

The acquisition of aspectuality by Russian children: the early stages¹

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Abstract

The article deals with the analysis of the development of aspectuality at the early stages of the acquisition of Russian. Data from seven children are investigated for this purpose. It is claimed that the category of aspectuality, being the property of the whole utterance, can be expressed at the early stages of language acquisition even before the verb itself occurs. During this period some children mark the basic aspectual opposition „process–result“ by the linguistic devices at their disposal, namely by various uses of sound imitations or onomatopoeics. Onomatopoeics, when used once, can be said to be the predecessors of perfective verbs, while reduplicative use of onomatopoeics seems to correspond to the imperfective aspect. The paper presents an analysis of the early verb lexicons of six children. Among their 24 earliest verbs both aspects are represented. As revealed by the analysis, aspect (and Aktionsart) clusters with tense in a specific way: imperfective verbs are mainly used in the present while perfectives are used mostly in the past.

1. Aspectuality in Russian

Bondarko (1987: 40) defines aspectuality as “a semantical categorial feature ‘the type of performing of an action and its distribution in a temporal continuum’”² and the group of various language-specific devices sharing this feature. It operates on the level of sentence and can be even expressed without a verb, see example (1), taken from Pushkin’s poem „Evgenij Onegin“:

- (1) Tat’jana – v les,
Tat’jana-NOM into forest-ACC
‘Tat’jana [rushed] into the forest’
- Medved’ – za nej
bear-NOM after her
‘The bear [rushed] after her’.

The aspectual situation (AS) of an utterance is determined by a number of syntactic components and perfective (PF) or imperfective (IPF) aspect of the verb. We address to such elements of the sentence, that define aspectual semantics, i.e. characteristic of the distribution of actions in a temporal continuum (see Bondarko 1983).

¹ I would like to express my deep gratitude to Magdalena Smoczyńska, whose comments on this paper and corrections suggested were very helpful. I am also grateful to Paul Law for his suggestions concerning formulation and stylistics. All mistakes are mine.

² The text in internal quotation mark is taken from Peshkovskij 1956: 105.

Russian has two aspects: PF and IPF. In principle each verb is either perfective or imperfective³. Most verbs tend to form aspectual pairs with IPF and PF members, which means that an English verb, such as *drink*, has two counterparts in Russian: IPF *pit'* and PF *vypit'*, with *pit'* and *vypit'* being two different, though related, verbs rather than inflectional forms of the same verb. However, some verbs do not form aspectual pairs, these are so called perfectiva tantum (e.g. *kashl'anut'* 'cough once' PF) and imperfectiva tantum (e.g. *l'ubit'* 'love' IPF).

The two aspects are distributed in three tenses in the following way:

	PF	IPF
Past	+	+
Present	-	+
Future	+	+

which means that perfective verbs cannot occur in the present tense.

For better understanding of this scheme examples are given in a table below with an approximate translation into English⁴.

	PF	IPF	IPF with adverb 'often'
Past	<i>On <u>spel</u> pesnju</i> He <u>sang</u> (has sung) a song	<i>On <u>pel</u> pesnju</i> He <u>was singing</u> a song	<i>On chasto <u>pel</u> pesnju</i> He often <u>sang</u> a song
Present		<i>On <u>pojot</u> pesnju</i> He <u>is singing</u> a song	<i>On chasto <u>pojot</u> pesnju</i> He often <u>sings</u> a song
Future	<i>On <u>spojot</u> pesnju</i> He <u>will sing</u> a song	<i>On <u>budet pet'</u> pesnju</i> He <u>will be singing</u> a song	<i>On chasto <u>budet pet'</u> pesnju</i> He often <u>will sing</u> a song

The main meanings of PF and IPF aspects are well known, but they can be „modified“ by other elements of an utterance. For example, IPF in its hierarchy of meanings basically denotes a process, but can also have habitual meaning (as in examples given in the last column of the table). The basic meaning of PF aspect to denote a concrete fact (see examples given in the first column of the table) is less influenced by the context of the utterance, as it always designates different manifestations of an action, but can also be modified. Examples in the table below present secondary meanings of PF aspect that are contextually dependent and can be said to have potential, summarised and perspisious modifications of the main meaning of the PF aspect⁵:

PF demonstrates the	
Concrete single fact	<i>On <u>spojot</u> pesnju</i> He will sing a song
Potential ability to sing	<i>On tak <u>spojot</u> pesnju</i> He is able to sing a song so [good, bad,...]
Perspisiousity of singing	<i>Byvaet tak, <u>spojot</u> on pesnju, a potom zapisyvaet noty</i> It is sometimes so: he sings a song, then writes notes
Summation of the concrete facts of singing	<i>On <u>spojot</u> pesnju dva raza</i> He will sing a song twice

³ With few exceptional instances of bi-aspectual verbs.

