Early Root Nonfinites and the Acquisition of Finiteness in Child Grammar: Evidence from Early Child Slovenian

Dominik Rus
Georgetown University

Introduction

This paper deals with one of the ongoing questions in the field of early syntactic development, namely, the acquisition of *finiteness* and the *agreement paradigms.* In this study, I address the following three questions regarding the acquisition of Slovenian verb morphosyntax: (i) How and when are subject–verb agreement and tense acquired by young Slovenian children?; (ii) Is there empirical evidence suggesting that functional categories are present in early Slovenian grammar; and if so, to what extent?; (iii) What is the status and what are the properties of early root nonfinites, i.e., root infinitives, bare verb stems, and bare participles, which seem to represent some of the most common morphosyntactic constructions in early child systems? I also address the fourth question that falls out from the first three, namely, (iv) What is the initial clause structure of early Child Slovenian?

The paper brings forth theoretical and empirical insights into the syntax of child verb morphology and the clause structure of early grammar, based on natural production data from very early Slovenian.[1]

The paper is organized as follows. First, I briefly review the two opposing accounts regarding the acquisition of functional categories within the generative framework that I assume. Section 2 sketches the morphosyntactic properties of Adult Slovenian that are relevant for our discussion. The subsequent three sections introduce the empirical evidence regarding the syntax of verb morphology of Child Slovenian: Section 3 reviews the knowledge of young Slovenian children's subject–verb agreement, showing that the children's finite verbs appear

[1] The language reported here seems to be a very attractive system from a morphosyntactic point of view since it exhibits extremely rich verb morphology, with Asp(ect) expressed on verb stems, T(ense), Agr(eement), and Asp expressed on verb affixes, as well as an extremely flexible word order with second-position Wackernagel clitics. The grammatical system of Slovenian is a three-gender, three-number, and three-person morphological system, giving rise to two types of agreement, i.e., subject–(finite) verb and subject–past participle agreement (on both active and passive participles).

correctly−inflected for T/Agr from the earliest utterances on; Section 4 provides evidence against a prefunctional stage in early grammar on the basis of constructions with finite verbs in the Present Tense; Section 5 introduces young children's nonfinite verb forms, showing that in the process of language development Slovenian children go neither through a bare stem nor a root infinitive stage; Section 6 concludes the paper, outlaying some open questions and further directions in the study of Child Slovenian morphosyntax and child verb morphosyntax in general.

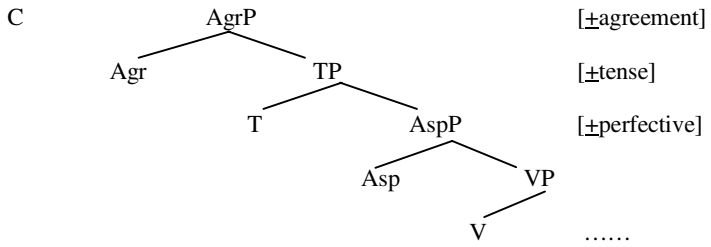
1. The Acquisition of Finiteness and Agreement Paradigms: Previous Hypotheses and Findings

The acquisition of finiteness has been associated with the V(erb) movement parameter and hence the emergence of functional projections, such as T, Agr, C(complementizer). Under the term 'finiteness' we understand the morphosyntactic elements that either directly express person (e.g., main lexical Vs, copulas, auxiliary Vs in periphrastic (compositional) tenses, and modal Vs, all inflected for person/number) or are related to these elements (e.g., subject clitics, reflexive clitics). The acquisition of finiteness is, of course, directly related to the relation *Agree* between the SUBJ(ect) and the predicate, and as such, the child language acquisition literature has focused on the acquisition of agreement paradigms as well.

For Slovenian, I will assume the following feature−based phrase structure representation, where the V and Asp represent the lexical layer, and all the heads above them represent the functional layer, split into the Infl(ectional) and C layers (Montrul 2004):[2]

(1) CP [±focus/topic/wh-]

[2] I am leaving aside the discussion on the presence or absence of the two standardly assumed Infl-related projections, i.e., TP and AgrP. In the present paradigm in the syntactic theory (e.g., Chomsky 1995), TP is being used for both representations though most acquisition studies still use the syntactic representation with the split Infl. See Guasti and Rizzi (2000) for the proposal why both projections are needed on the basis of the acquisition data.



