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Issues in Language Sample Analysis of Russian Speaking Children

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Honors Thesis

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<u>Issues in Language Sample Analysis</u>

<u>of Russian Speaking Children.</u>

The purpose of a language sample is to determine the level of the child's development. It is important to observe the stages of his/her development in relation to the "norm." Nonetheless, a sample transcript is not necessarily representative of the child's ability. Factors such the child being too shy or too tired may contribute to inaccuracy of the transcript. It is possible that the child is capable of a lot more than he/she is demonstrating throughout the transcript. Furthermore, when evaluating the child's language development, syntactic, semantic, and pragmatic analysis are looked at.

There are multiple factors, however, when evaluating the development of Russian speaking children. Unlike for English speaking children, there is hardly any data available for Russian children's norms. Typically, when examining a language sample obtained from an English speaking child, one would pay attention to the Mean Length of Utterance, which is a number of morphemes that the child produces during each utterance, Brown's fourteen morphemes, Templin's Type – Token Ration, Semantic Roles Coding Sheet, and the pragmatic analysis (Retherford, 2000). Further, there is a great amount of research published to demonstrate the norms for these areas of development. Gutierres-Clellen, Restrepo, Bedore, Pena, & Anderson, (2000) discuss the issues involved in language sample analysis in Spanish speaking children. These issues are similar to those being encountered with Russian speaking children.

The main problem is that there is not enough research, norms and data available to standardize the findings. In Spanish, similarly to Russian language, one has to examine inflections, gender, number, diminutive and augmentative inflections and cases for nouns, adjectives, and pronouns, as well number, person, tense, and mood for verbs. The conflict arises because these things do not exist and do not get counted for an English speaking child. Therefore, it is impossible to compare the norms. Another issue is that the MLU cannot be used to analyze utterances with code switching elements. That is, if a child spoke half in English and half in Russian – it cannot be transcribed because it interferes with the rules for each language (Gutierres-Clellen et al., 2000).

For the purpose of this paper, I will examine two language samples obtained from two Russian speaking children both of whom were slightly under three years of age (2.11 and 2.10) at the time of the language sample. Both of these children were born in the United States, but their dominant language is Russian, with partial knowledge of the English language. They attend a Russian day care center where their caregivers communicate with them in Russian and the language spoken in the home is Russian as well.

Three areas of language were analyzed: Syntax, Semantics, and Pragmatics. Syntax was examined by calculating MLU, which was calculated rather different than usually for an English language speaking child. The second area of development being examined was the use of Semantic Roles. This area usually looks at the middle 50% of the sample, but in this analysis the whole sample was examined because the sample only contained 28 utterances for child A and 54 utterances for child B. Finally, the third area of examination was the pragmatics, which also analyzed the whole sample (28 &54 utterances) instead of the 25 % due to a small language sample.

The semantic coding examines child's total use of the 20 roles. From the chart, we can see that child A (Vika) did not make any use of recipient, comitative, created object, instrument, and one term entity. However, there was a great use of object, agent, action, demonstrative, experiencer, possessor, recurrence, quantifier, multi term entity, negation, and many more. Clearly, Vika only omitted 5 out of 20 semantic roles, demonstrating the use of 75% of the roles. Similarly, child B (Liana) demonstrated the use of most semantic roles. These results can be compared to the norms found for English speaking children. Typically, the biggest change that occurs during the early stages of linguistic production is that children begin to use agent, object, demonstrative, recurrence, possessor, attribute, and adverbial. Clearly, both of the children in this study demonstrated the use of all of these semantic roles and some were even advance for their age. It is also important to note that the language samples that were obtained were small, involving both participants simultaneously, and were right before nap time, which could have also altered the results.