⁴ For examples of imperfective verbs in the second column, English progressive verb forms seem to be the best to convey the Russian meaning. However, this does not imply, that English progressive aspect can be considered to be an equivalent of the Russian imperfective aspects.

⁵ About particular meanings of PF and IPF aspects see Bondarko 1990.

The same problem in English was under discussion by Dowty (1972) and others, who pointed out to the aspectual meaning of the sentences, that is determined by the constellation of various devices of syntax and discourse.

All these factors contribute to the extreme complication of the already complex structure of aspect as linguistic category in Russian. This is additionally aggravated by the fact that native speakers of languages that do not have aspect as a separate category cannot easily grasp the notions that are obvious to most speakers of aspect languages, and by the absence of a common terminological apparatus.

In this paper we concentrate on the early stages of the acquisition of aspectuality, when the children start to produce utterances. Mainly, the sentences that are under investigation consist of two or more components, which do not modify the basic meanings of PF and IPF. However, we trace the occurrence of aspectual distinctions and within the corpus of first verbs we consider two groups according to their relation to the semantical category of telicity, namely verbs with telic/atelic meaning, i.e. presence/absence of an inner endpoint in the linguistic representation of an action (Bondarko 1990). We also use the designation of some groups of Aktionsarten (see classifications of Vendler 1967, Sheljakin 1987) among which these verbs are distributed.

The majority of studies of the acquisition of aspect and tense appeals to the Vendler's (1967) well-known four-way classification of the inherent lexical aspect, based on the temporal „foundations“ of the verbs⁶. However, our attempt to perform traditional analysis for Russian failed, due to the presence of the above-mentioned features of the verbs. Shirai & Andersen (1995: 744) present Vendler's classification in the following way:

- (i) ACHIEVEMENT: that which takes place instantaneously, and is reducible to a single point in time (e.g. *recognize, die, reach the summit*, etc.).
- (ii) ACCOMPLISHMENT: that which has some duration, but has a single clear inherent endpoint (e.g. *run a mile, make a chair, build a house*, etc.).
- (iii) ACTIVITY: that which has duration, but with an arbitrary endpoint, and is homogenous in its structure (e.g. *run, sing, play, dance*, etc.).
- (iv) STATE: that which has no dynamics, and continues without additional effort or energy being applied (e.g. *see, love, hate, want*, etc.).

Consider now the Russian equivalents to the above-mentioned English examples. The Russian equivalents of group (i) verbs *recognize, die, reach* form aspectual pairs, one member of which does not belong to the achievement. For instance, the verb *recognize* has two equivalents: *uznavat'*-IPF vs. *uznat'*-PF. The IPF verb denotes an action that has some duration and an inherent inclination to reach an endpoint, therefore it belongs to group (ii), while its PF „companion“ denotes an action which takes place instantaneously, and is reducible to a single point in time, and thus stays in the same group (i) as English *recognize*. Other verbs from this group like *okazat's'a, ochutit's'a* ‘to find oneself’ are used only in PF and belong to group (i). Analysis of the Russian equivalents of verbs from groups (ii) and (iii) *make* and *sing* reveals some similarities. *Make* has two equivalents: *delat'*-IPF vs. *sdelat'*-PF, and *sing*, respectively *pet'*-IPF vs. *spet'*-PF. The IPF verbs *delat'* and *pet'* are not always simple activity verbs (like *kachat's'a* ‘swing’). In some contexts they may denote actions that are internally oriented to reach a potential endpoint. The PF verbs denote an action that has

⁶ We mention only some of findings of Antinucci and Miller (1976) for Italian and English, Shirai & Anderson (1995) for English, Aksu-Koç (1978) for Turkish, Champaud et. al (ms.) for French, Smoczyńska (1985), Weist at al. (1984) for Polish.

reached a critical endpoint, after which it has to stop. However, the reaching of the endpoint is not instantaneous (like in *uznat*'), therefore, these verbs do not belong to group (i). Verbs *delat*'/*sdelat*', *pet*'/*spet*' are telic, and this is why they cannot be distributed among the four Vendler's groups. As for the last group of states (iv), their Russian counterparts do not form aspectual pairs, and constitute the same group as in English. This analysis shows that Vendler's classification is not universally applicable, especially not to Slavic languages⁷. Some researchers try to solve this problem, by partitioning situations into state and dynamic, by establishing the set of tests that help to "classify verb phrases according to Vendler-type schemas" (Weist et al.1984:352).

