LITHUANIAN AND RUSSIAN CHILD-DIRECTED SPEECH: WHY DO WE ASK YOUNG CHILDREN SO MANY QUESTIONS?

Victoria V. Kazakovskaya, Ingrida Balčiūnienė

Abstract. The main objective of the study was to identify and compare the variety and distribution of interrogatives in Lithuanian and Russian child-directed speech (CDS) from the perspective of the functional and structural characteristics of questions addressed to young children.

The analysis was based on the longitudinal data of two monolingual typically developing children, a Lithuanian girl (2;0–2;8) and a Russian boy (2;0–2;8). The transcribed corpus of conversations between the children and their parents was annotated for multipurpose automatic linguistic analysis, using tools of the program CHILDES (Child Language Data Exchange System). During the investigation, the functional and structural features of parental interrogatives were analysed.

After the analysis of conversations between the children and their parents, the following can be stated: in both Lithuanian and Russian CDS, interrogatives are more numerous than imperatives, statements and exclamations. A number of parental interrogatives are used (similar to natural adult conversation) as requests for information, clarifications of incomprehensible utterances or demonstrations of disagreement. Despite this, the majority of them appear to be used for a very specific purpose (e.g., negative evidence) and in specific forms (e.g., repetitions, reformulations or corrections), which would be inappropriate and/or redundant in a natural adult conversation.

With the exception of a few differences, interrogatives in both Lithuanian and Russian CDS are generally used for the same purpose, and their forms and structures seem to be similar or even identical. This leads us to the conclusion that a correlation can be identified between parental conversational strategy and the type of language, i.e., adults speaking typologically, culturally and geographically close languages demonstrate the same or similar strategy of conversation with their children.*

Keywords: language acquisition, CDS, conversational strategy, Russian, Lithuanian

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1. Introduction

1.1. Aims of the study

Child-directed speech (CDS, also termed motherese, or baby-talk) is considered one of the most important factors for native language acquisition (Tomasello 2003, Clark 2009). Despite the cultural and individual features of CDS (for example, see Schieffelin 1979, Ochs 1982, Heath 1983, Ochs, Schieffelin 1984, Rye 1986, Fernald et al. 1989, Choi 1997, de León 1988), one can observe that children growing up in a rich linguistic environment acquire better skills in their native language (e.g., Girolametto et al. 2002); and, in contrast, inadequate or pure input can cause delayed or even impaired language acquisition (e.g., Sachs, Johnson 1976, Sachs et al. 1981, Daukšytė 2005). Consequently, insufficient skills of spoken language (pure vocabulary, limited grammar structures etc.) delay acquisition of reading and writing; this causes learning difficulties, and leads to lower academic attainment. Thus CDS, as a primary basis of child language acquisition, needs comprehensive investigation, especially in those countries where child language generally is still a relatively new topic of (psycho-) linguistic research. The majority of the previous investigations of CDS were based on English data (e.g., Snow, Ferguson 1977, Gallaway, Richards 1994). During the last few decades, several comprehensive cross-linguistic studies have been carried out (Slobin 1997, Tulviste 2002), and a variety of other languages have been investigated (e.g., Ūke-Draviņa 1977, Wojciek 1994, Ceitlin 2001, Kazakovskaya 2004; 2008, 2011; Kamandulytė 2005; Kjellrun 2005; Balčiūniienė 2009, Kazakovskaya, Balčiūniienė (forthcoming)). However, more comprehensive investigations are still needed in order to be able to make an assessment of the possible connection between language type and CDS style.

Previous studies have indicated many similarities in parental conversational strategy between typologically closer languages, i.e. between Austrian-German and French, and between Lithuanian and Russian. Despite the fact that parents generally tend to react rather to the content than to the form of a child’s previous utterance (see Kilani-Schoch et al. 2008, Kazakovskaya 2010, Kazakovskaya, Balčiūniienė (forthcoming)), one can observe a dominant didactic strategy in both Lithuanian and Russian CDS, and a high index of interrogative production. A number of parental interrogatives are used (similar to natural adult conversation) as requests for information, clarifications of incomprehensible utterances or demonstrations of disagreement, but the majority of the questions appear to be used for a very specific purposes (didactic, supporting language acquisition, e.g., negative evidence, see Hirsch-Pasek et al. 1984), Demetras et al. 1986), Bohannon, Stanowitcz 1988), Farrar 1992), Sokolov, Snow 1994), Saxton 1997, 2000), Saxton et al. 1998), Chouinard, Clark 2003), Saxton et al. 2005), Strapp et al. 2008), Markus 2003)) and in specific forms (e.g., repetitions, reformulations or corrections), which would be inappropriate or redundant in a natural adult conversation (Jefferson 1982, Clark, Wong 2002, Clark, Bernicot 2008). Studies in CDS have identified two maternal conversational styles, directive vs. conversation-eliciting, and confirmed that mothers with conversation-eliciting style ask a lot of questions to elicit children’s conversational participation and their children have

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1 The studies were carried out in the framework of cross-linguistic project “Pre- and Protomorphology in Language Acquisition”. The project is supervised by W. U. Dressler (Austrian Academy of Sciences).
better language abilities (Hoff-Ginsberg 1991, Tulviste, Mizera, De Geer, 2004). Taking these observations into account, this paper concentrates on the functions and structures of parental questions addressed to young children. The main aim of the study was to identify and compare the variety and distribution of functional and structural types of interrogatives in Russian and Lithuanian CDS. The study is still at the initial stage, thus it is mainly the descriptive analysis of the research issue which is presented here.