The pragmatic analysis shows that both children (Vika and Liana) use requests, labeling, statements, and many responses to requests. These results are similar to the norms discussed in Retherford (2000), where children similar in age mainly demonstrate responses to requests and labeling. The fact that there are many more responses to requests than requests by the children can be because I was the one who initiated most of the conversations, and I was the one who produced most of the requests. The children were also interacting among themselves, where the conversational skills required differ from those involving adults. In the Russian language and culture, especially, there is a certain way of addressing someone who is older and someone to whom you have just been introduced to. The person's first name is combined with a conjugated form of his/her father's name. For example, if my name is Yelena Unik and my father's name is

Mikhail, I would be addressed as Unik Yelena Mikailavna. In addition, in Russian, there are two forms of '*you*': one that is appropriate when addressing an adult [*vi*] and one that is appropriate when communicating with a friend of a same age [ti]. In fact, it would be offensive to an adult if he/she was addressed with the [*ti*] version of '*you*'. This may have also affected the way that each child communicated during the language sample because they way the two children interact among themselves is very different from the way they interact with adults. When speaking with adults, there is a more formal language approach, which alters the total mean length of utterances.

Russian syntax is slightly different from English. The word order in Russian isn't as structured as it is in English. In Russian, it is the case system and word endings that determine the subject and object within the sentence (Timberlake, 2003). For example, the English possessive form *'Alex's friend'* appears in Russian language as the genitive case and turns into *'friend of Alex'*. Overall, Russian syntactic structures consist of 6 cases: nominative, accusative, genitive, dative, prepositional, and instrumental case. Nominative case refers to the subject of the sentence, accusative is the direct object, genitive relates to possession, dative is indirect object, prepositional case includes prepositions, such as *in & on,* and instrumental case is the way that action is carried out (Timberlake, 2003). When calculating the MLU for the current study, the six cases listed above were examined and considered for every noun. In Russian, more morphemes are used to count each word. Unlike in English, where every utterance gets a certain amount of morphemes based on the syntactic structure, MLU, was calculated similarly to the approach discussed in the Gutierrez-Clellen and colleagues (2000) article: each utterance was broken down into words and every word was evaluated based on gender, root, tense, singular/plural, case, and whether or not it was diminutive. The nouns for example, were analyzed based on cases, and any

other component that applied to the particular word. That is why the MLU cannot be compared to any norms for English speaking children because the way that the MLU was obtained is very different from the way an English language sample would have been obtained. Her sentence structure was complex but cannot be compared to any particular Brown's stage because her sentences were translated into English and it would be inaccurate to compare results to data that is normed for English speaking children.

Verbs in the Russian language have to agree with the subject nouns in gender. Past tense verbs and all adjectives, pronouns and attributes in Russian are conjugated according to feminine, masculine, plural or neuter, depending on the subject of the noun (Timberlake, 2003). For example, "he **went** to the store" the verb **went**, would have a different ending depending on the subject (he, she, they or it). Same applies to adjectives, pronouns and attributes that describe the noun. For example, *ona krasivaya* (she is good looking) has a different ending from *on krasivii* (he is good looking). In the English language, however, there is a past tense **ed** ending, with a few irregular past tense verbs; and adjectives, pronouns, and attributes don't differentiate between feminine, masculine, plural, and neuter form. It is also important to note that while generally feminine nouns end with a suffix 'a', there are a few exceptions where masculine words have an ending with 'a'. In these cases, even though children mastered the agreement rule, they will still make mistakes with such words. Therefore, they will use the masculine form of a noun with a feminine past tense verb. Interestingly, Russian contains only past, present, and future tenses. However, the English language also consists of morphological marking for progressive actions in the past, present, or future (Bar-Shalom, 2002). The Russian language also possesses four adjectival and two adverbial participles. The English language, however, has only two participles: *I am cleaning* (present) and *I have cleaned* (past) (Cubberly, 2002).