Two main hypotheses dominate the field in terms of the acquisition of functional categories, namely a maturational account and a Full Continuity account. According to the former, children's early utterances are pure instantiations of lexical categories (Radford 1990, 1995; Varlokosta, Vainikka and Rohrbacher 1998) and functional categories only emerge in the final ('functional') stage at around 25 months of age.[3] Radford (1990, 1995) puts forth such a hypothesis on the basis of the English-speaking children's non-adult utterances with T/Agr-less Vs (Bare Verbs; BVs), which seem to be extremely common in early English between the ages of 1.5 and 3. These constructions have been known as R(oot) I(nfinitives) (Rizzi 1993/4), i.e., infinitives used in matrix (root) finite contexts (but see Hoekstra & Hyams 1998 why in English these should be analyzed as BVs rather than RIs).

Several subsequent studies on other early Germanic languages (German, Icelandic, Swedish) and early French found strikingly similar results, namely young children's earliest utterances seemed to lack T/Agr markers (and other finiteness-related elements such as auxiliary Vs (Wexler 1998) or copula Vs (Becker 2000).[4]

The opposing view about the acquisition of functional categories in child grammars sates that most (if not all) functional categories are in place very early in the grammatical system, and are, in fact, innately given by UG (Hyams 2002; 2003; Guasti 1993/4; Poeppel and Wexler

[3] This hypothesis argues that the initial stage in language development is pregrammatical in nature, i.e., the utterances at this stage consist of single words that have not yet been categorized syntactically (as Ns, Vs, etc.). In other words, according to this hypothesis, there is no true syntactic structure in earliest utterances.

[4] However, it turned out that these are *optional* rather than *entirely missing* (see Guasti 2002 for an extensive review of these proposals). Furthermore, it was found that while *omission* of T/Agr seems to be extremely common in child languages cross-linguistically, *commission* (where the T and/or Agr are supplied in incorrect contexts) is hardly attested (see Deen 2002; Hyams 2003).

1993; see Guasti 2002 and Montrul 2004 for detailed reviews). Most of these studies have looked at Romance (null subject) languages with rich agreement paradigms, such as Italian, Catalan and Spanish. Assuming the Full Continuity approach they have shown that early language grammars not only exhibit the Infl−system, but also the C−system. According to these studies, the differences between adult and child languages result from different morphosyntactic specifications of functional projections (Hyams 2003: 8).[5]

Ever since the mid 1980s, researchers have shown that children acquiring null subject languages with rich morphology know the SUBJ−V agreement facts. Hyams (1986) showed that Italian children have productive agreement, showing very few errors. However, her study reported the use of mainly singular V forms. Guasti (1993/4), further showed that Italian children do not make systematic errors at all (she reports 1% of errors on all finite forms for two children and 3% errors for another child) and that later acquisition of plural agreement confirms a developmental trend manifested in other early languages.[6] In sum, as Hyams' (2003) study shows, subject−verb agreement errors never raise above 4%.

I will show below that Slovenian children exhibit (near)-perfect knowledge of subject-verb agreement in the case of finite Vs and that neither the theories proposing a piecemeal acquisition of functional categories nor those assuming some partial knowledge of functional projections can well explain the data coming from the earliest utterances.

As a slight digression, let us briefly sketch the morphosyntactic properties of Adult Slovenian that are relevant for the present discussion.

2. The Syntax of Verb Morphology in Adult Slovenian

[5] There is a third, mixed approach to the acquisition of functional categories that falls between the first two. Sometimes dubbed as the Weak Continuity Hypothesis, it holds that though children may have access to the full set of functional categories and operations that govern functional categories from the onset of the acquisition process, they may not make use of them in their representations right away (e.g., children who have not heard Cs yet do not have a CP representation in their grammars (Vainikka 1993/4)).