1.2. Data and methods

The study was based on longitudinal data on two monolingual, typically developing children: a Lithuanian-speaking girl, Monika\(^3\), and a Russian-speaking boy, Vanja\(^4\). Since maternal CDS is influenced by the context of the interaction (Sorsby, Martlew 1991, Tulviste 2003), subjects characterized by similar (or even identical) social and linguistic context were selected for the study. During the longitudinal observation period, both children were living in the second largest cities of their countries (Monika was living in Kaunas, Lithuania, and Vanja was living in St. Petersburg, Russia) and in upper-middle-class families. During this period, Monika and Vanja had no siblings and were not attending a kindergarten (the girl was being taken care of by her parents and the boy by his grandmother and parents). Monika’s parents use the northern Panevėžiškiai sub-dialect of the eastern Aukštaitish dialect when they speak with each other, but they speak in Standard Lithuanian with their daughter. Consequently, Monika acquired Standard Lithuanian, although she comprehends dialectal speech as well. Vanja, like his family, speaks Standard Russian. Both children were recorded twice or three times a week by a portable tape-recorder in a familiar environment (parents’ or grandparents’ homes, garden, etc.). Attempts were made to record as many different situations as possible: games, preparation of food, eating, communication with guests, bathing, getting ready for bed, etc. The recordings were done at different times of the day, which mostly depended on the child’s willingness to communicate. Most of the recordings are dialogues between the child and her/his mother or grandmother, and there are also quite a few dialogues with more than two participants (mainly child, mother, and father; or child, mother, and grandmother). The size of Monika’s corpus is 128,517 words which covers 27 hours of the child’s (1;8–2;8) conversations with her parents and relatives. The size of Vanja’s corpus is 191,949 words, which contains 63 hours of the child’s (1;5–4;0) conversations with his grandmother and parents. For the study, the period from 1;8 to 2;8 of both the corpora was selected (see Table 1).

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\(^2\) Longitudinal language sampling method was developed in the late 1950s by three independent groups of investigators: Martin Braine (Walter Reed Hospital), Susan Ervin and Wick Miller (University of California), and Roger Brown (Harvard University). The specific of the longitudinal language sampling is that the children are selected specifically because they meet predetermined criteria. Usually more than one child is observed in order to identify the most typically developing child for the particular study. At the beginning of observation, they usually are at the transition stage from single-word to multi-word speech. The children are recorded on a regular schedule, e.g., twice a week, 30 min. per session (Ingram 1989).

\(^3\) The corpus was collected by Monika’s mother I. Balčiūnienė (the co-author of the paper).

\(^4\) The corpus was collected under the supervision of N. V. Gagarina.
One can observe that, despite an identical biological age, the development of Monika and Vanja’s mean length of utterance (MLU), which is considered one of the most relevant criteria of grammar and general language acquisition, is significantly different. Monika develops consistently from 1.285 words per utterance at age 1;8 to 2.468 words per utterance at age 2;8; while Vanja’s MLU index does not exceed 1.1 words per utterance until age 2;2, but from 2;3 a rapid spurt is observed, and finally (at age 2;8) Vanja’s MLU index equals 2.603 words per utterance (see Figure 1).

### Table 1. The analysed corpus

<table>
<thead>
<tr>
<th>Age</th>
<th>Total number of adults’ and child’s utterances</th>
<th>Number of adults’ questions (% of all adults’ utterances)</th>
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</tr>
<tr>
<td>Total</td>
<td>47172</td>
<td>50355</td>
</tr>
</tbody>
</table>

**Figure 1.** Children’s MLU development
However, the development of the MLU index proves that during the observation period both of the children are at the transition stage, i.e., their language develops from a holophrastic (based on single-word utterances) speech to binomial syntactic structures. For the study, a random sample of 300 adult questions\(^5\) was selected from each month, and these questions were annotated for automatic linguistic analysis using the tools of the CHILDES (Child Language Data Exchange System) software (MacWhinney 2010).

2. Classification of interrogatives according to their function and structure

The classification of interrogatives according their pragmatic role, position, function, form and structure was based on the methodology of previous investigations (see Kilani-Schoch et al. 2008, Kazakovskaya 2008, 2010, 2011, Kazakovskaya, Balčiūnienė (forthcoming)), thus here we concentrate mainly on the functions and structure.

2.1. Functions of interrogatives

Questions can be used to convey the following intentions of a speaker:

- to get some unknown information, e.g., (1a–b):

  (1a) **CHILD:** *Aš ieškojau, ku [= kur] peilis.*
  ‘I [was] looking for a knife.’

