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Negation and word order in Hungarian child language

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Abstract

The study provides a quantitative analysis of longitudinal naturalistic language data from young Hungarian children. The main concern of the analysis is the development of word order restrictions triggered by negation and certain other linguistic features, such as focussing and subjunctive mood. It is found that the mastery of the word order requirements of negation is slightly delayed relative to the development of ordering restrictions associated with other features. Some aspects of the data suggest that initially the children may rely on lexicalised construction templates in selecting the appropriate word order configuration.

Keywords: Language acquisition; Word order; Negation; Hungarian; Lexicalised construction templates

1. Introduction

Negation in Hungarian is one of a number of linguistic features that trigger deviation from what can be regarded as the neutral order of elements in a sentence. It has previously been noted in diary studies (Meggyes, 1970) and in work based on sentence repetition data (Réger, 1986) that Hungarian pre-school children have difficulty with the principles determining positioning in the adult grammar. Neither of these studies, however, are concerned with the systematic documentation of the development of ordering restrictions

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in different types of non-neutral sentences. This is the subject of the current study: the question to what extent young Hungarian children observe the ordering requirements of negation and whether the expression of negation develops independently or concurrently with other features that motivate non-neutral word order. My primary aim is to give a thorough description of the children's linguistic behaviour rather than to search for explanations.

2. Four types of elements in the Hungarian sentence

Briefly, the neutrality of word order may be defined with reference to the semantic/pragmatic features of the expression occupying the slot immediately preceding the finite verb in the surface phonetic string. In neutral finite clauses, it is the position for a categorially heterogeneous class of expressions, termed verbal modifiers (VMs) that form a semantic unit with the finite verb or with the nonfinite verb of its clausal complement. In non-neutral sentences the VM, if there is one, appears postverbally and the preverbal slot may be occupied by some other item. In terms of their behaviour with respect to the order of the VM and the verb, non-VM elements of the sentence may be of three types: (a) those that may or may not trigger the inversion of the VM and the verb depending on the information structure of the proposition; (b) those, including negation, that obligatorily trigger inversion; and (c) those that cannot trigger inversion. In the following discussion I will refer to these categories as ''focussable'' (or [±f]), ''focus'' (or [+f]) and ''nonfocus'' (or [−f]) sentence contexts respectively.

2.1. The verbal modifier

The most common verbal modifiers are an open class of bare nominals with object or goal function and a relatively well-defined closed set of verbal prefixes and prefix-like adverbs. Nominals introduced by determiners may not act as VMs. Since in early child Hungarian the presence or absence of determiners does not appear to be governed by the principles of the adult grammar (see e.g., Babarczy, 1998) only utterances with prefixes or prefix-like adverbs are included in the analysis here.

Verbal prefixes fulfil a number of different semantic functions. The most common of these are aspectual, directional and derivational. Thus, in (1), for instance, the prefix el transforms the unbounded process of sleeping into the bounded event of falling asleep and in (2) the prefix *meg* adds an element of successful completion to the event of searching. Aspectual prefixes are lexically selected by the verb.

(1) a. Aludtak.
slept.they
'They slept/were sleeping'.

b. El-aludtak.
away-slept.they
'They fell asleep'.

(2) a. Keresték.
searched.they
'They searched/were searching (for it)'.

b. Meg-keresték.
pref-searched.they
'They searched and found it'.

In addition to the aspectual effect, the prefixes in (3) also indicate the direction of the activity whether the goal argument is expressed or not. In these cases the selection of the prefix is determined by the nature of the explicit or implicit goal.

(3) a. Be-ugrottak a (víz-be).
in-jumped.they (the water-in)
'They jumped in (into the water)'.

b. Fel-másztak (a fá-ra).
up-climbed.they (the tree-on)
'They climbed up (the tree)'.

c. Haza-mentek.
home-went.they
'They went home'.

