

Acquisition of Inflectional Morphology in Estonian: Individual Differences in the Acquisition of Number

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Introduction

The realization of the category of number varies cross-linguistically, in Estonian language both nouns and verbs inflect in number. The paper examines the role of individual differences in the early acquisition of number inside the set of triplets. The main goal is to investigate if the development of number is homogeneous across children in the set of triplets or not, and which are the factors determining the individual variation. The acquisition of plural is especially intriguing area of language acquisition in the multiple birth sets: there usually more than one child in the same acquisition situation, therefore the plurality, especially plural verb forms are pragmatically more natural in the case of triplets than it is in singletons.

Data and Method

Some preliminary data from triplets was collected as a pivot project to the consecutive bigger triplets database. Recordings of spontaneous speech (approximately 6 hours) cover mostly the premorphological phase and the transition to the protomorphological phase of language acquisition (for criteria see the next section); the beginning of the acquisition of inflectional morphology. Data was transcribed in CHAT-format and analyzed (both the output and the input) using CLAN-program (see <http://childes.psy.cmu.edu/>). Comparisons are made with available Estonian data from singletons (Andreas's data in CHILDES database and data available from publications about the acquisition of Estonian) on the basis of child's age¹ and MLU. The overview of recorded speech material of triplets, the number of turns (speech production) of each child and the values of MLU is presented in the Table 1.

Table 1. Recordings of spontaneous speech of triplets

<i>Date</i>	<i>Age of children</i>	<i>Liisa</i>		<i>Mihkel</i>		<i>Annela</i>	
		<i>number of turns</i>	<i>MLU, counted in words</i>	<i>number of turns</i>	<i>MLU, counted in words</i>	<i>number of turns</i>	<i>MLU, counted in words</i>
22.11.1999	2;6.18	127	2.02	136	2.37	124	2.21
22.12.1999	2;7.16	132	2.09	102	2.40	245	2.52
05.01.2000	2;7.29	173	1.98	132	2.55	91	2.02
04.02.2000	2;8.29	220	2.15	210	2.43	91	2.42
01.03.2000	2;9.24	220	2.50	190	2.71	192	2.52

1 The child's age is marked with a full year, full months after semicolon, days are given after full stop only if needed in the case of for emphasizing a time interval.

Theoretical Background

Two theoretical approaches are relevant in the context of the present study: Pre- and protomorphological approach (see for example Dressler 1995) and usage-based theory of language acquisition (see for example Tomasello 2003). According to Dressler “the linguistic modules (like inflectional morphology) are not genetically inherited and the system of morphological grammar is developing only in the protomorphological stage” (Dressler 1995: 1).

The premorphological phase is considered to be the emergence phase, in which children “access a limited number of lexically stored morphologically complex word forms” (Dressler et. al. 2002: 392). According to usage-based theories “children learn inflection by learning some specific constructions involving particular lexical items, before going to gradually abstract more general construction types” (Wilson 2003: 75) and many morphemes are not productive and are used like lexically specific patterns (Tomasello 2003: 117). According to previous studies on the acquisition of Estonian morphology it can be stated that the premorphological phase in the acquisition of Estonian morphology is characterized by: 1) the use of rote-learned inflectional forms; 2) the great importance of input frequencies: the order of occurrence of inflectional categories of verbs and nouns is mostly predicted by input frequencies (Argus 2004, 2006).