  **ADULT:** *Nu kaip? Suradai?*
  ‘And? [Did you] find?’ (MON 2;7)

  (1b) **ADULT:** *A kakie ty xochesh’ konfetki?*
  ‘So what candies: DIM [do] you want?’ (VAN 2;3)

- to confirm some information, e.g., (2a–b):

  (2a) **ADULT:** *Salotų yra, Monika. Pomidorų ir kopūstų. Nori salotų?*
  ‘There is salad, Monika. Tomatoes and cabbage. [Do you] want salad?’ (MON 1;11)

  (2b) **ADULT:** *A jogurt dat’ ili smetanku?*
  ‘[Should]’ give you yoghurt or cream?’

  **CHILD:** *Net.*
  ‘No.’

  **ADULT:** *Ne nado ni togo, ni drugogo?*
  ‘[Don’t you] need any?’ (VAN 2;7)

These could also be termed *proper interrogative sentences.*

\(^5\) In Monika’s corpus, the majority of the selected questions were produced by her mother, and other questions were produced by her father, grandparents and aunts. In Vanja’s corpus, the majority of the selected questions were produced by his grandmother, and other questions were produced by his mother and father. However, no significant differences concerning structure and forms of interrogatives were observed between the mother’s and grandmother’s or between mother’s and father’s speech. Thus the analysed material could be generally described as a random sample of adult questions addressed to a child.
Another function of questions is:

- to initiate a conversation, e.g., (3a–b):

  (3a) Situation: Monika enters the room.
  ADULT: O, Monika, ką tu čia atsinešei?
  ‘Oh, Monika, what [did] you bring here?’ (MON 1;8)

  (3b) Situation: Vanja and his grandmother are listening to the record.
  ADULT: Kto tam govorit?
  ‘Who [is] speaking there?’ (VAN 2;0)

- to develop (support) a conversation, e.g., (4a–b):

  (4a) CHILD: Ladoni [= raudoni] meškiukai.
  ‘Red bears:diminutive.’
  ADULT: Raudoni. Gražūs meškiukai?
  ‘Red. Beautiful bears?’ (MON 2;3)

  (4b) CHILD: Ja típej [= teper] akulja [= akula].
  ‘I [am] a shark now.’
  ADULT: Akula? A chto delat akula?
  ‘A shark? And what [is] a shark doing?’ (VAN 2;8)

- or to repair a conversation, e.g., (5a–b):

  (5a) CHILD: Atidengiau.
  ‘[I] opened.’
  ADULT: Ką padarei?
  ‘What [did you] do?’
  CHILD: Atidengiau.
  ‘[I] opened.’
  ADULT: Atidengei?
  ‘[Did you] open?’
  CHILD: Atidengiau.
  ‘[I] opened.’ (MON 2;2)

  (5b) CHILD: Ja kos’ka.
  ‘I [am] a cat.’
  ADULT: Kto koshka? Ili v okoshko? Ty chto, pro chto govorish’?
  ‘Who [is] a cat? Or “to the window:diminutive”? What [are] you talking about?’ (VAN 2;6)

These could be also termed metainterrogative sentences. In some cases these intentions (seeking information vs. initiating/developing/repairing a conversation) may overlap, but usually one of them is obviously dominant.

Moreover, all the questions may be divided into two groups according to their pragmatic role: to focus on the content (6a–b) or on the linguistic form (7a–b) of interlocutors’ speech.

\[\text{Vanja speaks unclearly, thus the adult cannot identify the real lexeme.}\]

\[\text{One should mention here that initiating questions are related mainly to the content of conversation, while all other questions can focus either on the content or linguistic form of the interlocutor’s previous utterances.}\]
(6a) CHILD: *Gelyté.*
   ‘A flower:*DIMINUTIVE.*’
ADULT: *Kur gelyté?*
   ‘Where [is] a flower:*DIMINUTIVE.?*’ (MON 2;3)

(6b) ADULT: *Spasibo, mozhno ja ego budu katat?*
   ‘Thank you, may I drive it?’
CHILD: *Da.*
   ‘Yes.’
ADULT: *A ty chto budesh’ katat?*
   ‘And what [will] you drive?’ (VAN 1;10)

(7a) CHILD: *Něla [= něra] pakutuko [= plaktuko].*
   ‘Hammer [is] missing.’
ADULT: *Ko něra?*
   ‘What [is] missing?’
CHILD: *Užkalti.*
   ‘To hammer.’
ADULT: *Ai. Pirma sakei, něra plaktuko?*
   ‘Ah. [You] said before, hammer [is] missing?’ (MON 2;6)

(7b) ADULT: *Chto ty sobiraesh?*
   ‘What [are] you collecting?’
CHILD: *Smeshnoe.*
   ‘Funny.’
ADULT: *Veseloe?*
   ‘Merry?’ (VAN 2;7)

2.2. Structure of reaction interrogatives

All reaction interrogatives can be classified into several structural types, such as *repetitions, focuses, reformulations, expansions, indirect corrections, clarifications, topic continuations,* and *topic shifts.* These structural types will be discussed below.