Furthermore, there are no articles (a & the) in the Russian language. Therefore, a Russian speaking child may apply this Russian rule to English language and can easily be mistaken for a language disorder. Intonation also plays an important role in the Russian language. Intonation with which the sentence is pronounced is related to syntactic structure and word order. For example, the statement *ti pyosh* (you are drinking) can be pronounced with a rising intonation *ti pyosh?* (are you drinking?). Stress of the word is similarly important. The meaning of the word may vary depending on which syllable the stress falls on (Cubberly, 2002). For example, the word [*muka*] with the stress on a first syllable means torture; however, same word [*muka*] with the stress on a second syllable means flour. This is also true for some English words. For example, words such as [rec*o*rd and r*e*cord] vary in meaning depending where the stress is placed. This is where the semantic analysis applies. In this particular language analysis, the word order was simple and direct, but in an older child, one would have to pay closer attention to stress, intonation, and word order because it can possible change the meaning of the sentence and ultimately change the semantic analysis results.

The Russian language consists of inflectional and derivational morphology as does English. Inflectional morphology deals with inflections of words. Derivational morphology, which is also known as word formation is responsible for creating new sets of words from each old one. This is done by adding suffixes and prefixes to existing words, which change the meaning of the word, and therefore creates a new word. In addition, Russian verbs are primarily imperfective and when a prefix is added, they become perfective. For example: the verb [pisat'] (to write) is imperfective and when a prefix *"pro"* is added [propisal] – it becomes perfective. However, when prefixes are added for reasons other than to make the verb perfective, a new verb is created. The perfective verbs usually emphasize the boundary of completion, while

imperfective verbs indicate an ongoing action (Bar-Shalom, 2002). Bar-Shalom (2002) conducted a study of four monolingual Russian children ages 1 year and 6 months – 2 years and 11 months and observed their acquisition of aspect and tense. The results demonstrated that all of the children used both telic and atelic verbs in the past tense. In addition, they produced atelic imperfectives such as [*xotela*] – *wanted* and atelic perfectives [*poplavali*] – '*swam for a while'*. Furthermore, these children also displayed good usage of future tense. It is important to note that in the future tense of the Russian language, perfective verbs are acquired before the imperfectives are. However, as the child gets older, he/she begins to use imperfectives more accurately. Perfectives, on the other hand, are never used in the present tense and the participants in this study demonstrated this by using only imperfectives when referring to present tense actions (Bar-Shalom, 2002). The children (Vika and Liana) also used only imperfectives when referring to present tense actions. In addition, when discussing events from the past, they also used atelic imperfectives [child: Liana – utterance # 41], just like the children in Bar-Shalom (2002) study.

It is important to observe not just the use of perfective and imperfective verbs, but also the use of complex verb morphemes among Russian children. Gor & Chernigovskaya (2003) conducted a study where the processing of verbal morphology in Russian was observed among Russian children ages 4-6. The morphological processes that were examined were [*aj*] as in *gul'at* –to walk; [a] as in *pisat* – to write; [*i*] as in *nosit* – to carry & [*ova*] as in *probovat'* – to try. The [*aj*] pattern appeared to be the default pattern in younger children and as the children got older, the non-default [*a*] & [*i*] responses increased. Furthermore, the use of [*aj*] pattern decreased among older children. Similarly, since the children in this analysis are younger than

those discussed in the study above, they used the [*aj*] pattern – the default pattern in younger children.

Thus far, the paper discussed the acquisition of morphemes, syntax, and phonology in Russian speaking children. However, it is also important to analyze acquisition of morphemes and tense agreement among Russian children who are learning English as a second language. Ionin & Wexler (2002) investigated 20 Russian children's acquisition of English as a second language. The children's mean age was 8 years, 4 month, and they had lived in U.S. between less than a year and up to 3 years. The morphemes that were examined included third person [*s*], past tense [*ed*], auxiliary [*be*], and copula [*be*] in obligatory contexts. The results demonstrated a great number of omissions of such morphemes. However, these children displayed limited tense agreement errors. It is important to note that the Russian language does not contain copula [*be*] in the present tense and does not have auxiliary [*be*] in any tense except for the compound future tense. Another concept that was observed was that majority of the children over-generalized the use of [*be*] forms instead of progressive participle. For example, *the lion is go down*. These results can be attributed to the fact that these children might not have had enough time to master language specific morphological rules. Furthermore, just like L1 learners need time to acquire and master the phonological processes, so do L2 learners. In addition, this error can also be as a result of the influence of Russian language.