The protomorphological phase is considered to be the acquisition phase (Kilani-Schoch, Dressler 2002), when the child starts to generalize over rote-learned forms. The child needs more than one form from the same lexeme to start to generalize about these stored forms and to start morphological processing. To identify the detection of morphology Dressler and Kilani-Schoch have elaborated the concept of the emergence of mini-paradigms: a true mini-paradigm is an incomplete paradigm corresponding to a non-isolated set of minimally three phonologically unambiguous and distinct inflectional forms of the same word type produced spontaneously in contrasting syntactic or situative contexts in the same months of recordings (Dressler et. al. 2002: 396). The mini-paradigm is like a smaller piece of a total (sometimes very large) paradigm, consisting of most important and frequent forms. The child selects and stores morphological patterns of high token frequency; while productive patterns have a higher chance to be taken up by children than unproductive ones, partly because these patterns are frequent and natural (Dressler 2003). The active acquisition of the Estonian inflectional morphology starts at the protomorphological phase when first true mini-paradigms occur, the importance of morphophonemic and morphological features become evident and the rote-learning is not dominating any more (Argus 2004).

The Category of Number in Estonian

A short description of the category of number in Estonian is provided below. Estonian language belongs to the Finnic branch of the Finno-Urgic language family, typologically Estonian is an agglutinating language but more fusional and analytic than for example Finnish.

The category of number is grammaticalized in Estonian language. Estonian distinguishes two numbers, singular and plural. While the singular is unmarked, the plural marker follows the stem and precedes the case suffix (e.g. *maja-de-ga* 'house-PL-COM'). There are two sets of plural markers in nouns: the agglutinative *de*-plural (for example *kala-de-l* 'fish-PL-ADESS') and the vowel plural, divided into the agglutinative *i*-plural (for example *laulja-i-l* 'singer-PL-ADESS') and the fusional stem-plural (for example *jalg* 'foot:NOM' : *jal-u-l* 'foot-PL-ADESS'). The agglutinative *de*-plural is common to all nominals (except some pronouns) and occurs in all cases except the partitive, which is always formed by vowel fusion (*jalgu* 'foot-PRTV') or the suffix *-sid* (*jalga-sid* 'foot-PL:PRTV'), in which

the plural and case allomorphs are fused. The suffix *-de* has three allomorphs: *-d*, *de*, and *-te* (*ema-d* 'mother-PL:NOM', *ema-de* 'mother-PL:GEN', *pois-te* 'boy-PL:GEN'). The allomorph *-d* occurs only in the nominative; in all other cases plurality is expressed either by the oblique-case plural suffix *-de* or *-te* (depending on the final phoneme of the stem) or by modification of the stem vowel (stem plural). In some patterns the vowel plural can occur in parallel with the *de*-plural, the choice between the two depending on the stylistic value of the two forms.

Phonological changes of the stem have great importance in the inflection in Estonian. When the stem is subject to gradation it will occur in different forms in different grades (strong or weak). Gradation in Estonian includes both alternation in quantity, in which a phonetically stronger stem shape, the so-called strong grade alternates with a phonetically weaker shape, the weak grade (for example *koti* 'bag:GEN' > *kotti* 'bag:PRTV' or *haka-ta* 'start-2INF' > *hakka-n* 'start-1SG'), and in quality, which is mostly reflected in the change, assimilation or loss of the onset single obstruent of the second syllable in the weak grade (for example *jalg* 'foot:NOM' > *jala* 'foot:GEN' or *luge-da* 'read-2INF' > *loe-n* 'read-1SG') (see also for example Viitso 2003: 26). The plural suffix is added to the weak stem variant (the nominative stem) in the case of words with a strengthening stem (e.g. *hammas* 'teeth:SG.NOM' > *hamba* 'teeth:SG.PRTV' and *hammas-te* 'teeth-PL.GEN'), but to the strong-grade stem variant (the partitive stem) in the case of words with a weakening stem (e.g. *jalg* 'foot:SG.NOM' > *jala* 'foot:SG.GEN' > *jalga* 'foot:SG.PRTV' and *jalga-de-ga* 'feet-PL-COM').

There are several possibilities to express plurality also with lexical means, using quantifiers and numerals with plural, but also with singular case forms (for example *palju kasse* 'a lot of cat:PL.PRTV' or *kolm kassi* 'three cat:SG.PRTV').