*Repetitions* can be described as echo-repetitions of the whole preceding phrase of the interlocutor, e.g., (8a–b):

(8a) ADULT: *Kq piešim?*
   ‘What [will we] draw?’
CHILD: *Bliūdq.*
   ‘A bowl.’
ADULT: *Bliūdq?*
   ‘A bowl?’ (MON 2;2)

(8b) CHILD: *Xodit akulja [= akula].*
   ‘A shark [is] walking.’
ADULT: *Xodit akula?*
   ‘A shark [is] walking.’ (VAN 2;8)
Focuses are partial repetitions of the previous phrase, e.g., (9a–b):

(9a) CHILD: *Ką dabal [= dabar] šnekės?* ‘What [will she] say now?’
ADULT: *Dabar?* ‘Now?’ (MON 2;8)

(9b) CHILD: *Eto budet puska [= pushka].* ‘Here [will] be a gun.’
ADULT: *Pushka?* ‘A gun?’ (VAN 2;8)

Reformulations are adult rephrasing of what they think the child intended to say, e.g., (10a–b):

(10a) CHILD: *Čia katinukas.* ‘Here [is] a cat:*DIMINUTIVE.’
ADULT: *Katinukas čia?* ‘A cat [is] here?’ (MON 2;2)

(10b) CHILD: *Igus'ki [= igrushki] se [= vse].* ‘All toys.’
ADULT: *Vo vse igrushki?* ‘With all toys?’ (VAN 2;7)

Expansions occur when the child’s phrase is lexically and grammatically supplemented by an adult, e.g., (11a–b):

(11a) CHILD: *Skylutė.* ‘A hole:*DIMINUTIVE.’
ADULT: *Skylutę radai?* ‘[Did you] find a hole:*DIMINUTIVE?’ (MON 2;0)

(11b) ADULT: *Ja chaj budu pit', s molokom. Vanja, a ty s chem chaj p'esh’?* ‘I [will] drink tea with milk. Vanja, what [will] you drink a tea with?’
CHILD: *Maokom [= s molokom].* ‘With milk.’
ADULT: *S molokom tozhe?* ‘Also with milk?’ (VAN 2;4)

Indirect corrections are an adult’s indications that the form (12a) or content (12b) of the child’s previous phrase was erroneous, e.g., (12a–b):

(12a) CHILD: *Pat’ [= spat’].* ‘To sleep.’
ADULT: *Ne spat’. Spit. Spit koza. Spit?* ‘Not to sleep. Sleeps. The goat sleeps. Sleeps?’ (VAN 2;2)
(12b) ADULT: *Chto by mne poest', kak ty dumaesh'?
‘What could I eat, what [do] you think?’
CHILD: *Tijku [= chajku].
‘A tea: diminutive.’
ADULT: *Chajku? Razve babushka chaek ljubit?
CHILD: *Kofe.
‘Coffee.’
ADULT: *Kofe, pravilno’.
‘Coffee, right.’ (VAN 2;4)

**Clarifications** are requests to repeat/clarify the previous phrase, e.g., (13a–b):

(13a) CHILD: *Vafiukqa [= vafliuqa] suvalgiau.
‘[I] ate a waffle: diminutive.’
ADULT: *Kq suvalget?
‘What [did] you eat?’
‘[I] ate a waffle: diminutive.’
ADULT: *Ai, vafliuq.
‘Ah, a waffle: diminutive.’ (MON 2;8)

(13b) ADULT: *Kto ego chinit’ teper’ budet?
‘Who [will] repair it?’
CHILD: *Usjat’ka.
Incomprehensible word.
ADULT: *Kto?
‘Who?’ (VAN 2;5)

**Topic continuations** occur when an adult does not respond explicitly to the child’s phrase but continues a natural flow of conversation, e.g., (14a–b):

(14a) CHILD: *Noju [= noriu] tintuko [= trintuko].
‘[I] want a rubber.’
ADULT: *Tai kq dabar daryti?
‘So what [should I] do now?’ (MON 2;2)

(14b) ADULT: *Vanja, a u vas v sadike mnogo mashinok?
‘Vanja, [are there] a lot of toy cars in your kindergarten?’
CHILD: *Da.
‘Yes.’
ADULT: *A bol’shie mashinki, ili raznye?
‘And [are] the toy cars big or different size?’ (VAN 2;5)

**Topic shifts** occur when an adult does not respond explicitly to the child’s phrase but changes the topic, e.g., (15a–b):

(15a) CHILD: *Mamyté dainuos.
‘Mummy [will] sing.’
ADULT: *Gal ir dainuos. Arbatyté nori?
‘Maybe [she will] sing. [Would you] like a tea?’ (MON 2;6)
(15b) CHILD: *Baba [= babushka] katat’ gorki [= s gorki].
‘Granny to slide down the hill.’
‘Granny [will] slide down the hill? Well. Vanja, [do] you want to eat?’ (VAN 2;3)

As mentioned above, the target corpus was annotated for automatic statistical analysis, and the production of different functional and structural types of interrogatives was analysed.

3. Research findings

3.1. General productivity of interrogatives in Lithuanian and Russian CDS

The analysis indicated that interrogatives seem to be the most productive communicative type of utterances in both Russian and Lithuanian “motherese”. They comprise approximately 71.8% of all utterances in Lithuanian and 51.8% in Russian CDS. One can observe (see Figure 2) the tendencies of distribution of parental interrogatives during the ages studied.

