

Optional Omissions in an Optionally Null Subject Language

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1. Introduction and Background

1.1 Focus of the study

In this paper we report the results of a study investigating the phenomenon of subject and direct object omissions in child Russian. While omissions have been extensively studied in a number of other languages, they all focused on either non-pro-drop languages (e.g. English (Haegeman 1990; Valian 1991; Hyams and Wexler 1993; Rizzi 1994; Hyams 1996; Matushansky and Wexler 2002, to mention a few), German and Dutch (de Haan and Tuijnman 1989; Weverink 1989; Kraemer 1993; Hamann 1995, etc.)) or obligatory pro-drop languages such as Italian (Valian 1991, among others). Russian in this sense presents a particular interest because the adult system allows for apparent optionality. For example, unlike Italian, Spanish, etc., the overt subject in (1) does not mean any additional emphasis or stress, and its use does not cause any change in meaning compared to its covert counterpart:

- (1) A: Chto ty delaesh s etim rasteniem?
what you do-1sg with this plant
“What are you doing with this plant?”
B: *e* polivaju *e*. / Ja polivaju ego.
water-1sg I water-1sg him
“(I) am watering (it).” / “I am watering it.”

As the example in (1) shows, the use of phonologically empty elements in Russian is clearly dependent on the contextual circumstances with no apparent restrictions from the morphosyntax. In particular, Russian has a rich morphological paradigm with full subject-verb agreement in all tenses (except past where no person agreement is present), but no verb-object agreement. Nevertheless, object omission is possible, too, provided certain contextual requirements are satisfied, as e.g. in (1).

The child acquiring such a system faces an intriguing task of figuring out if and when omissions are allowed. Indeed, from the positive evidence, the child receives information that null subjects and objects are allowed, and at the same time that overt subjects and objects are used too. This presents a challenge for a developing system. One might expect then that Russian-speaking children will initially use only one of the available options, or, alternatively, that acquisition of such a non-evident system will cause additional delay in language development.

On the basis of longitudinal data from six monolingual Russian children we show, however, that Russian-speaking children exhibit, rather early, a remarkable knowledge of the intricate system of distribution of overt and covert subjects and objects. As discussed below, it appears that the optionality of overt elements in Russian does not cause any confusion or significant delay (compared to children acquiring “clearly” non-pro-drop languages). Our findings (that are consistent with

other recent results, e.g. De Cat 2002) raise a possibility that the innate system of linguistic knowledge may include more than a specification of possible morpho-syntactic parameters. In other words, the part of language architecture that Avrutin (in press) describes as “linguistic discourse” (or “information structure”) seems to be available to children at a very early age, as it is precisely this system that may be responsible for encoding constraints on the distribution of null elements in Russian.

1.2 Adult Russian as a non-pro-drop language

Unlike pro-drop languages such as Italian and Spanish, Russian allows subject drop from finite clauses only in certain pragmatically motivated contexts, such as answers to WH-questions, which may omit the subject if the referent of that subject is mentioned in the question, as has been illustrated in (1).

Concerning the status of Russian with regard to the Pro-Drop Parameter, a substantial body of research unanimously points to the fact that Russian is a non-pro-drop language in that, similarly to other canonically non-pro-drop languages, it normally disallows its non-emphatic referential subjects to be null (Franks 1995; Lindseth and Franks 1996; Avrutin and Rohrbacher 1997). Compare, for example, the Russian and English sentences in (2a and b) with their Italian equivalent in (2c):

- (2) a. Vchera *(ja) xodil v shkolu.
 yesterday I went-masc to school
 “Yesterday I went to school.”
 b. Yesterday *(I) went to school.
 c. Ieri (io) sono andato a scuola
 yesterday (I) am gone to school
 “Yesterday (I) went to school.”

The examples in (2) show that Italian, which is a pro-drop language, allows subject drop in non-emphatic non-pragmatically motivated contexts, while Russian and English, which are non-pro-drop languages, do not allow subject drop in such contexts. In Russian, subjects are omissible only under certain pragmatic conditions.