Verbs are inflected for three persons in plural in Estonian: the first (e. g. *me sõida-me* 'we drive-1PL'), the second (e. g. *te sõida-te* 'you drive-2PL') and the third (e. g. *nad sõida-vad* 'they drive-3PL'). Verbs with weakening gradation (e. g. *tege-ma* 'do-1INF') have weak grade stem (e. g. *tee-me* 'do-1PL') and verbs with strengthening gradation (e. g. *hüppa-ta* 'jump-2INF') have strong grade (e. g. *hüppa-me* 'jump-1PL') in plural present indicative.

Research Questions and Assumptions

Triplets are an excellent natural phenomenon providing an opportunity to compare a development of inflectional morphology both within the triad and also with singletons. The goal of the study is to examine the general course of the acquisition and individual differences inside the set of triplets including factors determining the individual variation. The first general question is when and how children start to acquire the category of number. The question is connected to pragmatic factors influencing the acquisition of inflectional morphology, like language acquisition in a very special environment, in the triplet situation (there is always more than one child participating in the same language acquisition situation), where the plurality is more “present”, more important than it is in the so called singleton situation. Therefore it can be assumed that triplets will acquire plural earlier than singletons and plural verb forms earlier than plural case forms.

One purpose of this study is to determine how the input frequency influence the acquisition of number. Children can choose different routes for developing number marking (see for example Stephany 2002: 18) but the acquisition of number can be supposed to be identical inside the set of triplets, at least at the premorphological phase when the importance of the input is considered to be the highest, although it has been stated that children in multiple birth set can differ as much as any two subjects (Ravit 1997: 81).

There are a lot of noun constructions with some quantifier frequent in the input to children (Argus 2006: 24), therefore it can be supposed that the emergence of the category

of number will take place already in the premorphological phase when the importance of the input is dominating and many plural forms are acquired in some kind of lexically specific patterns or constructions which are frequent also in the input.

The third question arises about morphological preferences: productive patterns have been considered to be acquired earlier than unproductive ones (Dressler 2003: 7). There are some lexemes with high frequency inflecting according to unproductive inflectional pattern in the input. The questions are: which factor has more significant impact on the acquisition of plural, input frequency or productivity, and which role will the morphophonemic and morphological features play on the protomorphological phase of language acquisition? According to Stephany (2002: 17) “The agglutinating technique of indicating number and case by separate markers seems to favor acquisition as compared to the fusional technique.” In Estonian plural partitive is formed using fusional technique while other plural case forms can be formed using agglutinating technique, therefore it can be supposed that the plural partitive as a case form with rather complicated technique of formation will be acquired later than other case forms.

Below I present an analysis of the triplets’ development of the category of plural. First, the background information of the development of plural in the language of singletons is provided. Then, the development of the category of number is analyzed grammatically for all three children separately in pre- and protomorphological phase of language acquisition.

Acquisition of plural at the premorphological phase: omission of plural nominative suffix and the use of lexically specific patterns

There is not much data available on the early acquisition of singular-plural distinction, still it has been argued that English-speaking children first come to understand the semantic force of the singular-plural distinction in the months just before their 2nd birthday and in the beginning it is easier to understand the singular-plural distinction in verbs (*is/are*) than in nouns (Kouider et. al. 2006: 2). It is likely that children comprehend linguistic expressions of the distinction of singular-plural before they begin to produce them.

The singletons under observation started to use plural case forms later than singular forms; first plural forms emerge when there are already several singular case forms (grammatical cases, illative and inessive) acquired. Plural case forms become productive² approximately two months after the first occurrence, at child's age 2;0. In contrast to the singular, the plural partitive, not nominative, like in singular case forms, emerges early (for example *lilli* 'flower:PL.PRTV', *pois-te* 'boy-GEN.PL' at age 1;8), while the plural nominative develops much later. Some nominatives without plural suffix (*kõrva-0* 'ear-') from frequent nouns were also used at age 1;8, when the MLU was 1.2, in other words: there were already more than one word in the child's utterances (Argus 2004: 40), but no plural nominative suffix acquired.