Finally, unlike in (3), the meaning of the Prefix–Verb complexes in (4) is not transparently compositional. These combinations are independent lexical items.

(4) a. Kaptak egy ajándékot.
got.they a present
'They got a present'.

b. Ki-kaptak.
out-got.they
'They were told off '.

c. Be-kaptak egy szendvicset.
in-got.they a sandwich.
'They gulped down a sandwich'.

2.2. Focussable contexts

Given a [V,VM] complex in a sentence, the three categories of its formal context are those where both the [V VM] and [VM V] word orders result in grammatical utterances; those where the presence of an inherently [+f] element requires [V VM] order; and those where an inherently [−f] element requires [VM V] word order. The following paragraphs outline the major characteristics of the three classes. The lists are neither exhaustive, nor exceptionless. Some details will be given in the relevant sections of the paper; for a more

in-depth discussion of these issues the reader is referred to e.g., É Kiss (1994, 1998), Komlósy (1994), Puskás (2000).

The default property of arguments and adjuncts in a predication is to be focussable—they may be mapped onto a [+f] configuration with [V VM] word order or a [−f] configuration with [VM V] order depending on the communicative intentions of the speaker. In the latter case the argument or adjunct may precede or follow the [VM V] complex. In (5) below the predication is modified by the ''focussable'' temporal adverb *tegnap*. In both versions of (a) yesterday is mentioned as one of possibly many days when the event occurred and word order is neutral. Sentence (b), on the other hand, singles out yesterday as the only time of the event and *tegnap* appears left-adjacent to the verb, with the VM occupying a postverbal position.

(5) a. Tegnap haza-mentek. OR Haza-mentek tegnap.
yesterday home-went.they
'Yesterday they went home'.

b. Tegnap mentek haza.
yesterday went.they home
'It was yesterday that they went home'.

Similarly, both [V,VM] orders are permissible in (6). The conceptual difference between the two configurations is whether the speaker predicates something about Sára independently of the rest of the world, as in both versions of (a); or marks Sára as one special individual distinguished from all others in the universe of discourse, as in (b).

(6) a. Sára el-aludt. OR El-aludt Sára.
Sára away-slept
'Sára fell asleep'.

b. Sára aludt el.
Sára slept away
'It was Sára who fell asleep'.

2.3. *Focus contexts*

As was mentioned above, the alternation between focus and non-focus is not licensed in all sentential contexts. Obligatory focus contexts include propositional negation (7a), propositional negation with a negative polarity item (b), imperative or subjunctive mood (c) and the presence of a [+f] expression, such as a negated constituent (d), an implied negative polarity item (e) or a *wh*-word (f). Inherently [+f] phrases must appear in preverbal position. Thus to encode the propositions in (7), the only possible configuration is V followed by VM.

(7) a. Nem ugrottak be a víz-be.
not jumped.they in the water
'They did not jump into the water (but stayed aboard the cruiser)'.

b. Soha nem aludtak el.
never not slept.they away
'They never fell asleep'.

c. Menj haza.
go.imp home
'Go home'.

d. Nem a fára másztak fel.
not the tree.on climbed.they up
'They did not climb up the TREE (but the lamppost)'.

e. Későn aludtak el.
late slept.they away
'They went to sleep late'.

f. Miért kaptál ki?
why got.you out
'Why were you told off ?'

In propositional negation (7a) the negative particle *nem* is left-adjacent to the finite verb and has scope over the entire predication. Direct negative polarity items (NPIs) are inserted into negated sentences (b), although some may be fused with the negative particle in colloquial Hungarian. The example in (e) illustrates the class of implied NPIs, which occur in non-negated sentences and trigger the inversion of the VM and the verb. In narrow-scope negation (d) the slot immediately preceding the finite verb is occupied by the constituent marked by the negative particle.