![Figure 2. Distribution of interrogatives in Russian and Lithuanian CDS (% of all parental utterances)](image)

Despite the fact that the general number of interrogatives is smaller in Russian CDS than in Lithuanian (it has to be pointed out here that the great number of interrogatives in Lithuanian CDS were indicated in previous investigations as well, see, for example, Kamandulytė 2007, 2008, and also Kazakovskaya 2004, 2011), the development of interrogative production seems to be similar in both corpora. In both cases a considerable increase in the production of interrogatives was registered from the period of 1;8 to 2;1–2;2, after which it decreases (from 2;2...
to 2;5–2;6); however, from 2;6 a slight increase was registered in Lithuanian CDS, while a significant decrease was registered in Russian CDS.

Moreover, parental communicative strategy tends to develop similarly, according to the children’s age (see Figure 3).

3.2. Functions of interrogatives in Lithuanian and Russian CDS

As mentioned above, questions were divided into two functional types: a) requests for information (see examples 1a–b, 2a–b), and b) development/amendment, correction, repairing conversation (see examples 3a–b, 4–b, 5a–b). Our analysis indicates that questions which are used in order to develop/repair a conversation are the dominant functional type of interrogatives in both Russian and Lithuanian CDS: they make up 73%–94% of all questions in Lithuanian CDS and 84%–98% in Russian CDS (see Table 2).

These findings prove that parents put in great effort in helping children maintain a conversation: they ask many specific initiative questions (also termed pre-sequences, see Levinson 1983) in order to attract child’s attention and to stimulate his interaction; they help to extend a topic of conversation and to add more details to the child’s utterances. Finally, parents improve and reformulate child’s speech, i.e. their questions perform pure didactic functions. These findings correspond to the general tendencies of CDS in many Western cultures (see Ervin Tripp, Strage 1985).

The findings of our analysis correspond to the results of previous studies (see Kilani-Schoch et al. 2008, Balčiūnienė 2009, Kazakovskaya 2010, Kazakovskaya, Balčiūnienė 2011, (forthcoming)) in that the conversational questions are more numerous than the metadiscursive ones (see Table 3).
Table 2. Distribution of different functional types of reaction interrogatives in Lithuanian and Russian CDS

<table>
<thead>
<tr>
<th>Age</th>
<th>Corpus of Lithuanian CDS</th>
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<th>Corpus of Russian CDS</th>
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<tr>
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<td>Developing a conversation %</td>
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<td>92%</td>
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Table 3. Distribution of different pragmatic types of reaction interrogatives in Lithuanian and Russian CDS

<table>
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<th>Age</th>
<th>Corpus of Lithuanian CDS</th>
<th></th>
<th>Corpus of Russian CDS</th>
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<tbody>
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<td>CONV-interrogatives %</td>
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<td>95</td>
</tr>
<tr>
<td>1;9</td>
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<td>88</td>
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<td>98</td>
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<tr>
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<td>15</td>
<td>85</td>
<td>2</td>
<td>98</td>
</tr>
<tr>
<td>1;11</td>
<td>5</td>
<td>95</td>
<td>1</td>
<td>99</td>
</tr>
<tr>
<td>2;0</td>
<td>12</td>
<td>88</td>
<td>4</td>
<td>96</td>
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<tr>
<td>2;1</td>
<td>11</td>
<td>89</td>
<td>8</td>
<td>92</td>
</tr>
<tr>
<td>2;2</td>
<td>10</td>
<td>90</td>
<td>6</td>
<td>94</td>
</tr>
<tr>
<td>2;3</td>
<td>10</td>
<td>90</td>
<td>6</td>
<td>94</td>
</tr>
<tr>
<td>2;4</td>
<td>13</td>
<td>87</td>
<td>14</td>
<td>86</td>
</tr>
<tr>
<td>2;5</td>
<td>8</td>
<td>92</td>
<td>6</td>
<td>94</td>
</tr>
<tr>
<td>2;6</td>
<td>11</td>
<td>89</td>
<td>7</td>
<td>93</td>
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<td>87</td>
</tr>
<tr>
<td>2;8</td>
<td>12</td>
<td>88</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Average</td>
<td>11%</td>
<td>89%</td>
<td>7%</td>
<td>93%</td>
</tr>
</tbody>
</table>
Conversational interrogatives comprise 85%–95% of all questions in Lithuanian CDS and 80%–99% in Russian CDS. These results confirm that parents prefer to react to the content of conversation or to help a child with a topic maintainence, rather than focus on the linguistic form of the child’s phrases.

### 3.3. Structure of explicit reaction interrogatives in Lithuanian and Russian CDS

As mentioned above, interrogative reactions can be either explicit (*repetitions* (see examples 8a–b), *focuses* (see examples 9a–b), *reformulations* (see examples 10a–b), *expansions* (see examples 11a–b), *indirect corrections* (see examples 12a–b), and *clarifications* (see examples 13a–b)) or implicit (*topic continuations* (see examples 14a–b), and *topic shifts* (see examples 15a–b)). For the study, only explicit reactions were analysed, since they indicate the main differences between adult conversation and child-directed speech.