According to data describing the acquisition of Estonian verbal inflection it can be argued that among plural verb forms rote-learned plural 1st person (*lähe-me* 'go-1PL') and also some plural 3. person forms (*tee-vad* 'do-3PL') emerge first, at age 1;9, when the value of MLU is 1.5 (Vihman & Vija 2006: 24).

Triplets started the acquisition of plural case forms, like singletons, mostly from partitive (e. g. *loomi* 'animal:PL.PRTV' Mihkel 2;6, *asju* 'thing:PL.PRTV' Annela 2;7). One child, Liisa

² The inflectional form can be considered to be productively used when there is at least two plural forms in the same recording and there are also other form or forms occurring from the same lexeme in the same recording. About the criteria of the productivity see for example Vihman et. al. 2003.

used first plural nominatives (e. g. *poisi-* [instead of *poisid*] 'boy-' at age 2;7). Triplets' first plural nouns emerged when the MLU in their speech was already over 2 (2.0-2.5), thus, they started to acquire plural nouns later than singletons, when they had already more than two words in the utterance.

The assumption concerning the early acquisition of agglutinating *versus* fusional technique cannot be correct, plural partitive case forms are occurring early. But, on the other hand, it can be supposed that the first plural partitives are rote-learned, there were no other case forms from lexemes occurring in plural partitive in the first recording. In addition, all plural partitives were used in the lexically specific pattern. The construction with the plural partitive and a quantifier *palju* 'a lot of' emerged first: *palju asju* 'many thing:PL.PRTV' Mihkel at age 2;6, Annela at age 2;7, the construction with the quantifier *veel* 'more' emerged next: *veel klotse* 'more block:PL:PRTV' Annela at age 2;7. The special lexical patterns like a quantifier with a noun in plural partitive can be supposed to facilitate the acquisition of a rather complicated case form.

First contrasting uses of singular and plural case forms from the same lexeme were emerging in the second recording in the speech of Annela, she used both plural and singular partitive from the same lexeme: *klotse* 'block:PL.PRTV' and *klotsi* 'block:S.PRTV' at the age 2;7. In the next recording, that is 13 days later, also other children used some contrasts of singular and plural case forms, while contrasting case forms were all nominatives: for example *poiss* 'boy:S.NOM' : *poisi-* 'boy-'. In the example presented above the child used the appropriate stem-variant (the genitive stem) but no plural suffix. Omission of the plural nominative suffix *-d* was registered in the speech of triplets and it has also been noticed to exist in the speech of singletons (Argus 2006). First plural nominatives were occurring in correct stem variant, but always used without plural suffix (*pilve-* 'cloud-0' at Liisa's age 2;6, when the value of MLU was 2.2). Unlike plural partitives, plural nominatives did not emerge in lexically specific constructions. Plural nominatives were always used in one-word sentences as an answer to mother's preceding turn and always in the function of the predicative:

*OBS: kes need on?³

%eng: who are they?

%com: pointing to the picture on the cup.

*LII: *poisi-* [*poisid*].

%mor: boy-.

Plural case forms were not frequent nor all plural forms were used productively even at the end of the observation period: there were a lot of lexemes occurring only in plural, whereby no one of these lexemes was *pluralia tantum*. Three lexemes occurred in singular and in plural in the speech of Liisa and Mihkel, and only one in the speech of Annela.

