

## Local meaning in the two-year-old and three-year-old children's speech

### *Vietas nozīme divgadīgu un trīsgadīgu bērnu runā*

**Ilze Auziņa, Kristīne Levāne-Petrova, Baiba Saulīte**

Latvijas Universitātes Matemātikas un informātikas institūts

Raiņa bulvāris 29, Rīga, LV-1050

E-pasts: *ilze.auzina@lumii.lv, kristine.levane-petrova@lumii.lv,*

*baiba.valkovska@lumii.lv*

The aim of this article is analyze the ways how the local meaning has been expressed in the children's (aged 18 to 42 months) speech. What grammatical categories are often used? The speech data from the first *Morfoloģiski marķēts longitudināls bērnu runas korpuss* (*Annotated longitudinal Latvian children's speech corpus*) are used. The corpus is created during the research project *Latvian language in monolingual and bilingual acquisition: tools, theories and applications* and includes orthographically and morphologically annotated audio recordings of 17 to 44 months old children's speech. It was concluded that for the expression of local meanings the adverbs, locative case, prepositional phrases and prefixal verbs are often-used, but all these forms do not appear in the children's speech simultaneously.

**Keywords:** children's speech corpus; language acquisition; local meaning.

### Introduction

The language acquisition takes place individually and is associated to the overall development of each child. General observations show that by the age of 18 months a child usually has a vocabulary of 50 to 150 words. After that age a steady expansion of vocabulary can be observed. At the third year of life more attention is paid to the acquisition of grammar and syntax. Two-word sentences are used with increasing frequency and they express definite meaning: an Actor performs an Action (1); an Action affects an Object (2); an Object is given a Location (3); an Object or Person is Described (4) (Crystal 1997, 244–245).

- |     |                      |                 |
|-----|----------------------|-----------------|
| (1) | <i>tētis</i>         | <i>ap-gāzās</i> |
|     | dad.NOM.SG           | over-fell.PST.3 |
|     | 'dad fell over'      |                 |
| (2) | <i>durvis</i>        | <i>ciet</i>     |
|     | door.NOM.PL          | shut            |
|     | 'the door is closed' |                 |
| (3) | <i>tur</i>           | <i>lācis</i>    |
|     | there                | teddy.NOM.SG    |
|     | 'there is a teddy'   |                 |

(4) <i>balts</i>	<i>kaķēns</i>
white.NOM.SG	kitten.NOM.SG
‘white kitten’	

The article explores the expression of the local meaning in a two-year-old and three-year-old children’s speech. What grammatical categories are often used? When do the children in their speech start to use adverbials?

As it is known, adverbial is a syntactic element whose role is one served by adverbs (Matthews 2007, 10) – the part of speech that modifies a verb, an adjective, another adverb, or an entire clause or sentence. Adverbials most commonly take the form of adverbs, noun phrases or prepositional phrases (Lokmane 2013, 765).

Local adverbial meaning – adverbial and prefixal verbs expressing goal/direction of the motion, or one expressing the place of existence/appearance.

## 1. Analyzed data (Annotated longitudinal children’s speech corpus)

Analyzed data of three monolingual children (Latvian speaking) and one bilingual (Latvian and Russian speaking) child is taken from the first *Morfoloģiski marķēts longitudināls bērnu runas korpuss (Annotated longitudinal Latvian children’s speech corpus)* (Auziņa et al. 2016). The corpus is a part of the project *Latvian language in monolingual and bilingual acquisition: tools, theories and applications* that represents a systematic and comprehensive investigation of monolingual and bilingual acquisition of the Latvian language, unprecedented in theoretical and empirical scope.