2.4. Non-focus contexts

The third type of context does not license the inversion of the VM and the verb. Non-focus contexts are non-subjunctive, non-negative utterances where either no phonetic material precedes the [VM,V] complex within the clause or an inherently [−f] expression occupies the left-adjacent slot. Non-focus expressions include constituents modified by the inclusive particle *is* (too) (8a); complementisers (b), relative pronouns (c), universally quantified adverbs of frequency (d) and various other adverbs expressing temporal, aspectual or iterative notions (e).

(8) a. Danót is meg-keresték.
Danó-acc too pref-searched.they
'They searched and found Danó too'.

b. Mert el-aludtam.
because away-slept.I
'Because I fell asleep'.

c. (Az) aki be-ugrott a vízbe.
(that) who in-jumped the water-in
'The one who jumped into the water'.

d. Mindig haza-mentek.
always home-went.they
'They always went home'.

e. Megint fel-másztak a lámpaoszlopra.
again up-climbed.they the lamppost.on
'They climbed up the lamppost again'.

3. Aims and methods

The study follows the development of word order patterns in different sentence types in a longitudinal corpus of Hungarian child language. The corpus consists of transcripts of conversations in free-play situations by 6 children with an age range of 1;8–2;11. The data from 5 of the children are taken from the MacWhinney collection (MacWhinney, 1974) in the CHILDES database (MacWhinney, 1991). The recordings of the sixth childwere collected by Zita Réger, Hungarian Academy of Sciences. A summary of the subjects' details is given in Table 1.

The children's utterances are analysed with reference to a simple template of positions in the linear sentence string; no attempt is made to assign underlying syntactic representations to them. The category of each utterance-context (focussable, focus or non-focus) is determined according to its syntactically relevant formal characteristics, as discussed above, disregarding necessarily speculative judgements as to the communicative intentions of the speakers.

In addition to the child data, one adult native Hungarian speaker was included in some of the analyses as a control subject. The adult speaker is the conversation partner of one of the children, Miki. She produced a total of 9887 utterances in the corpus.

4. The results of the analysis

4.1. Overview

The development of word order patterns in different sentence types is shown in Table 2, with the data divided into three age groups across all children. At all ages, there is a clear difference between non-focus sentence contexts and obligatory focus sentence contexts in the preferred order of prefix and verb. In the former sentence type the prefix is postverbal in only 2 to 3 percent of utterances, while over 80 percent of prefixes appear postverbally in [+f] contexts. Focussable constituents tend to occur with neutral [Prefix V] word order throughout the corpus, although the proportion of prefix inversion gradually increases over age (from 6 to 15 percent). For the adult subject the proportion of inversion in focussable

Table 1
The children's age range, total number of utterances in corpus and total number of finite clauses with a verbal prefix

Child	Age range	No. of Utts	No. of [V,VM] Utts
Andi	2;2–2;8	960	240
Eva	2;8–2;11	4431	1172
Gyuri	2;4	1359	318
Miki	1;11–2;10	8515	457
Moni	1;9–2;5	708	141
Zoli	1;8–2;2	4887	805
Total	1;8–2;11	20860	3237

Table 2
Postverbal prefixes in different sentence types broken down to age groups

Age	All sentence contexts						Total *N*
	Non-focus		Focus		Focussable		
	N	%VPr	*N*	%VPr	*N*	%VPr	
l;8–2;2	620	2	361	80	142	6	1123
2;3–2;7	434	3	196	91	135	8	765
2;8–2;11	512	3	544	84	233	15	1349
Total	1626	3	1101	84	510	10	3237

contexts is somewhat higher (23% of 189 relevant utterances) than for the oldest age group. Assuming that this result is reasonably representative of the adult population, the trend observed in the child data is clearly approaching the adult norm. However, no clear developmental trend can be observed over time for the other two sentence context types.

4.2. Focus contexts

Table 3 breaks down obligatory focus contexts according to the category of the [+f] feature: sentential negation, the presence of an inherently [+f] expression or imperative/subjunctive mood.[1] To allow us to compare the children's sensitivity to distinct features requiring Prefix-Verb inversion, utterances in which more than one of these features are present are classed separately. Within this category the data are divided into negated utterances and non-negated utterances, shown in Table 4.