Having analysed the *structural* types of explicit reaction interrogatives, we can state that, generally, the distribution of different types in both Russian and Lithuanian CDS is similar (see Table 4a–b).

Expansions and clarifications are the most frequent type of explicit reaction interrogatives in both Russian and Lithuanian CDS, whereas other types are less numerous or were not observed at all in the target corpora.

**Table 4a. Distribution of different structural types of explicit reaction interrogatives in Lithuanian CDS**

<table>
<thead>
<tr>
<th>Age</th>
<th>Repetitions %</th>
<th>Focuses %</th>
<th>Reformulations %</th>
<th>Expansions %</th>
<th>Corrections %</th>
<th>Clarifications %</th>
</tr>
</thead>
<tbody>
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<td>1;8</td>
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<td>7</td>
<td>51</td>
<td>12</td>
<td>13</td>
</tr>
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<td>1;9</td>
<td>12</td>
<td>0</td>
<td>4</td>
<td>23</td>
<td>6</td>
<td>55</td>
</tr>
<tr>
<td>1;10</td>
<td>16</td>
<td>2</td>
<td>4</td>
<td>28</td>
<td>2</td>
<td>48</td>
</tr>
<tr>
<td>1;11</td>
<td>19</td>
<td>7</td>
<td>11</td>
<td>38</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>2;0</td>
<td>16</td>
<td>4</td>
<td>13</td>
<td>29</td>
<td>1</td>
<td>37</td>
</tr>
<tr>
<td>2;1</td>
<td>14</td>
<td>7</td>
<td>9</td>
<td>17</td>
<td>4</td>
<td>49</td>
</tr>
<tr>
<td>2;2</td>
<td>15</td>
<td>10</td>
<td>13</td>
<td>19</td>
<td>4</td>
<td>39</td>
</tr>
<tr>
<td>2;3</td>
<td>15</td>
<td>6</td>
<td>12</td>
<td>22</td>
<td>1</td>
<td>44</td>
</tr>
<tr>
<td>2;4</td>
<td>11</td>
<td>4</td>
<td>10</td>
<td>26</td>
<td>6</td>
<td>43</td>
</tr>
<tr>
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<td>26</td>
<td>3</td>
<td>8</td>
<td>19</td>
<td>5</td>
<td>39</td>
</tr>
<tr>
<td>2;6</td>
<td>9</td>
<td>10</td>
<td>12</td>
<td>19</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>2;7</td>
<td>15</td>
<td>13</td>
<td>23</td>
<td>13</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>2;8</td>
<td>8</td>
<td>6</td>
<td>11</td>
<td>15</td>
<td>5</td>
<td>55</td>
</tr>
<tr>
<td>Average</td>
<td>15%</td>
<td>6%</td>
<td>11%</td>
<td>25%</td>
<td>4%</td>
<td>41%</td>
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</tbody>
</table>
Table 4b. Distribution of different structural types of explicit reaction interrogatives in Russian CDS

<table>
<thead>
<tr>
<th>Age</th>
<th>Repetitions %</th>
<th>Focuses %</th>
<th>Reformulations %</th>
<th>Expansions %</th>
<th>Corrections %</th>
<th>Clarifications %</th>
</tr>
</thead>
<tbody>
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<td>1;8</td>
<td>5</td>
<td>0</td>
<td>37</td>
<td>28</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>1;9</td>
<td>11</td>
<td>0</td>
<td>34</td>
<td>45</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>1;10</td>
<td>6</td>
<td>0</td>
<td>44</td>
<td>38</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>1;11</td>
<td>12</td>
<td>0</td>
<td>31</td>
<td>47</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>2;0</td>
<td>14</td>
<td>2</td>
<td>8</td>
<td>48</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>2;1</td>
<td>21</td>
<td>0</td>
<td>11</td>
<td>41</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>2;2</td>
<td>20</td>
<td>2</td>
<td>14</td>
<td>37</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>2;3</td>
<td>19</td>
<td>2</td>
<td>15</td>
<td>42</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>2;4</td>
<td>20</td>
<td>16</td>
<td>11</td>
<td>21</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>2;5</td>
<td>17</td>
<td>11</td>
<td>15</td>
<td>37</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>2;6</td>
<td>27</td>
<td>13</td>
<td>14</td>
<td>24</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>2;7</td>
<td>17</td>
<td>24</td>
<td>15</td>
<td>23</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>2;8</td>
<td>16</td>
<td>25</td>
<td>19</td>
<td>14</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>Average</td>
<td>16%</td>
<td>7%</td>
<td>21%</td>
<td>34%</td>
<td>7%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Expansions make up 25% of all explicit reaction interrogatives in Lithuanian CDS and 34% in Russian CDS. During the holophrastic speech period, expansions usually occur as a rephrasing of the child’s single-word utterance into semantically equal syntactic construction and stimulate the child to maintain a topic of conversation, e.g., (16a–b):

(16a) CHILD: Skylutė.  
‘A hole:COMPETENT’

ADULT: Kur tu ten radai skylutę?  
‘Where [did] you find a hole:COMPETENT?’