Although the children in the current study were significantly younger, they were also learning L2, while dominant in L1. Throughout the language sample, they did not mix L1 and L2, but they did use the word *baby* and *ok* in their speech. Perhaps these two words are usually used by their caregivers within the context of Russian language. Within the language sample, these two words could not have been analyzed they way other words were and just received a

marking of 1. On the other hand, if these two words were said in Russian, depending on the conjugated ending that the child would use, it might have received a marking of 4 or 5 points, which would change the MLU.

Clearly, analyzing a language sample of Russian speaking children is very different from analyzing a language sample of English speaking children. The main difference that arises is that there are not any norms for Russian speaking children. Further, when evaluating the MLU, each word gets broken down into 5-6 components, which is the MLU. In addition, when judging the semantics portion of the sample, it is important to keep in mind the sentence structure common to the Russian language and how it affects the meaning of it. Finally, pragmatics can differ due to cultural differences and the way adults are approached as opposed to same age individuals. All of these components play a role when analyzing a language sample in Russian speaking children. It is very difficult to place a child into a particular stage of development. Rather, it is important to examine every aspect of his/her language development and use it an informal assessment. It is important to interview the parents and find out if there is simultaneous L1 and L2 acquisition. If there is, it may delay proficient language development. Further, it is important to recognize a difference vs. a disorder. Therefore it is imperative to research the typical development within the particular language, culture and population.

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SYNTACTIC ANALYSIS

By: Yelena Unik   Child: <u>Vika</u>

MLU

UTTERANCE NUMBER	NUMBER OF MORPHEMES
1.	15
2.	2
3.	4
4.	11
5.	5
6.	13
7.	7
8.	12
9.	5
10.	4
11.	5
12.	6
13.	5
14.	6
15.	3
16.	3
17.	3
18.	3
19.	11
20.	4
21.	4
22.	2
23.	2
24.	3
25.	1
26.	4
27.	3
28.	1

Subtotal	147

Total Number
Of Morphemes = [147] = 5.25 MLU
Total Number   [28]
Of Utterances

SEMANTIC ANALYSIS

By: Yelena Unik   Child: <u>Vika</u>

Semantic Roles Coding Sheet

Utterance Number	Semantic Coding	Question
1	CD (Yes/**No** Response)Agent Action Multi Term Entity Multi Term Entity Multi Term Entity	
2	Negation Multi Term	
3	Agent State Quantifier Adverbial Quantifier	
4	Agent Locative Object Action	
5	Agent Action	
6	Possessor Agent Action Object	
7	Agent Action Object	
8	Possessor Agent Action Object Beneficiary Action	
9	Agent Action Demonstrative	
10	Agent Negation Action Recurrence Object	
11	Experiencer Possessor Object	
12	Experiencer State Attribute	
13	Agent State Attribute	
14	Experiencer Action	
15	Experiencer	
16	Experiencer	
17	Attribute	
18	Action	
19	Agent Action Multi Term Entity Multi Term Entity	
20	Agent Action	
21	Object	
22	Attribute	
23	Attribute	
24	Demonstrative	
25	CD (**Yes**/No Response)	
26	Demonstrative Object	
27	Object	
28	CD (**Yes**/No Response)	