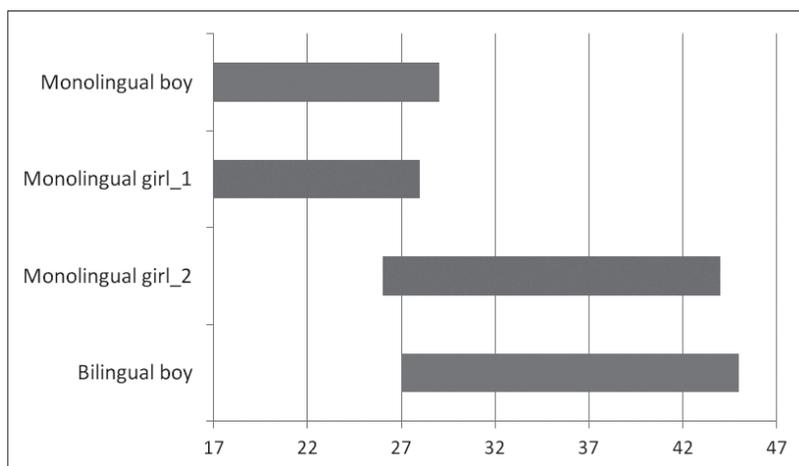
The corpus contains 4 longitudinal child’s speech sub-corpora:

- 3 monolingual Latvian-speaking children sub-corpora;
- 1 Latvian-Russian bilingual child sub-corpus.

The recordings were made in a period of 18 months from April 2015 to September 2016. The corpus contains recorded samples of children’s language over one and a half year period. The speech of youngest monolingual girl (Monolingual girl\_1) is being recorded from 17 months to 31 months of age. The speech of oldest monolingual girl (Monolingual girl\_2) is being recorded from 27 months to 42 months of age. The speech of monolingual boy is being recorded from 18 months to 32 months of age. A bilingual boy’s speech data were recorded from 28 to 42 months of age. See figure 1.

Children were recorded at their home or other familiar environment interacting with their family (most often their mother). During this time, four recording sessions per month have been conducted at regular intervals. Unfortunately, for various objective reasons the records have not been conducted with so much regularity, as it was originally planned. The largest break in the recording of one respondent is nine weeks.

The corpus size has been reached 134 hours of child-directed and child-adult speech recordings that are partly orthographically annotated.



**Figure 1.** The age of the children in the months: from the beginning of recordings

## 2. Age of children and language development in this age group

As acknowledged by Crystal (1997, 244–245), the 18 months is the end of so called ‘one-word stage’ of language development when children already move on to relating objects with other things, places and people and objects with events, e. g., *tētis te* ‘daddy here’. At the age of 17–19 month the first language specific constraints on word order and structure are evident, although an utterance length is constrained. The length constraint of utterances gradually releases as words begin to be combined into sentences (Lust 2006, 280).

Between two and three years of age, children begin constructing some more abstract constructions with fewer particular items necessary (Tomasello 2009, 78). The syntax become more complex and morphosyntax continues to grow (Lust 2006, 280).

During the pre-operational stage, lasting from 2 to 7 years of age, children learn the language and its expression is closely associated with the development of the thinking process and intellectual development in general, and it is reflected in the child’s speech. During this stage children are able to think about things symbolically. This is the ability to make one thing – a word or an object – stand for something other than itself (Piaget 1952).

Already in the preverbal stage of the language development children can communicate and express their emotions very well with facial expressions, gestures, voice responses, sounds (Piaget 1952).

The children already use so-called ‘jargon intonation’ – intonation patterns (one or more intonation contours) before they produced their first words, in pre-linguistic utterances (Peters 1977). Our data shows that sometimes 17–18 month-old children produce sound clusters, not real words (for example, *mm*, *ɲimɲi*) to indicate location or direction. The first words are expressed around the age of twelve months and that marks a new stage in the development of language, so-called ‘one-word stage’.

During the second year of life, language development of toddler does proceed at very different rates in different children. Crystal (1997, 247) believes that by age of two, spoken vocabulary probably exceeds 200 words, but in the third year of life the rapid acquisition of new words starts. Child's first words are universal: names of food, animals, family members, toys, vehicles, and clothing. Usually children first learn general nouns, such as „tree” instead of „oak”, and they may over generalize words, such as calling all toys „dolls”. At this age children attempt to pronounce multisyllabic words, speak two- or three-word sentences, ask two- or three-word sentences, they hum and sing, express pain verbally etc. They learn to use pronouns, some grammatical forms, such as past and future tense, noun accusative, genitive, dative case etc. They use three to five-word sentences; acquire the ability to repeat rhymes, songs, and stories, to answer special and general questions (Lust 2006, 280).