CHILD: Matatonas [= magnetofonas].  
‘A player.’

ADULT: Magnetofonas skylutę turi?  
‘A player has a hole?’ (MON 1;11)

(16b) CHILD: Mama.  
‘Mommy.’

ADULT: Mama kupila Vane eshche igrushku, da?  
‘Mommy bought one more toy to Vanja, right?’ (VAN 1;10)

The majority of pure metalinguistic expansions contain a repeated child's utterance with inserted (17a) modal or (17b) auxiliary verb, or a preposition (18a–b):

(17a) CHILD: Pasitikti.  
‘To meet.’

ADULT: Pasitikti reikia?  
‘[Do you] need to meet?’ (MON 2;0)
(17b) CHILD: *Kakii [= kake] isjo [= eshche]?
   ‘What else?’
ADULT: *Kakie eshche est’?
   ‘What else are?’ (VAN 2;7)

(18a) ADULT: Saulutë šviečia.
   ‘The sun:DIMINUTIVE is shining.’
CHILD: Akytë.
   ‘Eye:DIMINUTIVE.’
ADULT: Į akytę šviečia?
   ‘Is to the eye:DIMINUTIVE shining?’ (MON 2;0)

(18b) ADULT: Sobachka kuda poedet?
   ‘Where [will] the dog:DIMINUTIVE go?’
CHILD: Pak [= park].
   ‘Park.’
ADULT: V park?
   ‘To the park?’ (VAN 2;3)

Reformulations make up 11% of all explicit reaction interrogatives in Lithuanian CDS and 21% in Russian CDS. The first group of morphological reformulations is the correction of premorpheme a8, e.g., (19a–b):

   ‘We arrived a:PREMORPHHEME Biržai.’
ADULT: Į Biržus atvažiavome?
   ‘Did we arrive in Biržai?’ (MON 2;0)

(19b) ADULT: Stishki kakie budem chitat’?
   ‘Which poem [will we] read?’
CHILD: A [= pro] bezinju [= mashinu], a [= pro] basuju
   [= bol’shuju].
   ‘PREMORPHHEME car, a:PREMORPHHEME big.’
ADULT: Pro bol’shiju mashinu?
   ‘About the big car?’ (VAN 2;4)

During the earliest period, at a younger age, in Lithuanian CDS one can observe that a great number of child utterances are reformulated by parents from the child’s native dialect into Standard Lithuanian, e.g., (20):

(20) CHILD: *Nieka9.
   ‘Nothing.’
ADULT: *Nieko?
   ‘Nothing?’ (MON 1;8)

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8 The premorpheme a or “filler” is a prosodically appropriate but semantically empty element used in the early period of speech. In the child language these gradually develop into free or bound morphemes (Pepinsky et al. 2001, Savickienė 2002), and are absent from typically developed adult speech. Premorphemes are more conventional and universal than individual or language-specific elements; usually they are produced instead of particular lexical and/or grammatical items and take the position of an unstressed syllable. Following previous studies (Savickienė 2002, Balčiūnienė 2009), Lithuanian children use premorphemes instead of prefixes (adaryt [= uždaryti] ‘to close’), prepositions (a lova [= po lova] ‘under a bed’) and inflections (peija [= peliš] ‘knife’).

9 Dialectal phonological variation.
Naturally, there were no similar examples in the Russian CDS, since Vanja acquired Standard Russian as his first language.

**Clarifications** represent approximately 41% of all explicit reaction interrogatives in Lithuanian CDS and 15% in Russian CDS. Clarifications usually occur as reactions to an incorrect, inappropriate or incomprehensible child utterance, e.g., (21a–b):

(21a) CHILD: *Sėdi piniginė.*

“A wallet [is] sitting.”

ADULT: *Ką sakai?*

“What [are you] saying?” (2;0)

(21b) CHILD: *Tipej [= teper’] kupi kasju [= krasnuju].*

“Now buy the red [one].”

ADULT: *Chto krasnuju?*

“What red?” (VAN 2;8)

**Repetitions** make up 15% of explicit reaction interrogatives in Lithuanian CDS and 16% in Russian CDS.

**Focuses** make up 5.6% of all explicit reaction interrogatives in Lithuanian CDS and 10% in Russian CDS. Focuses occur at the later stage of language development, when the children are able already to produce more complex structures, and the parents can focus on the word or words they find to be the most important. Parents presumably repeat the most informative words (nouns and verbs) of the child’s utterance, e.g., (22a–b):

(22a) CHILD: *Dar šitų dažų leikia [= reikia].*

‘[I] still need this colour.’

ADULT: *Šitų dažų?*

‘This colour?’ (MON 2;8)

(22b) CHILD: *Fati [= smotri], on vez [= vlez].*

‘Look, it fitted.’

ADULT: *Vlez?*

‘[Did it] fit?’ (VAN 2;8)

However, this prediction should be verified by additional semantic analysis.