Similarly to subjects, direct objects can also be omitted only in pragmatically motivated contexts, such as answers to WH-questions as in (1), with the referent of the omitted object mentioned in the question. Like in the case of subjects, Russian disallows object drop in non-emphatic non-pragmatically motivated contexts. Thus, speaker B’s utterance in (1) would be unacceptable if uttered without the preceding speaker A’s question.

Further evidence for the postulation that Russian is a non-pro-drop language in the canonical sense is presented by the fact that in this language, differently from pro-drop languages, verbal agreement does not license null subjects (and, obviously, objects), which makes it different from languages like Hebrew:

- (3) a. **e* polil rastenie. vs. b. *e* heshketi cemah.
 watered-masc plant watered-1sg plant
 “(I) watered a plant.” “(I)watered a plant.”

- c. **e* polivayu rastenie. vs. d. **e* mashke cemah.
 water-1sg plant water-masc plant
 “(I)’m watering a plant.” “(I)’m watering a plant.”

The contrasting examples in (3a-d) uncover the following picture. While in Russian the form of verbal agreement does not influence the licensing of null subjects (3a,c), in Hebrew subject drop is licensed exactly in those tenses where person agreement is present on the verb (3b), but is not licensed when there is no person agreement (3d).

Despite the fact that Russian is a non-pro-drop language in parametric terms, it nevertheless allows the omission of many referential subjects and direct objects in main finite clauses, provided certain contextual requirements are satisfied, as outlined in Gordishevsky and Schaeffer (2002). Regarding this phenomenon, Franks (1995) observes that in Russian “items recoverable from the context are frequently omitted on the surface” (1995:307). It has been argued by Gordishevsky and Schaeffer (2002) that empty arguments in Russian must be contextually bound, that is subjects and direct objects in this language can be empty if their referents are recoverable from the linguistic and sometimes situational context, i.e. represent old information or are in the center of discourse/of interlocutor’s attention (using the terminology of the centering framework, as outlined in Grosz et al. (1986, 1995)). Specifically, Russian allows empty elements if a *linguistic* or a *situational* antecedent is present. For a more detailed discussion of the contextual circumstances that allow such recoverability the reader is referred to Gordishevsky and Schaeffer (2002) and Gordishevsky and Avrutin (2003). Briefly, the antecedent of the empty element can be in the center of discourse and thus of the interlocutor’s attention (linguistic antecedent). Situational contexts are more limited by different contextual circumstances than contexts with a linguistic antecedent present. In addition to strong non-linguistic cues provided by the speaker in the form of gesturing (e.g. pointing), the time of the event whose subject or direct object can be omitted should be close to the time of speech. This means that in order for the subject or the object to be eligible omitted in Russian, the sentence from which the argument(s) are omitted should refer to either an *ongoing event*, to *a state*, or to events that occurred *in the immediate past*, or are intended to happen in the near future, i.e. *intentional*.

1.3 Objectives

The patterns of subject and direct object omission and preservation in adult Russian described above require the knowledge of subtle discourse constraints, in particular of what is old versus new information and what places an entity in the center of discourse. Moreover, they demand from the speaker taking into consideration the interlocutor’s (i.e. listener’s) knowledge and assumptions about what is the topic of discourse and thus about what represents old information. The child acquiring such a system faces an intriguing task of figuring out if and when omissions are allowed. The question, naturally, arises, to what extent young children possess the knowledge of subtle discourse constraints operating on the distribution (i.e. omission and preservation) of subjects and direct objects in adult Russian. In this paper we investigate this question. In addition, we will attempt to investigate the question of whether young Russian speaking children possess the knowledge of

constraints posed by the syntactic system, such as the correlation between finiteness of verbs and overtiness of subjects (as discussed in e.g. Wexler 1994; Sano and Hyams 1994; Bromberg and Wexler 1995; Hoekstra and Hyams 1995, among others) on the one hand, but not of objects on the other.