Individual differences in the acquisition of plural case forms concerned both the time when first plural forms emerged and the total amount of plural case forms in the speech of children. First plural forms were used by Mihkel at age 2;6, there was a plural form in the next recording, occurring in number contrast, in the speech of Annela. Liisa started to use plural forms later, at the age 2;7.29. Individual differences concerning the amount of plural case forms in the speech of triplets were still not significant. There was biggest amount of plural case forms in the speech of Mihkel (12 types/20 tokens), 10 types and 12 tokens of plural forms were registered in the speech of Liisa and 8 types and 9 tokens in the speech of Annela. Individual differences can only partially be a result of different amount of speech

3 Symbols used in examples are based on the CHILDES-system: *OBS is used for the actual speech, here the turn of observer, line beginning with % is a dependent tier, for example: the line starting with %eng gives a translation in English, line beginning with the code %mor gives a morphological information, line with %com is used for comments.

production in a given recording. The correlation of production and amount of plural forms can be observed only in the speech of Mihkel in the first recording (see also the Table 1) where there were a lot of plural tokens registered and the speech production was highest among children in the set of triplets. Such a correlation between a number of turns in a recording and the amount of plural case forms was not observable in other recordings.

Children started to use plural verb forms later than plural case forms from nouns and they did it at different time. There were plural verb forms in the speech of one child (Annela) approximately two months earlier (at age 2;6) than they appeared in the speech of other children. Only one plural verb form can be considered to be rote-learned in the data of triplets (*kuku-vad* 'fell-3PL' Mihkel at age 2;7.29), other plural verb forms emerging in the speech of Liisa and Annela were used productively from the first usage. Hence, the plural verb forms occurred at the time when there were already several mini-paradigms in the speech of children it can be stated that the emergence of plural verb forms takes place only at the protomorphological phase.

The impact of input frequency to the acquisition order of noun plurals versus verb plurals is not straightforward: there are much more verb plurals than noun plurals in the input. For example, in the first recording the number of verb plural types in the input is 14 and noun plural types is 12. Even bigger difference can be observed in the number of tokens (101 verb plural tokens versus 51 noun plural tokens). Still children started to acquire plural forms from nouns and not from verbs which are more frequent in the input. The acquisition path where noun morphology was acquired earlier than verb morphology is observed also in other languages (Dresselr et. al 2002: 410). When we look at plural case forms and plural constructions with nouns and quantifiers it comes appear that there are more plural case forms (12 types/51 tokens) than constructions with quantifiers (4 types/17 tokens) in the input. Looking at verb plurals in the input it can be supposed that there are some pragmatic factors determining the frequency of verb plurals in the input but not in the speech of children: with verb plurals (e. g. *söö-me* 'eat-1.PL') the mother or the observer can direct or guide the situation or the action, children have no need to use verb plurals in the situations they are guided by adults and they just have to follow adult's activities. Consequently, not only input frequency but also pragmatic factors can guide the acquisition of plural at the premorphological phase of language acquisition.

It will be worth to attach some importance to different semantics of number in nouns and in verbs: the plurality in nouns indicates to the situation where there are more than one thing involved, plurality in verbs does not mean that there are more than one activity involved. Therefore, the child must use indirect mapping, she must attach a plural suffix to a verb knowing that there are more than one actors, not activities involved. This kind of difference in semantics can be one reason why children start to use noun plurals before verb plurals.

Acquisition of number at the protomorphological phase: different plural noun constructions and emergence of different plural verb forms

The protomorphological phase of language acquisition is the phase where the active acquisition of morphology starts and different forms are used productively. Plural noun forms were productively used by singletons at age 2;0 when the value of the MLU was approximately 3.5. First productive plural case forms were most frequent case forms like grammatical cases, the nominative, partitive and genitive.

Productive uses of first and third person plural verb forms (*laula-vad* 'sing-3.PL', *joonista-me* '1.PL') have been registered from the speech of singletons at the same age, at 2;0

when singular present tense forms were already acquired and the value of the MLU was also approximately the same as in the case of productive uses of first plural case forms - 3.6 (see Vihman & Vija 2006: 14). The transition to the protomorphological phase took place at different time and in different word class in the set of triplets. Liisa and Mihkel used their first noun mini-paradigms at age 2;8.29, Annela did not use noun mini-paradigms until the end of the observation period. At the same time Annela started to use verb mini-paradigms at the age 2;6.18, while Liisa and Mihkel used their first verb mini-paradigms more than two months later, at age 2;8.29. Hence, it can be stated that the transition to the protomorphological phase can take place at different time in nouns and verbs.