**Indirect corrections** are 4% of all explicit reaction interrogatives in Lithuanian CDS and 7% in Russian CDS; this leads to the conclusion that didactic function is more obvious in the Russian CDS.

The results of the corpus analysis show that, basically, the distribution of structural types of explicit reaction interrogatives is similar in both Russian and Lithuanian CDS. The difference lies in a different production of clarifications – these interrogatives are much more frequent in the Lithuanian corpus. These findings could be explained by individual, cultural or language-specific differences in communicative strategy in Lithuanian and Russian CDS. Despite the fact that didactic function is one of the most dominant of functions in both Lithuanian and Russian CDS, it is expressed more explicitly in Russian CDS than in Lithuanian.

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10 Since only one subject from each language community participated in the study, the results still do not indicate to what extent the differences observed between Russian and Lithuanian CDS reflect individual differences between two individuals and to what extent these are language-specific, cultural, age or gender differences.
One can observe many corrections of the child’s utterances and requests to repeat a particular word/phrase correctly, while Lithuanian speaking parents ask more clarification questions and stimulate the child to explain what she intended to say. This fact may be explained by age difference between the main target subjects; however, cultural, language-specific and contextual factors should be investigated additionally in order to generalize this statement.

4. Summary and discussion

The statistical analysis indicated that interrogatives seem to be the most productive communicative type of parental utterances in both Lithuanian and Russian CDS. They comprise approximately 71.8% of all utterances in Lithuanian and 51.8% in Russian CDS. Despite the different general number of interrogatives, their development seems to be similar in both target corpora. A considerable increase and decrease in the production of interrogatives was registered during the same periods; moreover, the type/token ratio of parental interrogatives increased consistently as the children grew older.

A number of the interrogatives function (similarly to natural adult conversation) as requests for information, clarifications of incomprehensible utterances or demonstrations of disagreement. Despite this, the majority of them appear to be used for a very specific purposes (didactic, supporting language acquisition, e.g., negative evidence) and in specific forms (e.g., repetitions, reformulations or corrections), which would be inappropriate or redundant in a natural adult conversation. In both Russian and Lithuanian CDS, expansions were the most produced structural type of explicit reaction interrogatives (they comprise 34% of all explicit reaction interrogatives in Russian and 25% in Lithuanian CDS), while other types were less numerous, and their production was different. However, the majority of parental interrogatives (approximately 89% in Lithuanian and 93% in Russian) were related to the content of conversation (i.e., conversational questions), while reactions to the linguistic form of the child’s previous phrase (i.e., metadiscursive questions) were rare.

The study indicated that the caregivers, representing speakers of typologically, culturally and geographically close languages, demonstrated similar communicative behaviour despite some individual differences (the Lithuanian speaking mother seems to use conversation-eliciting style, whereas the Russian speaking mother prefers more directive style; however, this prediction should be verified by more comprehensive studies). This leads to the general idea that a correlation can be identified between parental conversational strategy and the type of language. However, larger corpora should be analysed in order to confirm the hypothesis, thus the research material will be supplemented by longitudinal data of other Lithuanian and Russian children for further investigations. The cultural aspect should not be excluded either and, consequently, other languages (e.g., Estonian which is close culturally and geographically, but far apart typologically, and Austrian-German which is, in contrast, closer typologically, but far apart culturally and geographically) are planned to be included as the additional subject of further studies.
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Käesoleva uurimuse põhieesmärgiks oli kindlaks määrata ning võrrelda interrogatiivsete struktuuride erinevusi ning esinemist leedu- ning venekeelses lapsele suunatud kõnes. Rõhuasetus oli väikelastele esitatud küsimuste funktsionaalsetel ning struktuurilistel omadustel.

Analüüsi aluseks olid pikiuuringuga saadud andmed kahe normaalse keelelise arenguga ükskeelse lapse kohta, üks neist leedu tüdruk (2;0–2;8), teine vene poiss (2;0–2;8). Laste ja nende vanemate dialoogide litereeritud korpus annoteeriti mitmeotstarbelise automaatse lingvistilise analüüsi tarvis, kasutades programmi CHILDES vahendeid. Uurimuse käigus käigus analüüsiti lapsevanemate küsilauksete funktsionaalseid ning struktuurilisi tunnusjuhte.

Laste ja nende vanemate omavaheliste dialoogide analüüsimise põhjal saame teha järgnevat pärlendust: nii leedu- kui ka venekeelses lapsele suunatud kõnes on interrogatiivrohkem kui imperatiiv, väiteid või hüüatusi. Täiskasvanute omavahelise vestlustega sarnaselt kasutatakse interrogatiivset informatsiooni küsimiseks, arusaamatu ütluste selgitamiseks ning mittenõustumise näitamiseks. Vaatamata sellele esineb enamik neist interrogatiivdest väga spetsiifilisel otstarbel (nt negatiivse kinnitus või tagasiside) ning spetsiifilistes vormides (nt kordused, ümberesõnastused, paradused), mis oleksid ebasobivad ja/või ülearused tavapärases täiskasvanutevahelises vestluses.

Võtmesõnad: keeleomandamine, lapsele suunatud kõne, vestlusstrateegia, vene keel, leedu keel