2. Methods

2.1 Subjects and analyzed data

We investigated the spontaneous speech of six Russian-speaking children, four girls and two boys, between the ages of 1;8-2;6. All the children are monolingual Russian speakers whose speech was recorded in 30-45-minute sessions with 3-week intervals on average. Four of the children, two girls and two boys, were recorded in Moscow, Russia, and their transcripts were kindly provided to us by Dina Brun. Two other girls (raised by monolingual Russian-speaking caregivers) were recorded in Israel by one of the authors (G. Gordishevsky), who also made the transcripts. All the children were recorded in their home settings in the presence of at least one of the caregivers, which yielded spontaneous speech transcripts of at least 100 utterances each (and usually around 200 utterances). The transcripts studied included both the children's and the adults' utterances and detailed descriptions of contexts in which these utterances were produced.

As the goal of this study is to investigate the patterns of subject and direct object omissions, we were interested only in those transcripts which capture the children past the one-word stage, namely at the stage in which they produce multiple-word combinations (two words and more), containing a verb. For this reason, files capturing the children before the two-word stage or before they started producing verbs, were excluded. Thus, we ended up with 42 files for analysis.

The chronological ages at which the children reached the desired stage differ significantly (usually depending on the age at which they started producing their first words). This difference in chronological ages led us to set up linguistic ages to describe the relevant stages of linguistic development. As most kids entered the two-word stage with first usage of verbal elements around the age of one year and nine months, we termed the initial age of the analyzed recordings for all children "linguistic age 1;9". Furthermore, in order to observe development in the studied phenomena, we divided all the analyzed files into two developmental stages: Stage 1 – linguistic ages 1;9-2;0 (25 files), and Stage 2 – linguistic ages 2;0-2;6 (17 files).

2.2 Methods and analysis

In order to study the phenomenon of subject and object omissions, as well as their correlation with finiteness, we selected all utterances containing a main verb, either finite or non-finite¹. We have also distinguished between finite and non-finite

¹ We excluded from our counts repetitions and completions of adult utterances, exact repetitions of the child's own preceding utterance, and utterances including non-intelligible material, since these are not representative of the child's grammar. We also excluded imperative constructions when analyzing subject presence/omission (since these *require* a null subject), but included them when analyzing direct object presence/omission. Expletive subject

contexts with respect to subject and object preservation/omission. The reason for this distinction is the possibly different explanation of subject omission from finite contexts as opposed to non-finite ones. While for the finite contexts we propose a pragmatic account, subject omission from non-finite contexts has already been successfully explained in purely syntactic terms, as mentioned in section 1.3 above.

In the case of non-finite verbs, we excluded from our counts infinitival constructions that are permitted in adult Russian, such as infinitival questions, complex future tense or intentional constructions, like the ones in (4).

- (4) a. Pomoch vam? b. Ja xochu/budu risovat'.
 help-inf you I want/will-1sg draw-inf
 “Can I help you?” “I want to/will draw.”

All of the finite contexts chosen for analysis were divided into three categories with respect to the type of subject/direct object, namely those containing either (i) overt subjects/objects, or (ii) subjects/objects dropped in adult-like manner, or (iii) non-adult-like null subjects/objects. Moreover, in order to examine the correlation between finiteness of verbs and overtiness of subjects, and (allegedly) no such correlation for objects, we divided all of the non-finite contexts into two categories, namely those containing (i) overt subjects/objects or (ii) null subjects/objects.

The next sections present the results we obtained after coding and analysis of the available data were performed by native speakers of Russian.

3. Results

Let us first have a general look at the omission and preservation of subjects and direct objects in finite verbal utterances. Tables 1 and 2 present the results of subject and object use (respectively) in the two developmental stages.

