 1982 and the description of Varga 2002).

Furthermore, the suggestion regarding the role of VLE in compensatory/floor-holding strategies is supported by the closer evaluation of the properties observable at PTEs as well, since VLEs are almost never linked to the presumably "turn-passing" intentions and falling contours (as fall is accompanied by VLEs in less than 2%).

Figure 3 and 4 summarize the distribution of all of the occurrences of VLEs, NLFPs and the other DMs found in the material in terms of their function of marking discourse events and the participation in speech planning strategies.

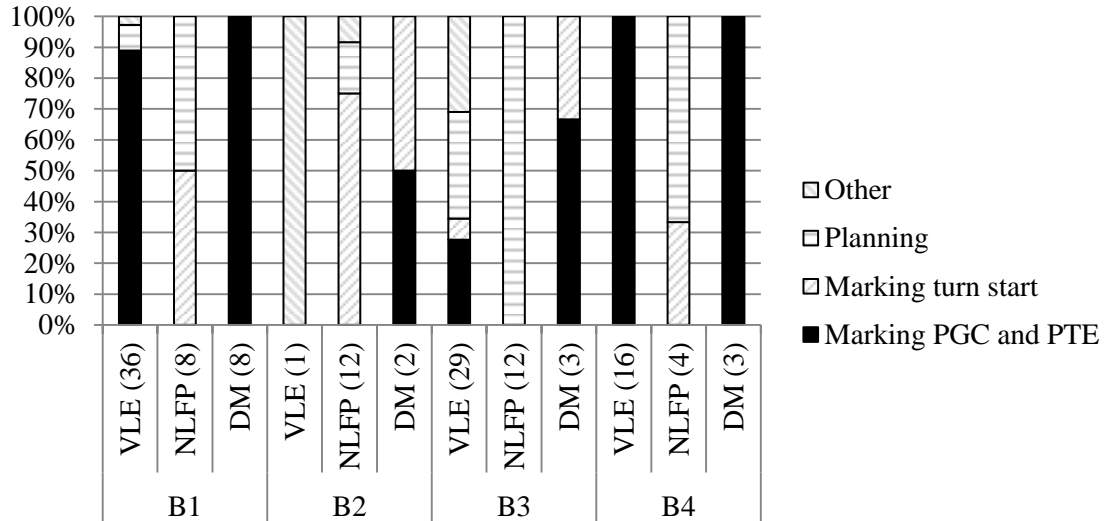


Figure 3. Occurrences of VLEs, NLFPs and other DMs in the boys' material. (The numbers in brackets indicate the total number of occurrences.)