Plural case forms occurring at the protomorphological phase were all only grammatical cases. Most of plural case forms occurred in mini-paradigms consisting of one plural and two singular case forms (e.g. *klots* 'block:S.NOM' : *klotsi* 'block:S.PRTV' : *klots-e* 'block-PL.PRTV' Liisa 2;8). Thus, the plural forms constitute a joint mini-paradigm with singular case forms. Some significant individual differences inside the set of triplets concerning the acquisition of plural were registered and these differences concerned the first productive uses of plural case forms. Plural case forms were first productively used by Annela at age 2;7.16, Liisa and Mihkel used plural forms productively in the next recording, at the age 2;7.29. It must be mentioned, that the value of MLU in the speech of triplets was significantly lower than it was in the speech of singletons at the point where first plural forms were used productively. It can be that the syntactical or lexical acquisition is not so quick as the morphological acquisition in the case of triplets, but the proper explanation about the difference cannot be expounded on the basis of a restricted amount of triplets' data.

Constructions children used for expressing the number were different. Liisa used a noun in proper stem variant, but the plural suffix *-d* was still missing in the beginning of the protomorphological phase: *need kotsi-* 'these block-' at age 2;7, when the value of MLU was 2.2. Albeit, the plural suffix *-d* was used in the same construction with the suppletive pronoun (e. g. *nee-d*). Plural nominative suffix occurred only at the end of the observation period, children's age 2;9.24, until then she marked the plural nominative only with the stem. It must be also mentioned that there are no disyllable words with the second syllable ending with a consonant at this age in the data of triplets, some disyllable words ending with a consonant were pronounced without the consonant (e. g. *rohke-* [rohkem] 'more' Liisa at age 2;6; *kukku-* [kukkus] 'fell' Annela at the age 2;7). All children observed seem to have had difficulties with producing long second syllables at the beginning of the protomorphological phase, first disyllable nouns with the consonant at the end of the second syllable emerged in the speech of Mihkel at age 2;8 and in the speech of girls at age 2;9.

Other children followed a different path in the acquisition of noun plurals: Annela used a construction consisting of a numeral and a noun, such a construction needs a noun in singular partitive in Estonian, for example *kolm tükki* 'three piece:S.PRTV' at age 2;6 when the value of MLU was 2.2. Mihkel used a construction with a quantifier and plural partitive case form: *palju loomi* 'many animal:PL.PRTV' at age 2;7 when the value of MLU was 2.5. Plural case forms used in a construction with quantifier were acquired later by Liisa, she used much more plural nominative forms without plural suffix. The plural partitive comes productive first in the construction with the quantifier *palju* 'a lot of', such a construction can be considered to be a lexically specific pattern facilitating the acquisition of plural case forms. One factor determining individual differences can also be supposed to be a general communication style of the individual child in the set of triplets. When we will take a closer look at the Table 1, a significant difference in the value of MLU can be noticed in speech of triplets: on child, Liisa has somewhat shorter utterances in every recording. When we look closer at the speech material of Liisa, the usage of one-word utterances is more common in her speech than in the speech of other two children. Hence, the preference of plural

nominative not a construction with quantifier can follow implicitly from the intention to communicate quicker, mostly with short answers to adult's turn.