[6] Valian (1990) reports that there is a general delay of plurality in child grammars crosslinguistically. Hence, Guasti (1993/4) argues that the lack of plural affixes in early Italian is a more general manifestation of the lack of plurality, rather than evidence that child grammars lack verbal inflection.

Slovenian has only one synthetic tense, namely the Present Tense. Other tenses, i.e., the Past Tense, the Future Tense, and the old-fashioned Pluperfect are all compositional/periphrastic, composed of the auxiliary verb *biti* 'to be' and the active past participle. However, when compared to Germanic and Romance languages, the verb paradigms for the Slovenian Present Tense are much more complex. The productive Present Tense suffixes carry both the T and Agr features that cannot be teased apart morphologically (portmanteau morphemes). Verbs are inflected according to the schema in (2), adapted from Toporišič (2000):

(2) $[\text{Root} + \text{Thematic Vowel}]_{\text{stem}}$ + suffix (Tense/Person/Number)

The morphosyntactic system comprises of three persons (1, 2, 3), three genders (MASC, FEM, NEUT), and three numbers (SG, DU, PL), but since gender has no (separate) morphological instantiation in the Present Tense conjugation, each verb in the paradigm has nine cells, as the following paradigm for the verb *igrati* 'to play' in Table (1) shows:

Table 1: Conjugation of *igrati* ('to play') in the Present Tense

	SG	DU	PL
1	igra**m**	igra**va**	igra**mo**
2	igra**š**	igra**ta**	igra**te**
3	igra**∅**	igra**ta**	igra**jo**

Additionally, the Present Tense paradigm exhibits complex morphophonology with several phonological changes in the verb stem. According to traditional descriptive grammars, there are five classes of verbs regarding the stem's morphophonological changes, summarized in Table 2 below, with a representative example V listed in each class and conjugated in all three persons in the SG (adapted from Toporiši 2000):

Table 2: V paradigms for all five V classes in the Present Tense

Class Conj (SG)	**-am Vs** *igrati* ('to play')	**-im Vs** *narediti* ('to make/do')	**-jem Vs** *piti* ('to drink')	**-em Vs** *pasti* ('to fall')	**-m Vs** *hoteti* ('to want')
1	igram	naredim	pijem	padem	hočem
2	igraš	narediš	piješ	padeš	hočeš
3	igra	naredi	pije	pade	hoče

BE is the only AUX(iliary) that is used in the formation of compositional tenses. It inflects for present in the Past Tense and for future in the Future Tense. Both the present and the future forms of AUXBE are clitics and have no full counterparts, but may be stressed for emphasis or contrast. AUXBE has two non−finite forms, the infinitive (*biti*) and the Past Participle (the *–l* participle) (*bil*), which inflects for number and gender. AUXBE agrees with the SUBJ in person and number, and with the Participle in number and gender. AUXBE c-celects the Active *–l* Participle of lexical verbs (to form compound tenses) and the *–n*/*−t* Passive Participle of lexical verbs to form passive constructions. (3) and (4) below show constructions with the Active Past Participles that will be relevant for our discussion on Bare Participles later on:[7]

(3)	Peter	je	kupil	avto.
	$\text{Peter}_{\text{NOM}}$	$\text{be}_{\text{3SGPRES}}$	$\text{bought}_{\text{SGMASCPERF}}$	$\text{car}_{\text{SGACC}}$
	'Peter has bought/bought a car'			
(4)	Peter	bo	kupil	avto.
	$\text{Peter}_{\text{NOM}}$	$\text{be}_{\text{3SGFUT}}$	$\text{bought}_{\text{SGMASCPERF}}$	$\text{car}_{\text{SGACC}}$
	'Peter will buy a new car'			

3. The Subject-Verb Agreement in Early Child Slovenian

3.1 Data, Method, and Analysis

The data are longitudinal natural production data, obtained from recording children during play at a daycare center in Ljubljana, Slovenia. The method used to collect the data differs from most studies reported in the acquisition literature since as many as 17 children originally participated in the study. To refute Radford's Prefunctional Grammar Hypothesis (or even the Weak Continuity Hypothesis), we analyzed the data from children younger than 25 months only at the end of the recording; hence, we excluded the two oldest children in the group.[8]

---

[7] Slovenian is a typical null-subject language with Wackernagel second position (P2) clitics, exhibiting a common Slavic pattern of (Past) Part(iciple) fronting with a phonologically empty SUBJ(ect) (*Part + SUBJpro + AUXBE (+…*).