Developmental stage	overt subjects	adultlike null subjects	non-adultlike null subjects
Stage 1 (language age 1;9-2;0)	41% (331/801)	23% (185/801)	36% (285/801)
Stage 2 (language age 2;0-2;6)	77% (840/1090)	17% (184/1090)	6% (66/1090)

Table 1. Development of subject use in finite contexts (6 kids)

constructions were excluded as well, as we concentrate on thematic subjects. Finally, answers to questions of the type *Chto ty sdelal?/Chto ona delaet?* etc. (“What did you do?/What is she doing?”) were also excluded, because these would inflate the numbers of adultlike null subjects (in recording sessions, such questions are asked way too often: 221 on the overall). For the analysis of direct object omissions, we considered all obligatorily transitive verbs. In addition, we included the instances of optionally transitive verbs that were used in clearly transitive contexts.

Developmental stage	overt objects	adultlike null objects	non-adultlike null objects
Stage 1 (language age 1;9-2;0)	51.5% (124/240)	24.5% (59/240)	24% (57/240)
Stage 2 (language age 2;0-2;6)	68% (298/436)	21% (91/436)	11% (47/436)

Table 2. Development of object use in finite contexts (2 kids²)

As can be seen from the two tables above, subjects and objects in finite contexts in young Russian-speaking children show a very similar pattern. In developmental stage 1 (language age 1;9-2;0), subjects and objects are overt in 41% and 51.5% of the cases, respectively. The children drop 23% subjects and 24.5% objects in adultlike manner (i.e. consistent with the conditions where adult Russian speakers would do so too), and 36% subjects and 24% objects in non-adultlike manner (i.e. violating the conditions operating in adult Russian). In developmental stage 2 (language age 2;0-2;6), we observe 77% overt subjects and 68% overt objects, 17% subjects and 21% objects dropped in adultlike manner, and only 6% subjects and 11% objects dropped in non-adultlike manner.

As the next step, we examined the behavior of subject and object omission in non-finite contexts, i.e. in main clauses containing non-adultlike non-finite verbs, known in the literature as Optional or Root Infinitives (Wexler 1992, 1994; Rizzi 1993/1994). Our results are summarized in Table 3 below.

Developmental stage	subject		object	
	subject null	subject overt	object null	object overt
Stage 1 (1;9-2;0)	88% (64/73)	12% (9/73)	36% (8/22)	64% (14/22)
Stage 2 (2;0-2;6)	100% (13/13)	0% (0/13)	40% (4/10)	60% (6/10)

Table 3. Overtness of subjects and direct objects with Optional Infinitives (2 kids)

Our results are consistent with previous research in other child languages (Rhee and Wexler 1995; Sano and Hyams 1994; Bar-Shalom et al. 1996) in that close correlation is observed between non-finite verbs and null subjects. In particular, the results show that while in both developmental stages almost all Optional Infinitives appear with null subjects (88% and 100% in stages 1 and 2, respectively), no such correlation exists for direct objects. The object of OIs is null 36% of the time in developmental stage 1 and 40% of the time in developmental stage 2, while it is overt in 64% and 60% of the cases in the respective stages.

² As the transcripts of the other four children were made not by ourselves, the relevant contextual comments were frequently omitted, which made it impossible to determine the adultlike/non-adultlike status of the object in many cases.

4. Discussion of Results

4.1 Omission of Subjects and Objects from Finite Contexts

With regard to the results of subject and direct object omission, the following observations can be made. The first observation is that, unlike English, where there is a clear difference between subject and object drop (Bloom 1990; Hyams and Wexler 1993; etc.), Russian children omit both subjects and objects, which is in agreement with the option available in adult Russian. Thus, in the younger group (ages 1;9-2;0) we observe 23% of adultlike and 36% of non-adultlike subject omission and 24.5% of adultlike and 24% of non-adultlike object omission. In the older group (ages 2;0-2;6) we observe 17% of adultlike and 6% of non-adultlike subject omission and 21% of adultlike and 11% of non-adultlike object omission. The finding that Russian-speaking children omit both subjects and objects is in accordance with the target-like option, which shows the children's sensitivity to the adult principles guiding argument omission. The non-adult omissions will be explained below.