Although all three children started to use the first plural verb forms at different age, the use of plural verb forms was productive from the appearance of the first plural verb forms in the speech of two children, Liisa and Annela. Annela used plural verb forms earlier than others, all plural verb forms contrasted with some singular form: *tee* 'make:IMP' : *tee-me* 'make-1.PL' at age 2;6. The first plural verb forms children used were not the same, 1st person and 3. person plural verb forms were acquired by children at different time: there were first plural 1st person verb forms, for example *tee-me* 'do-1.PL' in the speech of Annela already at the age 2;6 and the same verb form from the same lexeme in the speech of Liisa two months later, at the age 2;8. Mihkel acquired the 3. person form before 1. plural verb form: *käi-vad* 'go-3.PL' at the age 2;7. 1st person and 3. person plural verb forms were acquired by children at different time: there were first plural 1st person verb forms, for example *tee-me* 'do-1PL' in the speech of Annela already at the age 2;6 and the same verb form from the same lexeme in the speech of Liisa two months later, at the age 2;8. Mihkel acquired the 3. person form before 1. plural verb form: *käi-vad* 'go-3PL' at the age 2;7. 1st person plural verb forms were frequent in the speech of two girls but not in the speech of the boy.

Some pragmatic explanation can be presented here: pragmatic context and the individual temperament of every child can be supposed to have an impact to such a difference in the frequency. The observer noticed often in the everyday situations that the girls were those who initiated the new game or activity and asked the boy to join in (with the 1st person plural verb forms, like *teeme* 'let's do') and the boy just followed the girls. So, the pragmatic context where plural 1st person verb forms can occur existed for girls and not for the boy.

Plural verb forms depended on specific lexeme, for example: there were a lot of 1st person plural verb forms from verbs denoting some kind of initiation, like *teeme* 'let's do' or *lähme* 'let's go' but third person plural forms were used from lexemes denoting some kind of motion, like *käivad* '(they) are going', *hüppavad* '(they) are jumping'. The same tendency was noticed also in the input, there was a connection between the verb form used and the semantics of the verb, but this tendency was not so strong as it was in the speech of triplets. Herewith, the acquisition of plural verb forms is rather lexeme-specific and depends also on pragmatic and semantic factors in the beginning of the protomorphological phase. The usage of plural verb forms was restricted only to three of four lexemes and was not frequent at the end of observation period, because of that and also because of the limited observation period more universal generalizations about the acquisition of plural verb forms can not be made.

Conclusion and discussion

On the basis of the preliminary data presented here it can be argued that the acquisition of the category of number is similar in the case of singleton and triplet children. Inflectional forms emerging first are the same and even first lexemes occurring in plural were almost the same. Similar was also the strategy of omission of the plural suffix in the plural nominative. Still, some differences between singletons and triplets can be found. According to the Table 2 children start to acquire plural inflection at different age: differences can be found on the basis of different biological age of children but also on the basis of MLU, while triplets start the use of first plural forms much later than singletons when their MLU is already significantly higher. Still, the MLU of triplets is lower than singletons at the age when the noun plurals were used productively.

Table 2. Development of the category of number in Estonian: biological age of children

and MLU

	Singletons		Triplets	
	Age of the child	MLU	Age of children	MLU
Emergence of first plural case form	1;8	1.2	Liisa 2;7.16	2.0
			Annela 2;7.16	2.5
			Mihkel 2;6.18	2.4
Productive use of plural case form	2;0	3.6	Liisa 2;7.29	2.0
			Annela 2;7.16	2.5
			Mihkel 2;7.29	2.6
Emergence of first plural verb form	1;9	1.5	Liisa 2;8.29	2.2
			Annela 2;6.18	2.4
			Mihkel 2;7.29	2.6
Productive use of plural verb form	2;0	3.6	Liisa 2;8.29	2.2
			Annela 2;6.18	2.4
			Mihkel 2;8.29	2.4

Studies about the language acquisition in multiple birth sets indicate that there is a mild delay in speech and language onset (see for example Howard 1946; Savic 1980; MacMahon, Dodd 1997) resulting mostly from the triplet situation where children must share the parental input. Triplets under observation started to use the first plural forms approximately 9-10 months later than singletons. But it can be supposed that the language acquisition of triplets becomes cumulative by time, the time interval between the emergence and first productive uses of plural forms is only a month or two, while it was almost four months in the language acquisition of singletons. The comparison of the acquisition of plural on the basis of the value of MLU allows to make predictions of the different speed of the acquisition of inflectional morphology and syntax: Morphological inflections can be acquired at the different stage of syntactical development, for example, the same tendency of the omission of nominative plural suffix can occur at the period of mostly one-word sentences and also at the period of two-or more word sentences.