Comparing the considerable research on the acquisition of aspect (and tense) morphology published in English (see Shirai & Andersen (1995), Andersen & Shirai (1996))⁸ the situation differs greatly in work published in Russian where the long tradition of research of verbal aspect did not adequately address the issue of language acquisition⁹. More than fifty years ago Gvozdev (1949) wrote that children acquiring Russian as a native language almost never make mistakes in the choice of aspectual form of the verb¹⁰. For adults that learn Russian as a second language, acquisition of aspect is the most complex part of the language, probably because of the constellation of its semantics and the big variety in marking aspectual distinctions and groups of Aktionsarten. The norm in some contexts (e.g. concurrence of PF and IPF aspect) is very difficult to acquire and some mistakes made by adults are persistent.

2. Data

In this study seven sets of data of individual Russian children were used in form of diaries, separate notes, cross-sectional and longitudinal recordings. They are: Gvozdev's (1949, 1984) data of Zhenja G. (diary from birth to the age of seven), Protassova's (1997) data of Varja P. (diary from birth to 2;6)¹¹. The remaining five sets of data belong to the Child Language Data Bank created on the initiative of Prof. Stella N. Ceytlin at the State Pedagogical University of Russia in St.Petersburg. The largest of them is the longitudinal tape-recorded corpus of Philip S. (recordings from 1;4 to 2;6), collected with support of the Austrian Academy of Science within the project "Pre- and Protomorphology in Language Acquisition" directed by Prof. W. U. Dressler. Most of the data were not available in the CLAN version (or any other computer data base program), therefore analyses had to be made manually.

3. Theoretical prerequisites

⁷ It is maybe interesting to quote what Vendler himself wrote about his classification in his letter to Verkuyl written in 1987: „I wrote that paper as a third year grad. student 30 years ago. At that time I did not know anything about linguistics, and I did not even realize that what I am doing matches Aristotle“ (...) „I am very amused at seeing my old paper being milked beyond its capacities. My four classes have acquired a life of their own, like grown up children. And the parent can only watch their career. I hope you treat them well.“ (Verkuyl 1993: 359-60, f. 25).

⁸ For the acquisition of aspect (and tense) morphology in languages other than English, see Slobin (1985 - 1997).

⁹ However, one should mention well-known study of Gvozdev (1949), as well as works of Ceytlin (1989), Lepskaja (1989), Pupynin (1996), (1998), Kiebzak-Mandera (1999).

¹⁰ Two cases, however, are registered, in both of which PF verb is used instead of the IPF: *ne nado* + PF – **ne nado zakryt*'-PF (correct *ne nado zakryvat*' -IPF) 'not necessary to close', periphrastic future of the type **budu sdelat*'-PF 'will-1.SG.PRES make' (instead of *budu delat*'-IPF). Kiebzak-Mandera (1999), who studied the data of three Russian children up to the age of 3, notes similar examples of errors, with addition of that of using PF forms in negated imperative sentences (e.g. *ne zakroj*-PF instead of *ne zakryvaj*-IPF). Similar errors are found in Polish (Smoczyńska, 1985).

¹¹ See also Kiebzak-Mandera, Smoczyńska and Protassova (1997). The data of Varja P. are also available in the CHILDES database.

Being essentially constructivistic and functionalistic, the study has been performed on the cross-road of several scientific directions, such as Natural Morphology (see Dressler et al. 1987), Theory of Functional Grammar (some parts of which concerning aspectuality were elaborated by researchers of the so-called „st. petersburgian aspectual school“, e.g. Maslov 1978, Bondarko 1983, etc.). For the analysis of the very early stages of grammatical development, we use parts of the theory of pre- and protomorphology (see Dressler & Karpf 1994, Kilani-Schock et al. 1997). We follow the concept that each child builds the grammar of his/her native language by him/herself. At each step of language acquisition children choose the most iconic elements of the system of grammar, which also have a stronger cognitive base, and link the chain of different categories – in our case, aspectuality – together. In order to trace the development of aspectuality we have to consider different periods of language acquisition. For our study the early period is of utmost importance, because it is then that the basic set of devices for denoting actions (i.e. events, processes and states) emerges. It is then that the basic concept of aspectuality is formed.

4. Onomatopoeics used as precursors of perfective and imperfective verbs

Human languages have several possibilities to denote different actions. Except the major one - verb, we draw our attention to the „natural“, mostly connected with the extralinguistic reality, „verb interjections“ that imitate sounds of nature (*moo, bax, bam, stuk*, etc.), beloved by children and are called onomatopoeics or sound-imitations. Many decades ago Gvozdev (1949: 104) wrote about the fact that some actions can be expressed by „childish words“, as he named onomatopoeics at that time, giving an example from his data:

- (2) *Mal'chik ba-ba*
 boy-NOM ba-ba
 'The boy is sleeping'

(Zhenja G. 1;9.14).