Our results in child Russian are in sharp contrast with results from child English, which reveal a clear quantitative difference between subject and object omission. Thus, Bloom (1990) reports an average of 55% of subject omission and only 9% of object omission for three children, Adam, Eve, and Sarah, between the ages of 1;6 and 2;7. Hyams and Wexler (1993) present similar results for the two children, Adam and Eve, dividing their speech files into two developmental periods. In Period 1, they observed in total 48% of subject omission and 9% of object omission, and in Period 2, 22% of subject omission and 8% of object omission.

As can be seen, the percentages of subject omission and the percentages of object omission are strikingly similar in child Russian (as opposed to child English), suggesting that with respect to overall omissions, children's performance is driven by the same (non-syntactic, non-morphological) factors as exist in adult Russian. Let us now have a look at the non-adultlike omissions observed in the analyzed files.

(5) *Non-adultlike subject omissions*

- a. %CHI looks at the swing. (MUS2 -1;9.21)
*CHI: *e* *kachajutsa*.
%glo: swing-3pl
- b. *CHI: *e* *ne slyshit*. (SAS1 -1;11.21)
%glo: not hears-3sg
%CHI talks about the experimenter.
- c. *CHI: *e* *napisala*. (MUS2 -1;9.21)
%glo: peed-fem
%CHI points at a wet stain on the blanket, refers to herself.
- d. *CHI: *e* *guljala*. (KAT1 -1;9.??)
%glo: walked-fem
%CHI utters out of the blue, referring to herself.

(6) *Non-adultlike direct object omissions*

- a. *CHI: *daj e*. (KAT4 -1;10.20)
%glo: give-imper
*ADU: *chto daj?*

- b. *CHI: dostan' e . (ZLA3 -1;10.11)
 %glo: get-imper
 *ADU: chto tebe dostat'?
- c. *ADU: zlata, kakaja tjoťja? (ZLA2 -1;9.24)
 *ZLA: zabrala e .
 %glo: took-fem away
 %previously talked about a woman who took away CHI's sandals.

In all the examples above, the children violate the adult constraints on argument omission in that they make no verbal reference to the omitted element, i.e. *do not establish an antecedent linguistically* (as in all of the examples in (5) and (6)); *do not provide non-linguistic cues*, such as pointing, nodding, in order to make sure that the interlocutors look in the relevant direction, i.e. *do not explicitly place the entity in the center of discourse* (as in e.g. (5a,b) and (6a,b)); and *use event time that is not close to the time of speech*, i.e. sometimes the children refer to events that occurred in non-observable past (as in (5c,d) and (6c)).

The question of why young children violate the mentioned constraints arises. The answer, in our view, lies in the developing pragmatic system. Specifically, following Schaeffer (1999), we hypothesize that young children lack a pragmatic principle, namely the “Concept of non-shared knowledge”, formulated in (7):

- (7) *Concept of non-shared knowledge (pragmatic)* (from Schaeffer, 1999)
 Speaker and hearer knowledge are always independent

As Schaeffer (1999) explains, the Concept of non-shared knowledge requires the speaker to consider the hearer's knowledge as distinct from the speaker's knowledge. That is, what is known to the speaker is not necessarily known to the hearer, unless it has been explicitly established in the discourse. Thus, for an entity to represent discourse-old information, the speaker must establish its reference using one of the means outlined in section 1.2.

However, if the Concept of non-shared knowledge is absent, the speaker may attribute his/her own knowledge to the hearer, which should not be the case in adult language, but is often the case in early child language. The lack of this pragmatic concept leads the child to attribute his/her own discourse knowledge to the hearer, and thus refer to a discourse-new entity (from the point of view of the hearer) as if it was discourse-old, violating the necessary requirement of establishing its reference first. As a result, discourse-new subjects and direct objects are omitted in early child speech, violating the adult rule.