On the basis of the corpus data in Latvian at this age the child more commonly uses utterances with incomplete structure (usually, one word utterances (Lust 2006, 280), for example, *mamma*, *mam* ‘mother’, *baba* ‘grandmother’, *dod* ‘give (me)’, *nē*, *neā* ‘no’), sometimes utterances with two or three components are used.

### 3. Results

To express local meaning the adverbs, locative case, prepositional phrases and prefixal verbs are used, but these forms do not appear in the language simultaneously.

There are some forms that emerge first: these are forms which indicate either static location (locative, adverbs) or movement towards a location (preposition + nouns in accusative, dative or genitive). The forms with the meaning „motion away” appear noticeably later, thus there is a lack of data about movement away.

Form	Age	Examples
Adverbs (static location)	2;1	<i>te</i> ‘here’, <i>tur</i> ‘there’
Locative (static location)	2;6	<i>ielikšu</i> <i>latiņos</i> [ratiņos] put-in.FUT.1SG    pram.LOC.PL ‘I will put in the dolls’ pram’
Adverbs (dynamic location)	2;5–2;6	<i>augšā</i> ‘up’
Prepositional phrase (movement towards)	2;8	<i>ejam</i> <i>uz</i> <i>istabu</i> go.PRS.1PL    to    room.ACC.SG ‘let’s go to the room’
Prepositional phrase (static location)	2;3	<i>uz tā</i> on that.GEN.SG ‘on that’
Prefixal verbs	2;3	<i>tas</i> <i>nogāzās</i> <i>tā</i> <i>zemē</i> it.NOM.SG    fall_down.PST.3    so    down ‘so it rode and in the end it fell down’

**Table 1.** Local meaning expression in the children speech

Our observations show that in the age of two years the adverbs of place are used to express local meaning, for example, *tur* ‘there’, *te* ‘here’, *kur* ‘where’, etc.

Just afterwards the emergence of inflected nouns (for example, *istabā* ‘in the room’) and prepositions (for example, *uz galda* ‘on the table’) indicates both the child’s developing ability to productively form new words and word forms and the increasing need to verbally encode location more explicitly. Just after some time adverbs like *ārā* ‘outside’, *lejā* ‘down’ have been produced by children.

### 3.1. Adverbs

To express the local meaning some adverbs are used in the children’s speech. Local adverbs are widely used starting from 2;1.

Most of the adverbs used by child at this age are non-interrogative adverbs. Just interrogative adverb *kurp* ‘where’ has been used several times.

Most often adverbs *te* ‘here’ and *tur* ‘there’ are used. The reference point of these adverbs can be speaker or the hearer, in which case they are deictic, i.e., their meaning depends on the extralinguistic context (who the speaker/hearer is, where they stand). Moreover, these adverbs contain other semantic features than that of local distance from participants of the speech act (Haase 2001, 761).

The adverbs *te* ‘here’ and *tur* ‘there’ appear in the children’s speech when they are about two years old. These adverbs mainly are deictic, i.e. their main function is to refer to a place near (here) or away (there) from the speaker (Haase 2001, 761), for example:

- (5) Child (2;3): *tas*            *būs*            *te*  
 it.NOM.SG    be.FUT.3    here  
 ‘it will be here’
- (6) Child (2;6): *es* *te*        *dzīvošu*        *pati*  
 I.NOM        here            live.FUT.1SG    self.NOM.SG  
 ‘I will live here alone’
- (7) Child (2;3): *te*        *nav*  
 here    not\_be.PRS.3  
 ‘here is no’

In some examples adverb *tur* ‘there’ is used as discourse marker, namely, it does not indicate the location or direction, for example:

- (8) Child (2;6): *vailāk* [vairāk]        *tul* [tur]        *ila* [ir]  
 more                            there            be.PRS.3  
 ‘there is more’
- (9) Child (2;6): *kas*            *tuļ* [tur]        *pa* [par]        *pidžamu?*  
 what.NOM    there            PREP            pyjamas.ACC.SG  
 ‘what a pyjamas there?’