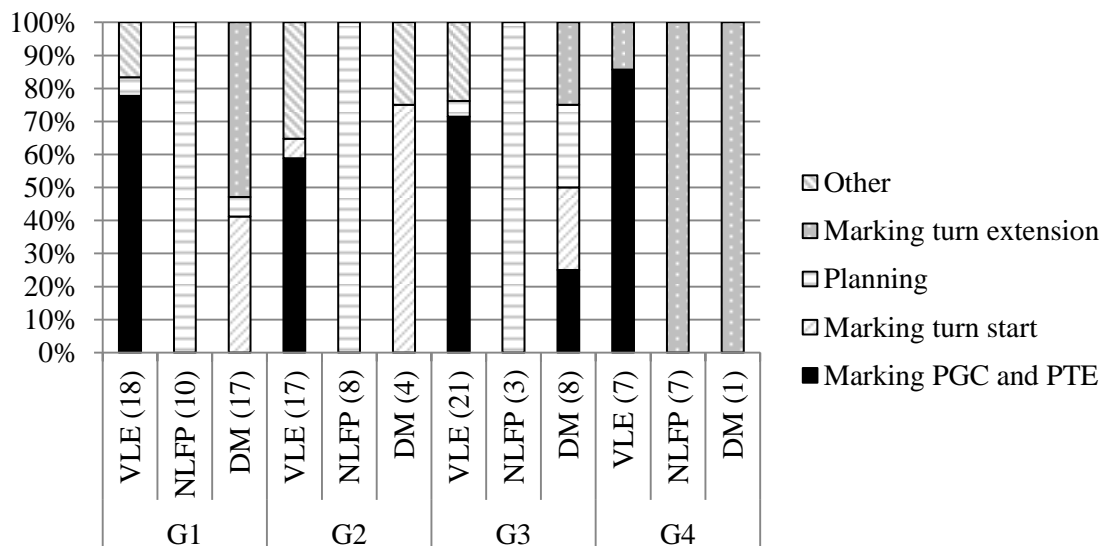


Figure 4. Occurrences of VLEs, NLFPs and other DMs in the girls' material. (The numbers in brackets indicate the total number of occurrences.)

Generally speaking, VLE appears most often in the material, as it is used by 6 children (B1, B3, B4, G1, G2, G3), while NLFPs are only used by 2 children (B2 and B3), and DMs (in the strict sense) are only used habitually by only one speaker (G1). Based on the number of adjacent DPhs, it can also be concluded that NLFPs seem to be more involved in speech disfluencies and speech planning processes than VLEs.

As far as VLEs are concerned, 5 out of 6 children use them as markers of the places of grammatical completion (or in a few cases, to mark turn start) with VLEs occurring in content words, and only one boy (B3) follows a different tendency. In his speech, the appearance of VLEs in function words (pronouns, conjunctions, articles) is more dominant. Interestingly, this pattern, which can be considered rare in children's material, is the pattern that Hungarian adults seem to follow, as well (according to Horváth 2004). Moreover, VLE is generally considered to be a time-gaining vocalization exactly due to these appearances, as it provides time for searching in the mental lexicon (if occurring in articles and pronouns before content words) or planning whole clauses (if occurring in conjunctions). However, this kind of usage is the most seldom in our material.

The case of NLFPs draws a more scattered picture. Those few speakers who use them quite frequently show divergent patterns: one of them uses NLFP for marking discourse events (turn starts), as well as signaling planning difficulties (B2), while others prefer to employ it only in the latter role (B3, G1) (along with the most children who use this means less often), and in a few cases, NLFPs also mark turn extensions (in G4). With regard to NLFP, in those children's speech, who use VLE in the function of signaling discourse events consistently (B1, B4, G1, G2, G3), 3 possible scenarios are observable: i) NLFP is only connected to speech planning difficulties (G2, G3), ii) NLFP has a role in planning as many times as in marking discourse events (B1, B4) or iii) NLFP is not present at all (G1). In other – non-prototypical – cases, in which VLE plays mostly the role of time-gaining, the general lack of discourse marking elements of any kind can be detected (B3).

There were 46 DMs found in the corpus. These (in an ascending order of frequency) are the following: *ilyen / ilyenek(et)* 'such' (28%) > *hát* 'well' (16%) > *és* 'and' + SP (14%) > *csak ennyi(t)* 'that's all' (14%) ~ *akkor* 'then' (14%) ~ *aztán* 'then'. In addition to these, other explicit forms were regis-

tered as well (altogether 14%), e.g. *Csak ennyi jut az eszembe* 'That's all that comes to my mind' or *Ez nem nagyon az eszembe jut* 'It does not come to my mind that much' (sic). Comparing these data to those obtained previously from Hungarian adult speech (Dér 2005), we find that the frequency of *hát* and *ilyen* are somewhat similar, though the place of order in the list is reverse (in adults the following order is reported: *hát* 'well' > *ilyen* 'such' > *így* 'like this' > *úgyhogy* 'therefore' or 'so'). Although, there are 2 phrases (*így* and *úgyhogy*) in adult speakers, which seem to be missing from children's speech, there are 3 additional ones (*és* 'and', *akkor* 'then' and *aztán* 'then'). These appear similarly to *így* and *úgyhogy* in adults, and have their origins in the word class of conjunctions, as well. Markó and Dér (2011) analyzed 3 DMs (*hát* 'well', *így* 'like this', *ilyen* 'such') in several age groups. With regard to the frequency of DMs, they established the following order for young children (age: 6–7): *ilyen* 'such' (33%) > *hát* 'well' (30%) > *így* 'like this' (37%). Apparently, *így* is not missing from the speech of children at the age of 6-7, but shows speaker-specific occurrence. Otherwise, the results of the present study are perfectly in line with the data of Markó and Dér (2011).