4.2 Development in Subject and Object Omission

Moreover, a clear development can be observed from developmental stage 1 to developmental stage 2: the percentage of overt subjects in finite clauses rises from 41% to 77%, and of overt objects - from 51.5% to 68%. Non-surprisingly, a reversed tendency is observed for arguments dropped in non-adult manner: the number of non-adultlike null subjects drops from 36% to 6 % and the number of non-adultlike null objects from 24% to 11%. Interestingly, there is almost no change in the

number of arguments omitted in adultlike manner from stage 1 to stage 2: 23% and 17% for subjects, and 24.5% and 21% for objects. It is also interesting to note that in adult Russian the rate of subject omission from finite contexts is very similar to that observed in children, namely 24% (59/244)³. The results of adultlike omissions in children and their similarity to the results from adults lead us to the conclusion that children are sensitive to and are guided by the same principles of subject and direct object omission as adult speakers of Russian are. The additional factor that leads children to omit arguments in the contexts where adults would not do so is the lack of the pragmatic Concept of non-shared knowledge, discussed above.

4.3 Subject and Object Omission from Non-Finite Contexts

There is, however, a constraint imposed by the syntactic system. As observed by other researchers (Wexler 1994; Sano and Hyams 1994; Hoekstra and Hyams 1995, among others), the omission of subjects in non-finite clauses is significantly higher than in finite clauses, while no such difference exists for objects. Indeed, for the younger group we found 88% (64/73) of non-adultlike subject omission from non-finite clauses as opposed to 36% (285/801) of such omission from finite clauses. On the other hand, 36% (8/22) and 24% (57/240) of objects were omitted in non-adultlike manner from non-finite and finite clauses, respectively. In the older group, the differences (between non-subjects and objects) are even more dramatic: 100% (13/13) of non-adultlike subject omission from non-finite clauses versus 6% (66/1090) of such omission from finite clauses; and 40% (4/10) and 11% (47/436) of objects were omitted in non-adultlike manner from non-finite and finite clauses, respectively. Based on this difference, we conclude that Russian speaking children possess, rather early, a subtle knowledge of both syntactic constraints (e.g. correlation between finiteness and overt subjects), and discourse constraints. At the same time, the difference between object omission in finite and non-finite clauses is unexpected in traditional syntax-based accounts. Interestingly, somewhat similar findings are reported in Baauw et al. (2002) with respect to determiner omission in child Dutch. Yet, a full explanation is needed and we leave this question open.

5. Patterns of Subject and Object Omission and Preservation

As adult Russian allows the use of overt NPs, overt pronouns, or empty elements, we asked ourselves whether the distribution of these elements in child Russian follows the same pattern as in adult language. Using our own judgements, we determined the “adult target utterance” in the tables below on the basis of whether we would have used an overt NP, a pronoun or *pro* in a given context, as judged by the available transcripts. We then compared our judgements with what children actually used in the relevant cases. It should be noted, however, that we did not have access to the detailed specification of the contextual circumstances for four of the children, which made it impossible for us to provide judgements of whether an object omission was possible or not (as mentioned in fn.1). Table 6 therefore

³ We analyzed adult speech in a one-hour episode of Russian TV series *Prostye Istiny* (“Simple Truths”).

provides data for two children only who were personally recorded and transcribed by one of the authors (G. Gordishevsky). In order to make the data compatible, we provide the data for these two children in a separate table (Table 5). Table 4, on the other hand, gives a total summary for all six children. As we are interested at this point only in the children's sensitivity to the *contextual* circumstances that regulate distribution of various nominal elements in Russian, and not in their sensitivity to morphosyntactic constraints, the tables below provide data from finite clauses only.