Looking at the totals for the three categories of focus context in Table 3, there are no significant differences between them in the frequencies of prefix inversion. In negated sentences and in utterances with an overt [+f] expression 77% of prefixes occur in postverbal position; the corresponding figure for imperative/subjunctive constructions is 83%. There appear to be slight developmental differences, however.

[1] The subjunctive/non-subjunctive distinction is neutralised in certain persons of the morphological paradigms of certain verbs for morphophonological reasons. Utterances with these ambiguous verb forms are excluded from the analysis.

Table 3
Postverbal prefixes in different types of obligatory focus context

Age	All [+f] contexts								Total *N*
	Single [+f]						Multi [+f]		
	Sent Neg		[+f] Item		Subjunct				
	N	%VPr	*N*	%VPr	*N*	%VPr	*N*	%VPr	
1;8–2;2	*30*	47	*2*	100	*295*	86	*34*	56	*361*
2;3–2;7	*39*	90	*6*	50	*66*	92	*85*	93	*196*
2;8–2;11	*41*	88	*14*	86	*331*	78	*158*	95	*544*
Total	*110*	77	*22*	77	*692*	83	*277*	89	*1101*

4.2.1. Propositional negation

In negated utterances the positioning of the prefix is around chance level in the youngest age group (47% postverbal). In combination with a [+f] item or subjunctive/imperative mood, the likelihood of inversion in negated utterances is only slightly increased (62%). These figures, however, are still considerably higher than the base line of 2% observed in non-focus contexts (see Table 2), indicating that the phenomenon of inversion is noted, albeit its conditions are far from fully mastered. In both single [+f] contexts and multiple [+f] contexts the proportion of postverbal prefixes in negated utterances exhibits a sudden leap in the second age group to 90% and 94% and remains around that level for the oldest group (88% and 94%).

Five of the six children produce non-inverted negative utterances. (In the data from the sixth child, Andi, only 5 sentences occur in this category, all of which conform to the word order of the adult grammar.) The children's errors involve a variety of lexical combinations of verbs and prefixes, there are no clear semantic or syntactic criteria distinguishing inverted constructions from non-inverted structures. Some examples of erroneous utterances are given in (9); in the adult grammar the prefix would be placed postverbally to express each of these propositions.

(9) a. *nem meg-harapta a kutya a cicát. (Éva 2;10)
not pref-bit the dog the cat-acc
'The dog didn't bite the cat'.

Table 4
Postverbal prefixes in negated and non-negated utterances with more than one [+f] feature

Age	Multiple [+f] contexts				Total *N*
	Neg		Non-neg		
	N	%VPr	*N*	%VPr	
1;8–2;2	*16*	62	*18*	50	*34*
2;3–2;7	*72*	94	*13*	85	*85*
2;8–2;11	*49*	94	*109*	95	*158*
Total	*137*	90	*140*	88	*277*

b. *nem össze-gyűrtem. (Miki 2;2)
not together-crumpled.I
'I didn't crumple it up'.

c. *nem ki-kapom. (Móni 2;5)
not out-get.I
'I won't be told off '.

d. *nem meg-csíp a egér. (Zoli 2;2)
not pref-sting the mouse.
'The mouse won't sting (me)'.

Unfortunately no negative polarity items or constituent negation occur in the youngest age group and only a few can be found at later stages. The children's utterances with NPIs in sentential negation are listed in (10). In (a) the NPI *soha* (never) is fused with the negative particle into a single phonological word. The prefix and the verb are appropriately inverted in all three constructions.

(10) a. sose jön ki. (Éva 2;10)
never comes out
'It never comes out'.

b. senki nem vert meg. (Éva 2;11)
nobody beat pref
'Nobody beat me'.

c. semmikor nem mondom meg. (Miki 2;4)
no-when not tell pref
'I'll never tell (you)'.