The premorphological phase of language acquisition in the Estonian category of number was characterized by pragmatically oriented usage of plural verb forms and several rote-learned plural partitives occurring in limited pragmatic contexts. The protomorphological phase in the acquisition of plural in Estonian is characterized by first mini-paradigms, plural verb forms formed united mini-paradigms with singular case forms. The total amount of plural forms is low even at the end of observation period, all plural case forms from semantic cases and plural 2.person verb forms were not registered from the speech material of children, therefore it can be argued that the category of number is not totally established at the triplets' age 2;9.

The acquisition of plural in Estonian can follow different routes in nouns and verbs: plural verb forms were used later than plural nouns but productively from the beginning by two children, but a lot of plural nouns occurred first as rote-learned chunks. Almost all of noun plurals were acquired in some kind of lexically specific pattern, such a use of some kind of pattern was not observed in verbs.

The impact of the input frequency is significant but cannot be considered to be straightforward: There was connection with the order of emergence of the first noun plurals

and their input frequency, but the first verb plurals did not emerge in the premorphological phase although the frequency of plural verb forms in the input was much higher in the case of triplets than singletons. Hence, the “natural plurality” in the triplet situation does not facilitate the acquisition of plural verb forms when the pragmatic context is not supporting the usage of plural verb forms. The impact of input frequency is much stronger in the case of the acquisition order of different plural forms. The acquisition of plural case forms covers the order of frequency of different plural case forms in the input. At the same time, the frequency of noun constructions where plurality was expressed was different in the input: there were a lot of plural case forms in the input and very few plural constructions with numerals and quantifiers. Still children started to use plural case forms in such constructions first. Therefore it can be supposed that the input frequency can have an impact only to the acquisition order of different case forms but does not have a strict influence on the acquisition order of different patterns. The use of some kind of lexically specific pattern can be determined by pragmatic factors like certain situations were the suitable context of using constructions with quantifier and plural noun is present and by individual communication style. The preliminary data presented here does not allow to make concrete conclusions and even predictions about the influence of the individual communication styles; much more data is needed for the further work.

The preference of the fusive stem-plural instead of agglutinative *de*-plural in nouns does not demonstrate some kind of morphological or morphophonological preference, fusive stem-plural is common in very frequent nouns. Plural verb forms were also used from verbs, which are extremely frequent in the input and inflect according to irregular morphological patterns. The restricted amount of data does not allow to make generalizations about the morphophonological or morphological preference of productive or unproductive pattern; the input frequency has still very strong impact on the acquisition of plural at the beginning of the protomorphological phase.

Individual differences in the acquisition of plural forms in the set of triplets were present already at the beginning of the observation period: one girl started the acquisition of plural from verbs and other two from nouns, although the input was the same for all three children. It became apparent that the protomorphological phase of language acquisition can start at different time in different word class, one child started to acquire verb inflection earlier than noun inflection and the other two children started with the acquisition of noun inflection. Although some individual differences in the acquisition of plural can be a result of different amount of speech production in a given recording, still the existence of some kind of individual acquisition strategy can be supposed: children can start to acquire inflectional morphology, including the category of number, from verbs or from nouns. Avoiding constructions with plural case forms and using those requiring singular case forms for expressing plurality, in other words, using the restricted number of case forms demonstrates the possibility of a verb-preference acquisition strategy.

The preliminary data presented in this paper hopefully demonstrates that the much bigger amount of speech data and the more semantic and pragmatic oriented approaches of the analyses of language development of children in multiple birth sets is needed for further work on such a fascinating natural phenomenon providing linguists with the opportunity to compare the language acquisition process in exactly the same language environment.

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