When investigating our data we paid attention on the use of onomatopoeics. They are not used chaotically, but organised in a special way. We also found a number of them in a child-directed speech (baby talk), which means children can take them from the input they hear.

Let us present a model example. The child Ivan P. (1;10.16) and his mother are both in the bathroom. The child places the empty glass in the water. The glass gets quickly filled with the water and immerses. The mother comments using the onomatopoeic *bul'* 'cluck':

- (3) a *Bul' i v vode stakan*
 Bul' and in water-LOC glass-NOM
 'Cluck and the glass is in the water'
- b *Bul' i stakanchik v vode*
 Bul' and glass.DIM-NOM in water-LOC
 'Cluck and the glass is in the water'

Afterwards the child takes the glass and immerses it slowly into the water, which gets gradually inside. This time the mother says:

- c *Bul'-bul'-bul'*
Cluck-cluck-cluck

Although there are no real verbs in these utterances (and onomatopoeics do not have aspect) we can speak of AS in examples (3a), (3b) and (3c), i.e. of limiting the general situation to a more specific one, aspectually characterised. The single use of *bul'* in (3a), (3b) denotes an instantaneous and limited action with a clearly observable result: the glass, filled with the water, sinks. This telic AS with the instantaneously achieved end state requires a perfective verb in the adult language. The repetition of *bul'* (3c) denotes an on-going situation, the reaching of an end state, which can be observed during the moment of speech: the glass, getting filled with water, gradually immerses into the bath. This is the telic-processual AS that needs (in the adult language) an imperfective verb.

The same strategy of using onomatopoeics (once or more times) can be seen in the children's data. However, not all our informants follow this way. Thus, we cannot claim it to be an obligatory rule, but the tendency of some children to acquire (in this specific way) the category of aspectuality. Besides, not all reduplicative use of onomatopoeics (and not at all stages) can be analysed in such way. We exclude from our investigation such reduplicative onomatopoeics as *baj-baj* 'to sleep', *bo-bo* 'to have pain', because they never occur in a single use. Also at the onset of speech reduplications of onomatopoeics cannot be interpreted as having the semantics of IPF aspect, due to the cognitive immaturity of the child (see next paragraph).

4.1. One-word utterances

The first occurrence of onomatopoeics is registered at the period of holophrases, when children use only one word (which has a broad meaning) to denote complex, multi-component situations (see Clark 1970). Already at this first period children use onomatopoeics differently: one or more times:

- (4) Anja S. (1;2.7) knocking on various objects around her:

Bax-bax.

- (5) Anja S. (1;2.21) seeing an object falling:

Bax.

We see the child names actions in (4) and (5) differently. However we did not find a significant number of such examples. Besides, the child at the stage of one-word utterances does not name the components of the amorphous situation. We suppose that at this stage of general cognitive and speech development a child cannot denote different types of temporal continuum and structure of actions around him.

4.2. Multi-word utterances

If we observe the speech further, when still no inflectional morphology can be registered, we see that children already are able to distinguish the components of the situation and to name them. They continue to use actively sound-imitations (onomatopoeics) to denote different types of actions. Ongoing, atelic actions that consist of repeated manipulations and

corresponds to the moment of speech are coded by the reduplications of onomatopoeics, while actions that happened in the nearest past with the resulting state (perceived by a child and important for him/her) in the present are denoted by the single use of the same onomatopoeics¹². Consider examples:

- (6) Philip S. (1;7.12) in reference to a train having fallen down:

Bux.

- (7) Philip S. (1;7.12) knocks with the same train:

Bu-bu.

- (8) Philip S. (1;8.28) plays with the hat, bites it:

Sjapa njam.
Hat-NOM njam

- (9) Philip S. (1;9.3) answers mother's question 'What are you doing?':

Njam-njam.

Philip S. uses the same onomatopoeics in pairs of examples (6) and (7), (8) and (9) for different situations. We interpret the ASs that are expressed in these examples as corresponding to the semantics of perfective aspect, examples (6), (8) and imperfective aspect, examples (7), (9).

The „iconic content“ of onomatopoeics (that belong to one of the extragrammatical operations, described by Dressler (1997)) changes with the development of children's language. Compare:

- (10) Varja P. (1;6) shows the hare, imitating how he jumps:

Pik-Pik.

- (11) Anja S. (2;5.16) saw how a poodle runs on the street:

Oj, kak bezhit, tak: beg-beg.
oj, how run-PRES.3 like this: beg-beg
'Oj, how he runs, like this: beg-beg'

In both examples reduplications correspond to the respective roots: *pryg-at* 'to jump', *beg-at* 'to run'.