The two utterances in (11) involve a special case of propositional negation with the postmodifying negative particle *se*(*m*) (neither), which incorporates both phonologically and semantically the negative particle *nem* (not) and the postmodifying inclusive particle *is* (too). The requirement to invert the prefix and the verb is observed by Gyuri in (a) but not by Miki in (b).

(11) a. ez sem fér bele. (Gyuri 2;4)
this neither fits in
'This doesn't fit in either'.

b. *anyuci se hozzá-nyúlhat a gázhoz. (Miki 2;6)
mummy neither towards-may.touch the gas.to
'Mummy can't touch the gas (heater) either'.

4.2.2. Inherently [+f] items

The small number of utterances with obligatory focus constituents allows no more than some brief comments. Two categories of [+f] items occur in the corpus: *wh-* phrases and *csak-* phrases.

The position of the exclusive adverb *csak* (only) is free within the clause. The head of the *csak*-phrase, however, must be left-adjacent to the finite verb, i.e., the adverb *csak*, whatever its position, is interpreted as modifying the constituent in focus position. Its presence therefore triggers the inversion of the prefix and the verb, freeing the preverbal slot for its head. Two utterances with *csak* occur in the corpus, both produced by Miki and both target-like. The adverb is separated from its head in both utterances and the immediately preverbal position of the head ensures the interpretability of the construction:

(12) a. ő ebbe fér be csak. (Miki 2;6)
he this.in fits in only
'He fits into this only'.

b. picit nézem csak meg. (Miki 2;4)
little look.I only pref
'I'll look at it only a little'.

The other category of obligatory focus constituents, *wh*-questions, appears to pose more problems for Miki and also for Gyuri, although the other four children observe the inversion requirement. Some examples of non-inverted *wh*-questions are shown in (13).

(13) a. *miért be-mennek? (Gyuri 2;4)
why in-go.they
'Why are they going in?'

b. *miért ki-esett? (Gyuri 2;4)
why out-fell.it
'Why did it fall out?'

c. *mikor be-kapcsol? (Miki 2;9)
when in-turns
'When does it turn on?'

d. * mikor föl-kelünk? (Miki 2;9)
when up-get.we
'When do we get up?'

4.2.3. Imperative/subjunctive constructions

By far the most frequent category of [+f] contexts are imperative and subjunctive constructions. As was shown in Table 3 above, the proportion of postverbal prefixes in this context is 86%, 92% and 78% from the youngest to the oldest age group. A notable difference between the learning curves for this context and negated utterances is that the youngest group's performance is considerably poorer in the latter (47%). Non-inverted imperative/subjunctive utterances are produced by all six children. Some examples of errors are given in (14).

(14) a. * El-meséljed. (Miki 2;4)
away-tell.imp
'Tell me (the story)'.

b. * Meg-mutasd. (Zoli 1;10)
pref-show.imp
'Show me'.

c. * Le-gurítsuk (Éva 2;8)
down-roll.subj.we
'Let's roll it down'.

Unlike for the previous two categories, utterances with the prefix in preverbal position, however, are not necessarily ungrammatical in subjunctive contexts.

Constructions where inversion is not obligatory include the semi-idiomatic expressions *oda-nézz*! (look at that!), *ide-figyelj*! (listen to me!); verbs of motion with the prefix-like adverbs *ide* (here) and *oda* (there); yes/no questions; and certain subordinate clauses. Both [Prefix,Verb] orders are acceptable in all of these sentence types. Examples for the latter two constructions are given in (15) and (16) respectively.

(15) a. meg-igyam? (Éva 2;8)
pref-drink.subj.I
'Shall I drink it?'

b. föl-szálljunk a motorunkra? (Miki 2;9)
up-get.subj.we the motorbike.on
'Shall we get on our motorbike?'