It should be emphasized that the usage of these prototypical DMs might be a yet less strengthened strategy in the speech of 7 year olds, since their appearances are the least consistent among the phenomena studied here. It is used by only two speakers on a regular bases (unlike VLEs, for instance). Apparently, girls use DMs almost twice as often as boys (4 tokens in boys and 7.5 tokens in girls on average).

Children who use DMs more frequently (G1, G3) use VLEs for marking discourse events and NLFPs for signaling planning difficulties.

#### 4. Discussion and conclusions

In the present material of ADS of eight Hungarian children, moderate variability in the usage of VLEs and NLFPs was found. The data provided evidence on the role of VLE and NLFP in turn-allocation and signaling discourse events and demonstrated functional differences of the two phenomena.

VLE was found to be more common than NLFP. Also, it was used more consistently by certain speakers and showed functional convergence in the material. Its functions were mostly marking PGC and PTE, possibly

as part of floor-holding strategies accompanied by rising or monotonic  $f_0$ -contour. There were just a few cases in which VLEs could only be attached to speech planning processes.

NLFP, on the other hand, is practically not present at PGC and PTE, therefore accounts for possibly no floor-holding strategies in the sense of keeping the right to speak (utterance-finally). These findings are not in line with those of Maclay and Osgood (1959) or Schegloff (1982) who described FPs as means of floor-holding in adult speech. Therefore, it can be concluded that age-related functional differences of NLFP exists. However, to some extent (in the case of a few children) NLFPs might serve as a certain kind of floor-holding means, since it may signal turn starts. Yet, the apparently most common role played by NLFP is time-gaining for speech planning purposes.

An interesting result of the analysis is that marking turn starts and marking turn ends turned out to be different cases, filled by different means: though VLE seemed to act as a very common means of speech-retention and the most common means of marking discourse events in general, VLEs occurred mostly utterance-finally, whereas the rare cases of marked turn-taking positions were only found to be occupied by NLFPs. On this basis, it is suggested that these positions and functions should be differentiated and examined separately, since there is no reason yet to believe that the skills of taking over the turn appear or develop parallel to the skills of keeping the right to speak. Moreover, the question, whether children acquire the ability of recognizing utterance-initial and utterance-final "competition" at the same period of development should serve as a subject of further studies.

It seems reasonable to propose that the habitual usage of DMs reflects conscious and voluntary discourse managing intentions (or, it is in correspondence with the development of discourse managing skills). For this reason, the material of children who use DMs on a regular basis is of special relevance. Analyzing their speech habits we can conclude that children with obvious discourse managing intentions (or more advanced discourse management skills) use VLE mostly for acting the part of PGC marking, or more specifically, one means of (utterance-final) compensation or floor-holding, whereas NLFP is used in the process of speech planning. Systematic application of VLE in planning processes was observed in only one

speaker's case (B3), but as he is not using discourse marking elements of any kind, his skills in discourse management can also be presumed to be a) less developed, or b) simply less present in the realization of his speech.

Consequently, of the above, the usage of VLE for time-gaining purposes cannot be considered common, and this suggests that there are age-related differences in the use of VLE, as well (since VLEs in adults are generally supposed to be a speech planning vocalization).

Because of the considerably high percentage of VLEs used for signaling discourse events it is also reasonable to suggest that VLEs are more likely to belong to the group of DMs (than disfluencies) in ADS (or maybe child speech in general), while NLFPs can primarily be regarded as a disfluency phenomenon. This finding serves as direct and clear evidence that children at the age of 8 have already improved skills to manage and control a conversation.