Examples in (10) present the actions that consist of several manipulations performed by the child, while commenting upon them. The level of iconicity in this case is higher than in example (11), where the reduplications of onomatopoeics can be said to be of another level of abstraction, not so close to the action referred to. While in (10) the child's utterance repeats *pik*, which exists in the adult language, in (11) sound imitation *beg* „specifies“ the action,

¹² For more examples of this type see Gagarina 1997: 49-57.

which was denoted by the normative verb and created by the child herself from the verb root and is not an independent word in adult language.

Children start to use reduplication of different onomatopoeics to denote ongoing actions at the same time when they start to master quantitative differences. At this point the early emergence of the category of quantity can be registered (words ‘a little bit’, ‘a lot’ occur)¹³. Understanding of the quantitative factor of the distribution of the actions coincide with the acquisition of the quantitative differences between subjects.

In this respect we should mention Slobin’s (1985) concepts of Basic Child Grammar, which seem to hold to a great degree, when we look at the first aspectual opposition marked by Russian children. Slobin assumed the existence of some universal innate parameters that do not depend on the input children get, such as notions of process and result of an action. We suppose this can be seen in our examples of the use of sound imitations. We did not perform detailed quantitative analysis of the input of the children investigated, but our results seem to support Slobin’s concept of Basic Child Grammar. The opposition “process vs. result” can be seen in the data at a stage when the children have not yet enough linguistic devices to mark it. It does not seem plausible that they got it from the input.

5. First verbs

With the increasing complexity of children’s speech, the quantity and quality of the words used change. First verbs emerge at the stage of multi-word utterances and children start to use PF and IPF verbs in their basic meanings. As to other variations of these meanings, they appear later, in the period that is not under investigation in the present study.

Children, as we will see, do not start to use verbs of both aspects in all tenses simultaneously, but they are selective: they use specific aspects with specific tenses depending on lexical verb type (Aktionsart). Any verb that is used by children belongs not only to PF or IPF aspect, but also to one of numerous subgroups of Aktionsarten (or inherent lexical aspect, in another terminology).

We decided to take no more than twenty four earliest verbs. With the six children studied, these verbs occurred before the age of 23 months. They are given in the infinitive form in the order of occurrence. Perfective verbs are marked with bold font. Verbs that were used in demands, i.e. in reference to actions the child wanted to take place, are marked with the sign →.

Table 1. Early verb lexicon: first verbs

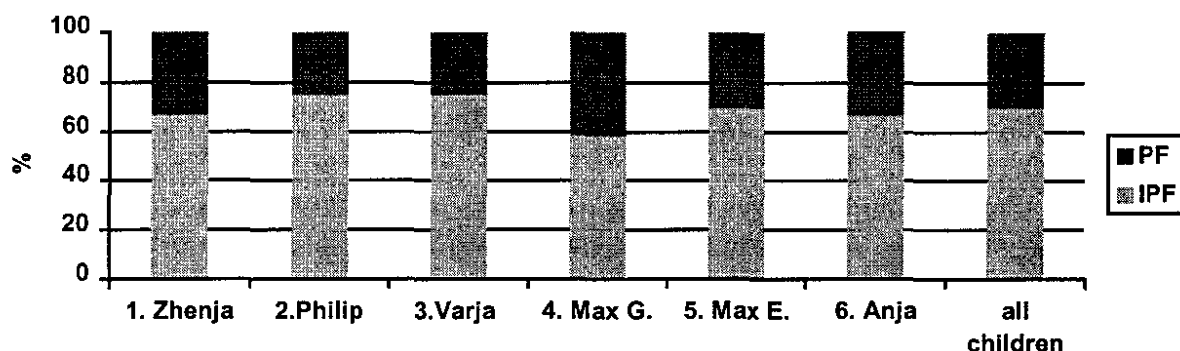
Zhenja G.	Philip S.	Varja P.	Maxim G.	Maxim E.	Anja S.
diary 1;7.20 - 1;10.15	recordings 1;4.5 - 1;9.16	diary 1;2.0 - 1;6	diary, recordings 1;2.0 - 1;8.12	diary 1;8.0 - 1;9.28	diary 1;2 - 1;11.8
24	24	24	24	23	21
pisat'→ to write	spat' to sleep	bezhat' to run	dat'→ to give	dat'→ to give	dat'→ to give
spat'→ to eat	bezhat' to run	exat' to go by car, train	idti→ to go by foot	spat'→ to sleep	sest'→ to sit down
pit'→ to drink	igrat' to play	letet' to fly	guljat' to walk	lepit' to model	chitat' to read

¹³ For the acquisition of category of quantity see Gvozdev 1949, Piaget 1969, Ceytlin 1989 and others.