(16) a. akarom hogy meg-száradjon. (Miki 2;4)
want.I that pref-dry.subj.it
I want it to dry'.

b. hogy föl-ébredjenek. (Miki 2;6)
that up-wake.subj.they
'So that they wake up'.

Interestingly, the proportion of postverbal prefixes decreases in optional-inversion subjunctive contexts over the age groups. The youngest group inverts the prefix and the verb 86% of the time (out of 85 utterances); the corresponding figure is 75% (of 12 utterances) at the next stage; and only 31% (of 93 utterances) at the last stage in the corpus. The likelihood of [V Pr] order in optional-inversion subjunctive contexts is even lower in the adult data (12% of 67 utterances). Similarly to focussable contexts discussed in Section 4.1 above, a clear developmental trend can be observed here: the statistical patterns in the children's productions gradually approach the adult patterns. In this context, however, the trend is in the reverse direction, with inversion being the preferred configuration for the youngest age group.

Table 5
Postverbal prefixes in different types of non-focus contexts

Age	Non-focus contexts				Total *N*
	Empty		[−f] Item		
	N	%VPr	*N*	%VPr	
l;8–2;2	*552*	2	*68*	6	*620*
2;3–2;7	*360*	3	*74*	4	*434*
2;8–2;11	*467*	2	*105*	6	*572*
Total	*1379*	2	*247*	5	*1626*

4.3. Non-focus contexts

Recall that non-focus contexts are those where no focussable expression appears in the slot that immediately precedes the [V,VM] complex. The slot may be empty or occupied by a [−f] item. As we have seen in Table 2 above, Prefix–Verb inversion in non-focus contexts is infrequent (2–3%). However, all six children produce both verb-initial utterances and utterances with a [−f] expression left-adjacent to the verb. As shown in Table 5, the proportion of postverbal prefixes is comparable in empty contexts (2–3%) and sentences with a [−f] expression (4–6%).

Some, but not all, of these constructions are ungrammatical. The errors appear to be random, with no lexical or semantic motivation for inversion. Some examples of erroneous verb-initial utterances are shown in (17).

(17) a. *fordította meg. (Gyuri 2;4)
turned.he pref
'He turned it round'.

b. *gyógyítom meg. (Miki 2;3)
cure.I pref
'I'll cure him'.

c. *kaptam be. (Éva 2;11)
in-got.I
'I gulped it down'.

Inversion with [−f] items in the children's language is illustrated in (18). In (a) the subject pronoun is modified by the inclusive particle is (too), which precludes focus interpretation in the adult grammar. (b) is a subordinate clause where the non-focussable complementiser appears in focus position left-adjacent to the verb. In (c) the item in syntactic focus position is an inherently [−f] adverb with an unspecified future time reference.

(18) a. *az is fér bele. (Éva 2;8)
that too fits in
'That fits in too'.

b. *azért mert mosott meg. (Moni 2;5)
that.for because washed.he pref
'Because he washed me'.

c. *majd adom oda. (Éva 2;10)
fut give.I there
'I'll give it to you later'.

Around a third of the children's inverted non-focus utterances are grammatical constructions, where the postverbal position of the prefix may signal progressive aspect. This interpretation is licensed by verbs of motion and directional prefixes. Whether the aspectual interpretation reflects the speakers' intentions in these particular instances is, of course, subject to debate:

(19) a. megyünk ki. (Zoli 1;10)
go.we out
'We're going outside'.

b. mindjárt jön vissza. (Gyuri 2;4)
soon comes back
'He's coming back soon'

c. mászok be. (Andi 2;8)
in-climb.I
'I'm climbing in'.

5. Some notes on productivity

In summary, the results of the analysis of the children's constraints on the relative order of the verb and the verbal prefix reveal the following: Focus contexts are clearly distinguished from non-focus contexts and focussable contexts in terms of the preferred position of the verbal prefix. In focussable contexts, i.e., contexts where the two word order options express semantic contrast, initially the neutral configuration is strongly preferred but at later stages the children make more and more use of the ordering device.