Adverbs *iekšā* ‘inside’, *augšā* ‘upstairs’, *pāri* ‘over’ are frequently used, for example:

(10) Child (2;6): *šito*                    *liksim*                    *iekšā*  
 this.ACC.SG                    put.FUT.1PL                    inside  
 ‘we will put this inside’

(11) Child (2;6): *vaig* [vajag]                    *likt*                    *iekšā?*  
 need.PRS.3                    put.INF                    inside  
 ‘need to put inside’

(12) Child (2;6): *ejam*                    *lejā*  
 go.IMP.1PL                    down  
 ‘let’s go down’

Adverbs *citur* ‘somewhere else’, *kaut kur* ‘somewhere’, *nekur* ‘nowhere’:

(13) Child (2;1): *i* [ir]                    *kau* [kaut] *kuļ* [kur]                    *aizbēdzis*  
 be.AUX.PRS.3                    some\_where                    escape.PTCP.PST.3  
*pojam* [projām]                    *no*                    *tevis*  
 away                    from                    you.GEN.SG  
 ‘it is somewhere escape from you’

(14) Child (2;1): *es*                    *tevi*                    *nekul* [nekur]                    *neledzēju* [neredzēju]  
 I.NOM                    you.ACC.SG                    nowhere                    not\_see.PST.1SG  
 ‘I did not see you anywhere’

### 3.2. Locative

Important role of the locative is in relating a referent to some point or location in space (Matthews 2007, 231). Locative is one of early abstract construction in children speech (Tomasello 2009, 78). For example, in response to the special question of the interlocutor, the child uses the exact word form in the locative (15–16, 20) or uses prefixal verb and noun in locative (17–19):

(15) Mother: *kur*                    *tad*                    *ir?*  
 where                    then                    be.PRS.3  
 ‘where then?’

Child (1;10): *jūrā*  
 see.LOC.SG  
 ‘in the sea’

(16) Mother: *kur*                    *tad*                    *tādu*                    *var*  
 where                    then                    that.ACC.SG                    can.PRS.3  
*dabūt?*  
 get.INF  
 ‘where can you get that?’

Child (1;10): *operātā* [aparātā]  
 apparatus.LOC.SG  
 ‘in the apparatus’

- (17) Child (2;1): *tā jāja un beigās tas*  
 it.NOM.SG.F ride.PST.3 and end.LOC.PL it.NOM.SG  
*nogāzās tā zemē*  
 fall\_down.PST.3 so down  
 ‘so it rode and in the end it fell down’
- (18) Child (2; 6): *ie-likšu latiņos[ratiņos]*  
 in-put.FUT.1SG pram.LOC.PL  
 ‘I will put in the dolls’ pram’
- (19) Child (2; 6): *ie-likšu tejā [tajā] somā visas*  
 put-in.FUT.SG.1 that.LOC.SG bag.LOC.SG all.ACC.PL  
*puzzles*  
 puzzle.ACC.PL  
 ‘I will put all puzzles in that bag’
- (20) Child (2; 6): *otlā [otrā] pusītē*  
 other.LOC.SG side.LOC.SG  
 ‘on the other side’

### 3.3. Prepositional phrases

As written by Rūķe-Draviņa (1993, 49) preposition learning could be observed in three stages:

1. The child does not use prepositions, nor correct inflectional endings. Only the word order and context allow to understand what the child wants to say.
2. The child does not use preposition, but the noun is used in relevant case (Rūķe-Draviņa 1993, 48). During the transition period, when the child begins to use the prepositions, fluctuations are observed. The child says the first sentence with a preposition and then repeats the same phrase without prepositions.
3. In the next stage of language development preposition are used with a noun in appropriate case.