[8] The examiner (Kranjc 1999, reported in Rus and Chandra 2005) recorded children on a weekly basis from 10/09/1992 to 01/14/1993. Most of the times she let children talk among themselves while playing, but sometimes she interacted with them. In the data, her utterances are transcribed as well. The transcription also contains utterances of the daycare center teacher who would sometimes play with the children while they were

We calculated MLU for each child. It fell between 1;2 and 1;10 in the beginning of the recording (average across all children: 1;7) and between 1;6 and 2;1 at the end of the recording (average across all children: 1;10). The average MLU across all subjects based on the entire recording period was calculated to be 1;94.[9]

Kranjc (1999), as reported in Rus and Chandra (2005), provides very little information in terms of the acquisition of morphosyntax. Her grammatical analysis section, which contains only a few pages, concentrates mainly on word classes and the division between lexical and functional vocabulary items in the data. She reports that there was a total of 6,086 words in Part A (which is the part analyzed here), of which 1,480 (=24.3%) are nouns and 1,466 (=24%) are verbs. The rest of the word classes are represented as follows: 1,453 (=23.8%) interjections, 740 (=12.1%) pronouns, 523 (=8.7%) adverbs, 89 (=1.4%) adjectives, 80 (=1.3%) quantifiers and only a few cases (less than 1%) of complementizers, prepositions, and conjunctions. The following two tables show the breakdown of all the utterance types (sentence types, C-types) analyzed in this study:[10]

Table 3: A breakdown of all C-types in the data

Sentence Type	Imperatives	Past Participles	Finite Vs	Other
Total #	679	197	187	142
%	56.4	16.3	15.5	11.8

Table 4: C-types analyzed for the present study

Sentence Type	Past Participles	Finite Vs	Other
Total #	197	187	142

being recorded. As customary in the acquisition literature, all direct and immediate repetitions after the teacher, the examiner, or the child herself were excluded in the count.

[9] We see that these children are at a very early stage of development, with their MLU being generally lower than 2;0. Hence, our data will be rather limited in terms of morphosyntactic complexity, though, as we will see below, the acquisition of finiteness is more than evident already at such an early age.

[10] Table 3 shows the breakdown of all C-types in the count, including imperative sentences, while Table 4 shows the C-types excluding the imperatives. It has been customary to discard imperatives in the count in the studies on finiteness since imperatives are believed to be deficient, tenseless clauses (Guasti 1993/4; Salustri & Hyams 2003). However, syntactic literature on Adult Slovenian has always argued that imperatives are full–fledged finite clauses (see Rus 2005 for one analysis and for a review of the existing studies; see also Rus & Chandra in press for imperatives in Child Slovenian).

%	37.4	35.5	27.1

3.2 The Knowledge of Subject-Verb Agreement in the Present Tense

Let us first examine the suppliance of agreement on the Present Tense verbs and the characteristics of the earliest affixes used by the children. By examining Table 5 below, we quickly see an extremely high number of correctly−inflected verbs in the Present:

Table 5: Agreement suppliance in finite Vs

Total # Vs	**187**
Agr correct	174 (=93.05%)

Though compared to the rate of correct SUBJ−V agreement suppliance in most previous studies (cf. our discussion above, based on Hyams 2003), 93% correct may seem a bit low. However, the agreement error facts tell us otherwise, namely almost 70% of the errors in the data are accounted for by the use of 3SG form instead of 1SG form in the cases where the child is referring to herself. This, however, has never been analyzed as an error in the acquisition literature since caretakers often address their children in 3rd person (Guasti 1993/4; Hyams 2003; p.c.). Table 6 shows the three types of agreement errors, of which two (i.e., the use of a bare stem and a wrong agreement marker) are considered 'real' errors. Once we exclude 'the 3SG (='I')' environments from the count, we get the agreement facts as shown in Table 7:[11]