Errors in the ordering of the prefix and the verb occur in both directions. Neutral [Pr V] configuration in focus contexts, especially in negated utterances, is frequent at the earliest stage of development and persists to some extent into later stages. In contrast, spurious inversion is negligibly rare throughout the corpus. In optional-inversion subjunctive contexts, however, inversion appears to be the default configuration.

Looking at the youngest age group only, the data in [+f] contexts therefore seem to be divided into relatively low-inversion contexts (negation and focussable constituents) and relatively high-inversion contexts (optional-inversion and obligatory-inversion subjunctive constructions). The question is what property of the children's grammar causes this divide. The syntactic mechanism of focussing is clearly available across the board, since inverted word order configurations do occur in all of these contexts. The difference must, then, lie in

the schedule of acquisition of the precise triggering conditions of inversion within the two context sets.

One explanation may be that there is something inherently more difficult about the delimitation of the concept of inversion-triggering negation and constituent focussing than the delimitation of the concept of inversion-triggering subjunctive. This explanation presupposes the assumption that the learners formulate hypothesis rules and their rules at this stage are more accurately specified in the syntactico-semantic domain of subjunctives than in the domain of negation or constituent focussing. Some characteristics of the data, however, suggest that the children's inversion patterns are not the reflection of an underlying focus-constraint system but in large part emerge from the probabilities of occurrence of individual rote-learnt input constructions. If this is the case, the children's subjunctive constructions are no more rule-governed than their negative constructions. The reason why negation and subjunctive/imperative constructions show divergent developmental patterns may then simply be that more imperative constructions have been stored as formulaic or semi-formulaic expressions and/or these expressions occur more frequently in the corpus than rote-learnt negative expressions.

This conclusion is supported by the type/token analysis of the data. It reveals that the token/type ratio of inverted constructions is highest in subjunctive contexts, where the children's early performance is most target-like (6.2 in subjunctive contexts, 2.3 in negative construnctions and 1.1 in focussable constituent contexts). In the youngest age group 161 (54%) of the children's imperative utterances are constructed with four frequent [V Pr] combinations: *add oda* (give it to me), *bújj el* (hide), *gyere ki* (come out) and *nézz oda* (look there). All 161 utterances conform to the adult word order. In negative contexts, on the other hand, similar formulaic or semi-formulaic constructions are far less frequent. There is only one such expression (*nem ad oda* (s/he won't give it to me) and slight variations to it), which occurs 7 times (23% of utterances).

We also find some general indicators in the data for a conservative learning strategy. Firstly, [−f] items in syntactic focus positions are vanishingly rare—no more frequent than inverted non-subjunctive constructions with no phonetic material in the preverbal slot. That is, the children do not experiment with the focus feature. Second, errors are random, they show no observable patterns that may indicate an erroneous rule-governed application of the syntactic device. Finally, there are two types of lexical error in the data that give further support to the hypothesis that the children's ordering choices are not necessarily rule-governed. One is unanalysed inverted constructions that appear to be treated as single-word lexical entries by the children and the other is novel combinations of prefix and verb which do not obey ordering principles.

In the speech data of the youngest age group we find lexical errors that suggest that the relative position of the prefix and verb observed in the input is not necessarily interpreted by the learners. At this stage the children produce utterances where an imperative verb form and a postverbal prefix (i.e. a command construction) are marked for first person agreement as a unit:

(20) a. *nem add-oda-m. (Zoli 1;10)
not give.imp-there-1sg
'I won't ''give-it-to-me!''. = 'I won't give it to you'.

b. *add-ide-m. (Andi 2;2)
give.imp-here-1sg
'I'll ''give-it-to-me!''. = 'I'll give it to you'.

c. *feküdj-le-lok. (Andi 2;2)
lie.imp-down-1sg
'I'll ''lie-down!''. = 'I'll lie down'.

d. *szállj-le-lok. (Andi 2;2)
get.imp-down-1sg
'I'll ''get-off !''. = 'I'll get off '.