topit'→ to heat	pit'→ to drink	lezhat' to lie	sadit'sja→ to sit down	umet' to can, be able	vstat'→ to stand up
dognat'→ To run down	kopat' to dig	chitat' to read	chitat'→ to read	guljat'→ to walk	bojat'sja to afraid of
sadit'sja→ To sit down	carapat'sja to scratch	sniat' to put off	kupat'sja to bathe	sest'→ to sit down	sunut'→ to push into
tushit'→ To blow out	sest' to sit down	smotret' to look	siomat' to break	vstavat'→ to stand up	sidet' to sit
lezt'→ to ascent	kusat' to bite	goret' to burn	priexat' to arrive	pisat' to write	pojti to go
lech'→ To lie down	myt'sja to wash oneself	pit'→ to drink	est' to eat	udti to go by foot	letat' to fly
pokupat' to buy	sidet' to sit	pisat' to write	kopat' to dig	est' to eat	lezhat' to lie
chitat' to read	upast' to fall down	pet' to sing	pogasnut' to extinguish	merit' to measure	davat' let's
plakat' to cry	bolet' to be ill	otkryt'→ to open	pojti→ to go	vklijuchit'→ to switch on	kopat' to dig
kipet' to boil	sjest' to eat	zakryt'→ to close	vzjat' to take	xotet'→ to want	risovat' to draw
xotet'→ to want	sadit'sja to sit down	kushat' to eat	ponesti to carry	pojti to go	bezhat' to run
sidet' to sit	otdat'→ to give back	spat' to sleep	postavit' to put	prygnut' to jump	terjat' to loose
brosat' to throw	xotet'→ to want	razvjazjat'(?) to untire	exat' to go by car,train	otkryt' to open	nesti to carry
odet' to put on	uxodit'→ to go away	guljat' to walk	katat'sja→ to go for a drive	ubrat'→ to put away	derzhat'→ to hold
nalit'→ to pour in	plakat' to cry	kupat'sja to bathe	smotret'→ to look	mychat' to bellow	igrat'→ to play
gljadet'→ to look	smotret' to look	myt' to wash	risovat' to draw	slushat' to listen	propast' to escape
lezhat' to lie	bit' to beat	stroit' to build	xotet'→ to want	odevat' to put on	brat'→ to take
propast' to escape	odet' to put on	skakat' to hop	pustit'→ to let do smth.	streljat' to shoot	sjest' to eat
otkryt' to open	exat' to go by car,etc.	pojti to go	stuchat' to knock	letet' to fly	
dat'→ to give	prygat' to jump	poterjat' to loose	ubit' to kill	bezhat' to run	
idti → to go by foot	pustit'→ to let do smth.	pustit'→ to let do smth.	sobirat' to collect		
total amount of pf vs. ipf verbs for each child					
8 pf /16 ip	6 pf /18 ip	6 pf /18 ip	10 pf/ 14 ip	7 pf/ 16 ip	7 pf/14 ip

At the first glance we can see that children start to use verbs of both aspects simultaneously. However, IPF verbs constitute the majority of the verb lexicon: 70% in all children and around the same number for each child (see Table 2 below). Most IPF verbs in Russian are more „primitive“ than perfective verbs. Their form is simpler, as their stem consist of a root and a thematic vowel. Thus it is easier for children to operate with them. Verbs of both aspects are used in the situations of demand and constation (i.e. in reference to the ongoing actions that children witness or the resultative actions with a clearly perceived result).

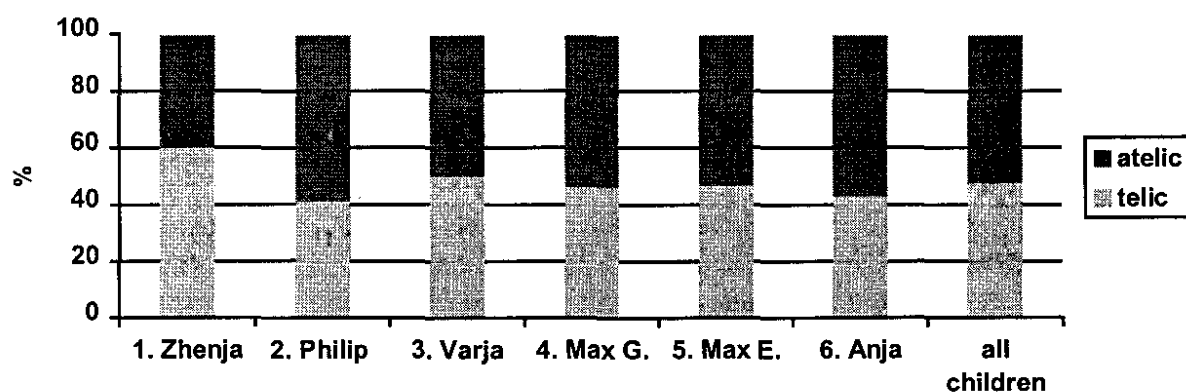
Table 2. Use of perfective vs. imperfective verbs