Table 6: Agreement errors

Agr Error	**# (%)**
bare stem	1 (7.7%)
wrong AGR	3 (23.1%)
3GS ('I')	9 (69.2)

Table 7: 'Real' agreement errors

Total # Vs	**187**
Agr correct	183 (=97.9%)

[11] There were three cases in the data where the children left out a complete verb, producing only the subject and the object. We excluded these cases in the count, too. Having included these, there would have been 190 environments with finite Vs, with 7 Vs being incorrectly inflected for T/Agr (1 bare stem, 3 forms with wrong T/Agr marker, and 3 omissions, which all included the V *imeti*, 'to have').

As we see from Table 7, the subject–verb agreement percent correct now increases to almost 98%, which is in line with most other studies on subject–verb agreement:[12]

Finite verbs show a great variety of constructions, as seen in the following examples from the data, with finite verbs in italics:

(5)a. Kapljice *padajo*. (Lenart, 1;9)
drop$_{PLNOM}$ fall$_{3PLPRES}$
'The raindrops are falling'

b. Katja *vozi* Katko. (Lenart, 1;9)
Katja$_{NOM}$ drive$_{3SGPRES}$ Katka$_{SGACC}$
'Katja is driving Katka'

c. Tuki kuža *lula*. (Katja, 1;10)
here doggie$_{SGNOM}$ pee$_{3SGPRES}$
'It is here where the doggie pees/is peeing'

d. Ne *gre* dol. (Lenart, 1;9)
not go$_{3SGPRES}$ down
'It does not go down' (= 'It won't go down.')

e. Bakica, kaj *delaš* ? (Vesna, 1;7)
grannie$_{SGNOM}$ what do$_{2SGPRES}$
'Grannie, what are you doing?'

f. Torbice *nima*. (Vesna, 1;7)
bag$_{SGGEN.}$ not have$_{3SGPRES}$
'S/he doesn't have a bag'

g. *Vrti* se (Kaja, 1;5)
roll$_{3SGPRES}$ $_{REFL}$
'It's rolling/going around'

Slovenian children seem to acquire the verb paradigm very early. However, DU forms as well as 1PL and 2PL forms are not found in the data, with 3SG being the most frequent. This conforms to the previous findings in the field, namely that the singular inflection is the most common and that plural inflections appear later than singular in the course of language development. We found only one case of 3PL with

[12] Note also that the children reported here are a few months younger than most of those reported in Hyams (2003).

finite verbs.[13] Table 8 below shows a breakdown of the inflections found in finite verb constructions regarding the person:

Table 8: Attested verb forms in finite verbs in the present tense

	SG	DU	PL
1	10	N/A	N/A
2	4	N/A	N/A
3	168	N/A	1

4. Prefunctional Stage in Early Slovenian? Evidence from Finite Verbs

The researchers who have argued that there is a prefunctional stage in language development would put forth the following premises about early grammatical systems:

(6) (i) There are no functional projections (e.g., T, Agr) in early systems, but only lexical projections and T/Agr morphology is not productive at all.
(ii) T/Agr-related elements such as modals and reflexive clitics are not present/productive.
(iii) Since there is no left periphery in the earliest systems, there are no C-related elements (e.g., complementizers,

[13] However, 3PL appears quite frequently with COPBE, so it is probably not true that crosslinguistically early verbs will generally appear in the SG only. Also, DU forms might not be found in the data simply because there might not be any DU contexts. From the transcript alone, it is hard to determine whether the child is addressing one or two interlocutors. The children reported here most often refer to themselves (1SG), address their speaker (2SG), or talk about the third person/object (either present or absent) (3SG). Interestingly, the high suppliance rate of 3SG forms may suggest that it is this form that is analogous to a R(oot) I(nfinitive) form, which is what has been claimed for Child Spanish (Davidiak and Grinstead 2004), where the 3SG form in the present tense paradigm for *–ar* and *–er* verbs bears no phonological tense or agreement marker, but merely a thematic vowel (same as in Slovenian). However, children acquiring Spanish sometimes make an error by producing a 3SG form in 1SG and 2SG contexts with overt personal pronouns, suggesting that it might be the case that 2SG is some RI version of an early root nonfinite. In Child Slovenian, this never occurs, though sometimes it is not obvious from the context whether the child is referring to herself or her interlocutor, especially since overt subjects are hardly ever attested. Generally, 3SG correctly appears in 3SG context, though we need more data to confirm this.

wh- elements) or processes involving the left periphery (e.g., topicalization, focalizations) in early grammars.