As the English translations in (20) indicate, as far as it can be established from the context of these utterances, the speakers express their intentions to do (or not do) something rather than give a command to the listener. The [Vimp Pr] sequences appear to be treated as verbal lexical entries. This fact raises the question whether the children's target-like inverted constructions are analysed structures or are simply imitations of observed input utterances.

Evidence for rule-governed behaviour may come from the target-like structuring of sentence types that can not have been witnessed in the input. An opportunity to test the children's creativity is provided by utterances with novel combinations of prefix and verb. These are utterances where the child's choice of prefix is inappropriate for a particular verb. The error may be semantically motivated or it may consist in the selection of the wrong aspectual prefix for a specific verb. An example for the former is the phrase *össze-görbít* (bend together) referring to the bending of a rod so that its two ends come together—this combination happens not to be part of the adult lexicon. There appears to be no semantic motivation for the phrase *meg-épít* (build to completion), for instance, where the purely aspectual prefix *meg* is selected in place of the target-like aspectual-directional prefix *fel* (up). What is interesting about these novel combinations is that they tend not to be inverted in obligatory focus contexts. While the overall error rate in these contexts is only 16%, 4 out of 5 (80%) creative [Pr,V] complexes fail to invert. The single syntactically target-like utterance occurs in the oldest age group. The four structurally ungrammatical utterances are listed in (21); the one with target-like word order can be seen in (22). (Acceptable prefixes include *el* (away) in (21a); *fel* (up) in (b); *fel* (up) in (c); *el* (away) in (d) and in (22).)

(21) a. *ne össze-görbítsd. (Éva 2;8)
not together-bend.imp
'Don't bend it together'.

b. *meg-építsük.
pref-build.subj.we
'Let's build it'. (Éva 2;11)

c. *akkor nem be-sírok. (Móni 2;5)
then not in-cry.I
'Then I won't cry'.

d. *én nem össze-rontottam. (Zoli 1;10)
I not together-ruined.I
'I didn't ruin it together'.

(22) *rontsuk össze. (Éva 2;11)
ruin.subj.we together
'Let's ruin it together'.

This pattern of behaviour is expected on the assumption that, at least at the early stages, the children rely on lexicalised construction templates and the conditions for syntactic focussing are acquired on an item by item basis. Since these combinations cannot be witnessed in the input, the default word order prevails.

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References

Babarczy, A., 1998. The transition to the functional stage in Hungarian language acquisition. In: de Groot, C., Kenesei, I. (Eds.), Approches to Hungarian, vol. 6, JATE, Szeged, Hungary.
É Kiss, K., 1994. Sentence Structure and Word Order. Kiefer & É.Kiss.
É Kiss, K., 1998. Identificational focus versus information focus. Linguist. Inquiry 29, 245–273.
Kiefer, F., É Kiss, K. (Eds.), 1994. Syntax and Semantics, vol. 27: The Syntactic Structure of Hungarian. Academic Press, San Diego.
Komlósy, A., 1994. Complements and Adjuncts. Kiefer & É. Kiss.
MacWhinney, B., 1974. How Hungarian children learn to speak. PhD dissertation. University of California at Berkeley.
MacWhinney, B., 1991. The CHILDES Project: Tools for Analysing Talk. Lawrence Erlbaum, Hillsdale, NJ.
Meggyes, K., 1970. Egy kétéves gyermek nyelvi rendszere. [The Linguistic System of a Two-Year-Old Child]. Akadémia Kiadó, Budapest.
Puskás, G., 2000. Word Order in Hungarian: The Syntax of A-bar Positions. John Benjamins, Amsterdam.
Réger, Z., 1986. The functions of imitation in child language. Appl. Psycholinguist. 7, 323–352.