Child Real Utterance	Ling. age	Adult Target Utterance		
		NP	Pronoun	∅
NP	Stage 1	72% (167/232)	4% (14/340)	0.5% (1/188)
	Stage 2	85% (202/239)	3% (17/648)	0% (0/193)
Pronoun	Stage 1	0% (0/232)	32% (110/340)	1% (2/188)
	Stage 2	10% (24/239)	89% (578/648)	5% (9/193)
∅	Stage 1	28% (65/232)	64% (216/340)	98.5% (185/188)
	Stage 2	5% (13/239)	8% (53/648)	95% (184/193)

Table 4. The use of NP/Pronoun⁴/Zero Subjects in finite contexts (6 children)

Child Real Utterance	Ling. age	Adult Target Utterance		
		NP	Pronoun	∅
NP	Stage 1	72% (74/103)	1% (2/165)	0% (0/97)
	Stage 2	87% (176/202)	3% (16/557)	0% (0/151)
Pronoun	Stage 1	0% (0/103)	20% (33/165)	0% (0/97)
	Stage 2	9% (19/202)	93% (516/557)	3% (5/151)
∅	Stage 1	28% (29/103)	79% (130/165)	100% (97/97)
	Stage 2	3% (7/202)	4% (25/557)	97% (146/151)

Table 5. The use of NP/Pronoun/Zero Subjects in finite contexts (2 children)

Child Real Utterance	Ling. age	Adult Target Utterance		
		NP	Pronoun	∅
NP	Stage 1	76% (105/139)	10% (3/29)	3% (2/61)
	Stage 2	91% (234/257)	21% (17/80)	1% (1/93)
Pronoun	Stage 1	0% (0/139)	10% (3/29)	0% (0/61)
	Stage 2	0% (0/257)	49% (39/80)	0% (0/93)
∅	Stage 1	24% (34/139)	79% (23/29)	97% (59/61)
	Stage 2	9% (23/257)	30% (24/80)	99% (92/93)

Table 6. The use of NP/Pronoun/Zero Objects in finite contexts (2 children)

As we can see, children's use of overt NPs, pronouns and empty elements follows, by and large, the distribution of these elements in adult Russian. For example, in a context where an overt NP is expected in adult speech, most of the subjects in child speech are, indeed, overt NPs (72% in Stage 1 and 85% in Stage 2, Table 4). When

⁴ Demonstrative pronouns such as (*vot*)*eto* ('this') etc. are excluded, because their reference is supplied in a non-linguistic, deictic way.

an empty element is expected, most subjects are indeed empty (over 95%, Table 4). The same is true for objects: when an overt object NP is expected, children correctly produce it more than 75% of the time, and when an empty object is expected, children use it over 95% (Table 6). The only exception to this pattern is the overuse of empty elements when an overt pronoun is required, which is of course consistent with findings in other languages. Thus, as seen in Table 4, in Stage 1 the children produce only 32% of overt pronouns when they are expected in adult speech, replacing them most frequently with an empty element (64%). The same is true for objects: overt pronouns are used only 10% of the time; most of the time (79%) they are replaced with an empty element. Clearly, there is a significant improvement with age, and the data from children in Stage 2 approaches the adult pattern even closer.

6. Conclusion

Russian provides an interesting case for the study of null and overt elements in child language because of their apparently complicated distributional system. We have shown, however, that children acquiring Russian do not have any specific troubles figuring out under what conditions these elements are to be used in their language. This observation suggests that the early available knowledge traditionally attributed to the syntactic domain only may in fact be a characteristic of other parts of the human linguistic system. In particular, the system that Avrutin (in press) refers to as “linguistic discourse” or “information structure” seems to develop much faster (and parts of it may be innate) than it was previously assumed. Nevertheless, Russian-speaking children, like children acquiring other non-pro-drop languages, still need some time to fully acquire pragmatic conditions that warrant the use of empty elements. This factor is responsible for the overuse of empty elements when overt pronouns are required in adult language. Finally, in agreement with other studies, we have shown that even very young Russian-speaking children (aged 1;8) conform to the constraints posed by the syntactic system, as evidenced by the correlation between finiteness of verbs and overtness of subjects.

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