In observation of Rūķe-Draviņa the usage of the preposition begins only at three years of age. Our data shows that already at age of two-year children use prepositions with correct case to express the meaning of place.

The first prepositions that appear in children’s speech are *uz* ‘to’, *pie* ‘at’, *no* ‘from’.

Usually prepositions have not been omitted. However, there are some rare examples when prepositional phrases have been used without preposition (21) or instead of prepositional phrase the locative has been used (22) in the children’s speech, for example:

- (21) Child (2;5): *plīst glīdas [uz grīdas]*  
 burst.PRS.3 floor.GEN.SG  
 ‘burst onto the floor’

- (22) Child (2;3): *brauc darbiņā* [uz darbiņu]  
drive.PRS.3 work.LOC.SG  
'drive to work'

Preposition *uz* 'to' are used to express movement towards (24, 25), prepositions *pie* 'at' (23, 26 and 27), *no* 'from' – static movement (28).

- (23) Child (2;6): *es pie tētīša iešu*  
I.NOM to dad.GEN.SG go.FUT.1SG  
'I will go to dad'

- (24) Child (2;3): *es neiešu uz dāzu* [dārzu]  
I.NOM not\_go.FUT.1SG to kindergarten.ACC.SG  
'I'm not going to kindergarten'

- (25) Child (2;3): *viņš lac [lec] uz glīda* [grīdas]  
he.NOM jump.PRS.3 on floor.GEN.SG  
'he jumps on the floor'

- (26) Child (2;1): *pie tā loga nosala*  
at that.GEN.SG window.GEN.SG frozen.PST.3  
*tā loka* [roka]  
that.NOM.SG hand.NOM.SG  
'this hand was frozen at that window'

- (27) Mother: *kur tas ir?*  
where it.NOM be.PRS.3  
'where is it?'

- Child (2;1): *pie kakla*  
at neck.GEN.SG  
'at the neck'

- (28) Child (2;3): *tālu no mājas* (atkārto mammas teikto)  
far from home.GEN.SG  
'far away from home (repeats what mother said)'

### 3.4. Prefixal verbs

Around the age of two the children begin to use prefixal verbs in different syntactic environment (29):

- (29) Child (3;2): *ai es no-lecu*  
oh I.NOM down-jump.PST.1SG  
'oh, I jumped down'

Prefixal verb frequently is used together with adverb (30–32) or with prepositional phrase (33) expressing the same movement meaning:

- (30) Child (3;6): *tavu krūzi ie-likšu iekšā*  
your.ACC.SG cup.ACC.SG in-put.FUT.1SG inside  
'I will put your tea cup inside'

- (31) Child (2;3): *Lauma*                    *no-vilks*                    *zeķes*                    *nost*  
 Lauma.NOM.SG    off-put.FUT.3SG    sock.ACC.PL    off  
 ‘Lauma will put off the socks’
- (32) Child (3;0): *pele*                    *jau*                    *iz-bēga*                    *no*  
 mouse.NOM.SG    already    off-get.PST.3    from  
*tovela* [tovera]    *āļā* [ārā]  
 tub.GEN.SG    outside  
 ‘the mouse already escaped from the tub’
- (33) Child (3;0): *no*                    *priksta* [pirksta]                    *no-līpa*  
 from    finger.GEN.SG                    off-take.PRS.3  
 ‘took off from the finger’

It would be interesting to investigate in what way the prefixal verbs are combined with adverbs, locative and prepositional constructions to express the local meaning.

## Conclusion

There are some forms that emerge first (around two years of age: 1;10–2;1) and that indicate either static location (locative, adverbs) or movement towards a location (preposition + nouns in accusative, dative or genitive).

Prepositional phrases are used quite accurately – with the correct ending and with the preposition. Just some rare examples show that prepositions might be omitted from the prepositional phrases.

Locative is mainly used to express the local meaning, but not meaning of time.

Around the age of two the children begin to use prefixal verbs in their speech, but the lack of examples does not allow us to draw general conclusions.