PRAGMATIC ANALYSIS

By: Yelena Unik   Child: <u>Vika</u>

Dore's Primitive Speech Acts

Act	Child Utterance Number	Total / %
Labeling	5, 9, 21, 25, 26	5 5
Repeating	13,	1 1
Answering	1, 2, 3, 4, 6, 7, 8, 11, 12, 14, 15, 16, 17, 18, 20, 22, 23, 25, 27, 28	20 20
Requesting Action	24	1 1
Requesting Answer		0 0
Calling		0 0
Greeting		0 0
Protesting		0 0
Practicing	10, 19,	2 2

SYNTACTIC ANALYSIS

By: Yelena Unik   Child: <u>Liana</u>

MLU

UTTERANCE NUMBER	NUMBER OF MORPHEMES
29.	1
30.	2
31.	2
32.	2
33.	1
34.	1
35.	3
36.	3
37.	1
38.	1
39.	1
40.	3
41.	4
42.	4
43.	2
44.	3
45.	3
46.	3
47.	5
48.	4
49.	3
50.	4
51.	4
52.	4
53.	15
54.	2
55.	2
56.	3
57.	5
58.	3
59.	2
60.	6
61.	8
62.	3
63.	8
64.	1
65.	9
66.	12

67.	1
68.	5
69.	6
70.	4
71.	6
72.	2
73.	1
74.	4
75.	3
76.	3
77.	1
78.	4
79.	1
80.	14
81.	9
82.	5

Subtotal	208

Total Number
Of Morphemes = [208] = 3.85 MLU
Total Number   [54]
Of Utterances

SEMANTIC ANALYSIS

By: Yelena Unik   Child: <u>Liana</u>

Semantic Roles Coding Sheet

Utterance Number	Semantic Coding	Question
1	Locative	
2	Locative-demonstrative-object	
3	Locative-demonstrative-object	
4	Demonstrative-object	
5	One term entity	
6	One term entity	
7	Experiencer-instrument	
8	Negation-demonstrative-instrument-locative	
9	One term entity	✓
10	Demonstrative	
11	One term entity	
12	Negation-locative-demonstrative-instrument	
13	Locative-demonstrative-instrument	
14	Locative-demonstrative-instrument	
15	Demonstrative-instrument	
16	Multi- term entity	✓
17	Locative-negation-complex	
18	Locative-multi-term entity	
19	Agent-object-state-locative	
20	Instrument-action	
21	Negation-action	
22	Negation-demonstrative-object	
23	Demonstrative-state-object	
24	Demonstrative-object	
25	Experiencer-demonstrative-action-negation complex	
26	One term entity	
27	Negation	
28	Negation	
29	Object-demonstrative	
30	Locative-action	
31	One term entity	
32	Object-demonstrative-negation	✓
33	Demonstrative-object-state	
34	Multi-term entity	
35	Negation-agent-object	✓
36	CD (yes-no response)	

37	Agent-negation-state-action-attribute	
38	Agent-action-negation	
39	CD (yes-no response)	
40	Agent-negation-action	
41	Negation-agent-action-locative	
42	Agent-locative	
43	Locative-agent-state	
44	Multi-term entity	
45	CD (yes-no response)	
46	Agent-action	
47	Agent-action	
48	Demonstrative-state-agent	
49	CD (yes-no response)	
50	Agent-state-action	
51	One term entity	
52	Agent-action-state-negation-locative	
53	Negation-state-agent	
54	Agent-action-state	

PRAGMATIC ANALYSIS

By: Yelena Unik   Child: <u>Liana</u>

Dore's Primitive Speech Acts

Act	Child Utterance Number	Total / %
Labeling	1, 2, 3, 7, 13, 14, 15, 23, 33, 47, 48,	**11** **11**
Repeating	9,	**1** **1**
Answering	4,, 5, 6, 8, 10, 11, 12, 17, 18, 20, 21, 22, 24, 26, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 49, 50, 51, 52, 53, 54	**39** **39**
Requesting Action		**0** **0**
Requesting Answer	16,	**1** **1**
Calling		**0** **0**
Greeting		**0** **0**
Protesting	25,	**1** **1**
Practicing	19,	**1** **1**