Perfective verbs in the indicative are marked by past tense inflections and denote the actions that happened in the nearest past, whose resulting state is visible or actual for the speaker (perfect meaning): *propast* 'to escape', *upast* 'to fell down', *slomat* 'to break'. It is interesting to note that all verbs (among given twenty four) that children mark for the past are telic verbs and belong to the group of achievements. For verbs of PF aspect our results are similar to the findings of Antinucci and Miller (1976) for Italian and English, Shirai & Andersen (1995) for English, Aksu-Koç (1978) for Turkish, Champaud et. al (ms.) for French, Stephany (1997) for Greek.

Almost all IPF verbs in the indicative are used in the present: the only example of the past IPF, *sobiral* '(he) collected', is taken from Maxim G. (1;8.12). We will further analyse AS of the group of imperfective verbs with telic and atelic meaning¹⁴. Insignificant majority of the IPF verbs (in the indicative, see table 3) are atelic and denote actions without a clear endpoint: *idti* 'to go by foot', *bezhat* 'to run', *lezhat* 'to lie', etc. The majority of these verbs distribute between activities and states (Vendler's schemata).

Table 3. Use of telic vs. atelic IPF verbs¹⁵



¹⁴ For more information about the problem of telic vs. atelic verbs (or in another terminology bounded vs. non-bounded) see Comrie 1976, Bondarko 1995, Dahl 1985, Declerck 1979, Forsyth 1970, Klein 1995, Maslov 1978 and others. We define telic verbs (after Russian Grammar-80) as the verbs with the telic meaning of the stem, i.e. semantic of the verb expresses inclination to reach the boundary of the action.

¹⁵ The verb *xotet* 'to want' is not included into the calculations of telic/atelic IPF verbs, that's why the general amount of IPF for each child in the Table 1 differs from such in the Table 3.

To investigate groups of Aktionsarten of telic and atelic verbs in more detail, we apply the Sheljakin's (1983, 1987) classification of Aktionsarten (which we try to shape (to relate) to Vendler's classification). In our further description we divide the use of verbs into two types of situations that correspond to the imperative (situation of a demand) and indicative (situation of a constation) mood in the adult language (see Gvozdev 1949).

IPF verbs which have no internal endpoint and are static by their nature, such as *spat* 'to sleep', *sidet* 'to sit', are used by all children in the situations of demand (when a child wants to sleep) and of constation (when a child sees somebody sitting). Already at this age we notice that the child is able to denote the state without localisation at speech-time¹⁶. Compare:

- (12) Zhenja Gvozdev (1;9.25) looking at the his father:

Papa sidit.
 Father sit-PRES.3
 'Father is sitting'

- (13) Maxim (1;10) is talking with the mother about a book. He answers her question about the main hero 'Why is he astute?'

Sidit doma, smotrit [v] okno.
 sit-PRES.3 home, look-PRES.3 [in] window-ACC
 'Is sitting at home, looking at the window'

In the example (13) the child „breaks“ the frame of the utterance „here and now“ and „climbs“ the next step of temporal generalisation.

IPF verbs of motion that can denote in adult language either atelic or telic (in combination with the goal of movement) type of movement, are frequently used by children¹⁷ in atelic AS. These atelic verbs belong to the evolutive Aktionsart (that has development, progressivity, but does not reach an endpoint) – in Sheljakin's classification or to activities in Vendler's classification. When using in the present indicative, children mark *bezhat* 'run', *exat* 'go', *idti* 'go', *letet* 'fly' mainly for the 3.Sg. present (3.Sg. present is considered to be unmarked and thus is acquired before other personal forms of the present (Pupynin 1998)), for example:

- (14) Maxim G. (1;8.9) plays with the tape recorder imitating its movement:

Tutu, tutu edet.
 tutu, tutu, go-PRES.3
 'Tutu, tutu, is going'

- (15) Anja S. (1;10.14) is playing with the doll Tata, imitating its movement:

Mama, Tata bezhit.
 mama, Tata run-PRES.3
 'Mama, Tata is running'

¹⁶ About relationship between the time of actual situation, speaker and utterance itself see Klein 1995, Smith 1983.

¹⁷ From 14 pairs of verbs of motion of the adult language members of four are registered already in our data: *bezhat* 'run' (in one direction), *exat* 'go' (by car, train in one direction), *idti* 'go' (by foot in one direction), *letet* 'fly' (in one direction).