The disparate counts of VLEs, NLFPs and other DMs among speakers can be interpreted in terms of different states of acquisition and/or individual speech strategies, as well. In this sense,

- i) DM seems to be the latest means in the course of acquisition or a tool used only by certain individuals, whilst
- ii) the incidences of NLFP suggest that it is a speech strategy that is either acquired on an early stage of development or is used only by particular speakers, and
- iii) VLE seems to be one of the most common items of discourse at this age (and in the given speech situation, ADS).

According to this material, both the explanations (namely the acquisition-related interpretation and the assumption of speaker-dependent strategies) are plausible, thus the exact clarification of this issue needs a following comparative study among several age groups. However, both interpretations highlight the differences of function and frequency of VLE and NLFP.

The present study sheds some light on the non-trivial (and less studied) issue of VLEs and draws attention to the possibility of age-related occurrences and functions of NLFPs. The paper also points out that it is necessary to make a clear distinction between VLEs, and NLFPs and their

functions, and to distinguish the characteristics of children's discourse management from that of adults.

## References

- Beattie, Geoffrey W., Cutler, Anne, and Pearson, Mark. 1982. Why is Mrs. Thatcher interrupted so often? *Nature* 300: 744–747.
- Bell, Linda, Eklund Robert, Gustafson, Joakim. 2000. A comparison of disfluency distribution in a unimodal and a multimodal speech interface. *Proceedings of the 6<sup>th</sup> ICSLP* 3. 626–629.
- Clark, Herbert H. and Fox Tree, Jean. E. 2002 Using *uh* and *um* in spontaneous speaking. *Cognition* 84: 73–111.
- Choi, Inji. 2007. How and when do children acquire the use of discourse markers? In *Proceedings of the 5<sup>th</sup> Cambridge Postgraduate Conference in Linguistics (CamLing) 2007*. 40–47
- Corley, Martin and Stewart, Oliver W. 2008. Hesitation disfluencies in spontaneous speech: The meaning of *um*. *Language and Linguistics Compass* 4. 589–602.
- Corley, Martin and Hartsuiker, Robert J. 2011. Why *im* helps auditory word recognition: The temporal delay hypothesis. *PLoS ONE* 6(5): 19792. doi:10.1371/journal.pone.0019792.
- Denny, Rita 1985. Making the interaction order: the social constitution of turn exchange and speaking turns. *Language and Society* 14(1): 41–62.
- Deme, Andrea 2012. Magánhangzónyújtások gyermekek spontán beszédében [Lengthenings in the spontaneous speech of children]. In [VI. Alkalmazott Nyelvészeti Doktoranduszkonferencia](#). Váradí T. (ed.). Budapest: MTA Nyelvtudományi Intézet [Research Institute for Linguistics, HAS]. 24–39.
- Deme, Andrea and Markó, Alexandra. 2013. Lengthenings and filled pauses in Hungarian adults' and children's speech. In *Proceedings of the 6th Workshop on Disfluency in Spontaneous Speech, KTH Royal Institute of Technology, TMH-QPSR* 54(1). Robert Eklund (ed.). Stockholm: Royal Institute of Technology. 21–24.
- Dér, Csilla. I. 2005. Diskurzusszerveződés és grammatikalizáció [Discourse structure and grammaticalization]. *Nyelvtudományi Közlemények* 102: 247–264.