## Acknowledgements

The research project „Latvian language in monolingual and bilingual acquisition: tools, theories and applications” leading to these results has received funding from the Norwegian Financial Mechanism 2009–2014 under Project Contract No NFI/R/2014/053.

## Source

*Morfoloģiski marķēts longitudināls bērnu runas korpus* (Annotated longitudinal children’s speech corpus), available: lambda.korpus.lv

## Abbreviations

- 1            1st person  
 2            2nd person  
 3            3rd person

ACC	accusative
AUX	auxiliary
GEN	genitive
FUT	future
IMP	imperative
INF	infinitive
LOC	locative
NEG	negative
NOM	nominative
PRF	perfect
PL	plural
PRS	present
PST	past
PTCP	participle
SG	singular

## References

1. Auziņa, Ilze, Levāne-Petrova, Kristīne, Rābante-Buša, Guna, Dargis, Roberts, Fabregas, Antonio. 2016. Designing an annotated Longitudinal Latvian Children's Speech Corpus. *Proceedings of the Seventh International Conference Baltic HLT 2016. Frontiers in Artificial Intelligence and Applications*. 289. IOS Press, 46–50.
2. Crystal, David. 1997. *The Cambridge Encyclopedia of Language*. Cambridge: Cambridge University Press.
3. Haase, Martin. 2001. *Local deixis. Language Typology and Language Universals: An International Handbook*. Volume 1. Haspelmath, Martin (ed.). Berlin, New York: De Gruyter.
4. Lokmane, Ilze. 2013. Vienkārša teikuma formālā (strukturālā) organizācija. *Latviešu valodas gramatika*. Nītiņa, Daina, Grigorjevs, Juris (red.). Rīga: LU Latviešu valodas institūts, 710–766.
5. Lust, Barbara C. 2006. *Child Language: Acquisition and Growth*. Cambridge: Cambridge University Press.
6. Matthews, Peter H. 2007. *Concise Dictionary of Linguistics*. Oxford: Oxford University Press.
7. Peters, Ann M. 1977. Language learning strategies: does the whole equal the sum of the parts? *Language*. 53, 560–573.
8. Piaget, Jean. 1952. *Origins of intelligence in the child*. New York: International Universities Press, Inc.
9. Rūķe-Draviņa, Velta. 1982. *No pieciem mēnešiem līdz pieciem gadiem*. Stockholm: Baltiska institutet.
10. Rūķe-Draviņa, Velta. 1993. *Latviešu meitene apgūst savu pirmo valodu*. Rīga: Dio Nordik.
11. Tomasello, Michael. 2009. The usage-based theory of language acquisition. *The Cambridge Handbook of Child Language*. Bavin, Edith (ed.). Cambridge: Cambridge University Press, 69–98.

## Kopsavilkums

Rakstā analizēts, kā 18–42 mēnešus vecu bērnu runā tiek izteikta vietas nozīme. Pētījuma pamatā ir dati no LU MII veidotā *Morfoloģiski marķēta longitudināla bērnu runas korpusa*, kurā ievietoti ortogrāfiski transkribēti 17–42 mēnešus vecu bērnu runas ieraksti, kas tapuši 18 mēnešus ilgā laikā. Vispirms aprakstīts, kā kopumā šajā posmā attīstās bērnu runa – cik plašs ir vārdu krājums, kāda nozīme ir intonācijai, kādas gramatiskās kategorijas tiek lietotas vispirms u. tml. Tālāk analizēts, kādā vecumā parādās kādi vietas izteikšanas līdzekļi, kā tie tiek savstarpēji kombinēti, kādas ir atkāpes no normas, kādā sintaktiskajā apkaimē un cik patstāvīgi tie tiek lietoti. Sākot no diviem gadiem, tiek lietoti vispārīgas nozīmes adverbi (*te, tur*), vēlāk tiek izmantoti arī lietvārdi lokatīvā un prepozicionālas konstrukcijas. Kopumā līdzekļi vietas nozīmes izteikšanai tiek izvēlēti samērā precīzi, arī prepozicionālās konstrukcijās tiek izmantoti atbilstošie prievārdi un nomenu locījumi.