The range of telic verbs is wider (they constitute 61,4 % of all verbs in the early lexicon), but children use only a small group of general-resultative verbs: 1) a subgroup of verbs denoting activities (according to Vendler), such as *kopat* 'dig', *lepít* 'model', *merít* 'measure', *pisat* 'write', *risovat* 'draw', *chítat* 'read' and 2) a subgroup of verbs that form aspectual pairs, in which the IPF member denotes concrete process tending to an endpoint and the PF member denotes successful reaching of the endpoint (achievements according to Vendler), e.g. *sest*-PF/*sadít*'s'a-IPF 'sit down'/'be in a process of sitting down', *vstat*'-PF/*vstavat*'-IPF 'stand up'/'be in a process of standing up', *lech*'-PF/*lozhit*'s'a-IPF 'lie down'/'be in a process of lying down'. It is interesting to mention that from the huge amount and big variety of resultative verbs in the adult language children mainly use the simple verbs¹⁸ that are easier to operate with. These verbs can be said to be minimally marked in the sense of the degree of formal and semantic markedness. This evidence corresponds to one of the subtheories of natural morphology: the subtheory of universal preferences or of universal markedness (see Dressler et al. 1987).

The biggest individual differences in the verb lexicon that we found in the 1) subgroup of telic resultative, can be explained by the varieties of manual activities of children, the family environment and of the historical period (for example. Zhenja G. lived about fifty years ago, and witnessed how the parents *heat* the house with the wooden oven, Maxim G. used to be in the dacha with a lot of mosquitoes, that he usually *killed*).

Verbs *chítat* 'read' and *risovat* 'draw' (*pisat* 'write' in the meaning *risovat* 'draw') can be found in all lexicons of all six children.

Children use some of the above-mentioned verbs of the 1) subgroup first in the atelic processual AS and later in the telic processual AS (when the verb in the utterance has an object). Here we see the correlation between the development of the syntactic complexity of the utterance and the changes of the AS:

(16) Maksim G. (1;7.21) answers the question on the mother 'What are you doing?':

Risuju.
draw-PRES.1.
'I am drawing'

(17) Maksim G. (1;8.14) has a pencil and paper and answers the question of the mother 'What are you going to do?':

Risovat' bibiku.
draw-INF car-ACC
'To draw the car'

After the age of 1; 8 we register more utterances of this kind.

The same tendency appears in the speech of other children, for example, Maxim E. at 1;8.5 – example (18) and at 1;9.28 – examples (19), (20).

(18) *Idi, mama, lepít'.*

¹⁸ Simple verbs are verbs that consist of a root plus thematic vowel, see Forsyth 1970: 17.

go-IMP, mother, model-INF
'Come here, mother, to model'

(19) *Lepit'* *krokodila.*
model-INF crocodile-ACC
'To model the crocodile (with a meaning of imperative)'

(20) *Mama,* *lepiti* *vafu-sobaku.*
mama, model-INF dog-ACC
'Mother, let us model a dog'

The development of complexity of aspectuality starts from the AS that are expressed by the minimal number of elements in the sentence.

6. Conclusion

In this paper we investigated some parts of the acquisition of aspectuality by Russian children. We tried to show the gradual emergence of all numerous components of aspectuality, starting from those that are the most iconic, the clearest for children, the closest to the cognitive base of morphology. We first presented early cues of the emergence of this category: onomatopoeics that children used from the onset of speech. They mark the basic opposition „process–result“ at the earliest stage of extragrammatical morphology. Reduplicative or single use of onomatopoeics correspond a) to the meaning of later acquired IPF or PF verbs, b) to the meaning of the semelfactive actions that happened in the nearest past (and that have the resultative endpoint perceived by a child) and that of ongoing actions in the present without a (clear) end point, respectively. Additionally, we presented the early verb lexicons of six children. We did this in order to show how the first verbs continue to express aspectual differences in AS and in what tenses they tend to occur. We argued that PF verbs, belonging to the telic Aktionsarten class, take mainly past inflections at first, while the IPFs, mainly belonging to the group of atelic Aktionsarten (states, evolutives, verbs of motion, etc.), initially tend to be used in the present tense.

Our results for Russian only partially support the Aspect Hypothesis (part I) of Shirai & Andersen (1995), namely, their conclusion that children first use past marking predominantly with achievements. The situation in Russian is complicated by the existence of aspectual pairs of verbs, members of which can belong to different groups, specified by Vendler, for example, either to achievements, or to accomplishments. The IPF verb of these aspectual pairs that belong to accomplishments does not occur among the earliest verbs. As to their PF correlates that constitute the group of accomplishments in our data, contrary to the Aspect Hypothesis, these imperfective verbs were first marked by present.

Further investigations of the groups of verbs of different Aktionsarten in connection with PF and IPF aspect (and tense marking) would be useful for studies of complex structure of the category of aspectuality.

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