- Eklund, Robert. 1999. A Comparative analysis of disfluencies in four Swedish travel dialogue corpora. *Proceedings of Disfluency in Spontaneous Speech Workshop*, University of Berkeley, California. 3–6.
- Eklund, Robert. 2001. Prolongations: A dark horse in the disfluency stable. *Proceedings of Disfluency in Spontaneous Speech*. University of Edinburgh, Scotland. 5–8.
- Esposito, Anna 2006. Children's organization of discourse structure through pausing means. In *Nonlinear Analyses and Algorithms for Speech Processing: Lecture Notes in Computer Science*. Faundez-Zanuy, M., Janer, L., Esposito A., Satue-Villar, A., Roure, J. and Espinosa-Duro, V.(eds.). Springer Verlag, Berlin Heidelberg. 108–115.
- Ervin-Tripp, Susan M. 1979. Children's verbal turntaking. In *Developmental Pragmatics*. New York: Academic Press. 391–414.
- Fox Tree, Jean E. 2002. Interpreting pauses and *ums* at turn exchanges. *Discourse Processes* 34(1): 37–55.
- Fraser, Bruce. 1999. What are discourse markers? *Journal of Pragmatics* 31: 931–952.
- Giannini, Antonella. 2003. Hesitation phenomena in spontaneous Italian. In *Proceedings of the 15th International Congress of Phonetic Sciences*. Barcelona :Universitat Autònoma de Barcelona. 2653–2656.
- Goldman-Eisler, Frieda. 1968. *Psycholinguistics: experiments in spontaneous speech*. New York: Academic Press.
- Gósy, Mária. 2006. A semleges magánhangzó nyelvi funkciói [Functions of the neutral vowel]. *Beszédkutatás* 2006. 8–22.
- Horváth, Viktória. 2004. Megakadásjelenségek a párbeszédekben [Disfluency phenomena in dialogues]. *Beszédkutatás* 2004. 187–199.
- Kidd, Celeste, White, Katherine S. and Aslin, Richard. N. 2009. Children's use of disfluencies for pragmatic inference in lexical development. *Proceedings of the 31st Annual Meeting of the Cognitive Science Society*. 1494–1499
- Kyrtzisz, Amy and Ervin-Tripp, Susan. 1999. The development of discourse markers in peer interaction. *Journal of Pragmatics* 31: 1321–1338.
- Maclay, Howard and Osgood, Charles. E. 1959. Hesitation phenomena in spontaneous speech. *Word* 15: 19–44.

- Markó, Alexandra. 2004. Megakadások vizsgálata különféle monologikus szövegekben. [Disfluencies in several types of monologues.] *Beszéd kutatás 2004*. 187–199.
- Markó, Alexandra. 2005. A spontán beszéd néhány szupraszegmentális jellegzetessége. Monologikus és dialogikus szövegek összevetése, valamint a hűmmögés vizsgálata [Prosodic features of spontaneous speech: comparison of dialogues and monologues, and the investigation of humming]. Budapest: ELTE dissertation.
- Markó, Alexandra, Grácsi, Tekla E. and Imre, Angéla. 2010. A diskurzusjelölők használatának fejlődése: a hűmmögés formai és funkcionális sajátosságai különböző életkorokban [Development of discourse markers in the function of age: formal and functional features of humming]. In *Nyelv, beszéd, írás. Pszicholingvisztikai tanulmányok I*. Navracsics Judit (ed). Budapest: Tinta Könyvkiadó. 82–92.
- Markó, Alexandra and Dér, Csilla I. 2011. Diskurzusjelölők használatának életkori sajátosságai [Discourse markers in the function of age]. In: *Lexikai folyamatok egy- és kétnyelvű közegben: Pszicholingvisztikai tanulmányok II*. Navracsics, Judit and Lengyel, Zsolt (ed.). Budapest: Tinta Könyvkiadó. 49–61.
- Sacks, Harvey, Schlegoff, Emanuel A. and Jefferson, Gail. 1974. A simplest systematics for the organization of turn-taking for conversation. *Language* 50(4): 696–735.
- Schegloff, Emmauel A. Overlapping talk and the organization of turn-taking for conversation. *Language and Society* 29(1): 1–63.
- Tice, Marisa. 2010. Getting the timing right: factors affecting gap length in children's responses to questions. *Qualifying Paper 2*, Stanford, USA.
- Tice, Marisa, Bobb Susan C., Clark, Eve V. Timing in turn-taking: children's responses to their parent's questions. *Proceedings of the 15th Workshop on the Semantics and Pragmatics of Dialogue*. 202–203.
- Varga, László 2002. *Intonation and Stress: Evidence from Hungarian*. Houndmills, Basingstoke: Palgrave-Macmillan.