The examples in (5) above seem to refute these premises in (6).[14] Not only do they all show perfect SUBJ–V agreement, some of them also show focalized adverbials in pre-SUBJ position (presumably located in the C-domain), sentential negation, *wh*-movement, object topicalization (movement of the object across the V), and the presence of the reflexive clitic '*se*'. We see that the T/Agr markers are present from the onset of the acquisition process.

But how about the subject use? As the following table shows, the subjects are extremely rare:

Table 9: The subject use in finite verbs

	Null SUBJ	Overt SUBJ
Finite Vs	153 (81.8%)	34 (18.2%)
Agr errors	12 ("real": 3)	1

The findings in Table 10 suggest that young Slovenian children are indeed very sensitive to their linguistic environment and start using null subjects from the earliest stages on. The subjects used in this earliest stage are also correctly inflected for the Nominative Case.[15] The use of

[14] There is, however, a difference between 'presence' and 'productivity' in language acquisition and sometimes these are not teased apart sufficiently. I agree with those who argue that the mere presence of a certain linguistic expression does not entail that the child has acquired it and knows it (for it may be simply rote-learned), but I believe that the facts on T/Agr suppliance in the current study show that T/Agr markers in Child Slovenian are not only present, but also productive in the sense that they appear on a large number of verbs and with very diverse types of verbs (e.g., transitive, unaccusatives, etc.). The strongest support for productivity would, of course, come from the knowledge of inflection on novel verbs. Unfortunately we have no data on this. The lack of certain forms (e.g., DU and PL forms) is, I believe, merely an unfortunate consequence of the nature of the data, and by looking at the variety and complexity of the constructions it would be hard to believe that these utterances are rote-learned. This might be less apparent in the cases of modals, reflexives and *wh*'s since these elements very rare in the data, but again, there might be very few contexts that require them after all. Note also that even when the few recorded morphosyntactic errors appear, they are never those of commission, but rather omission, as found in many other child languages.

[15] We found no errors for Case in subject D(eterminer) P(hrase)s. In the generative paradigm, the knowledge of the Nom(inative) case in pre-verbal position has generally been taken to be evidence for the existence of TP/AgrP, following generative syntactic literature which assumes that Nom is checked in the functional layer above the VP after

subjects has been associated with the knowledge of agreement (Wexler 1994, 1998). Hence, it has been sometimes assumed that while overt subjects would be used (more) with correctly inflected Vs, null subjects would be used (more) with uninflected (bare) Vs.[16]

In the model that we assume, the following three pieces of evidence count as evidence for functional projections higher than the VP (AspP), with the first two representing the strongest evidence for our argument:

(7) (i) The presence of correct T/Agr markers on the verbs.
(ii) The presence of focalized/topicalized object DPs.
(iii) The presence of wh-questions.
(iv) The presence of reflexive clitics in constructions with reflexive verbs.[17]

5. Root Nonfinites in Early Child Slovenian: Bare Verb Stems, Root Infinitives, and Bare Participles

When looking at nonfinite verbal forms that appear in the contexts of *finite* verbs in our data, we get the following facts:

Table 11: Root nonfinites in early Child Slovenian

	# finite V utterances: 187
BVs	1 (0.5%)
INFs	9 (4.8%)

We found only one case of a BV, *kak* 'to do a poop'. This might be a phonologically reduced finite verb or simply noise in the data. We also found 9 infinitives, but interestingly, all of them were found in the

---

the V has moved to the Inflection (T/Agr) (Wexler 1994, 1998). Though this may be a piece of evidence for the existence of TP/AgrP, it may well be that Nom is simply a default case and simply spelled out in the derivation.

[16] This is hard to test in our case for two reasons. First, the premise concerning subject use and agreement has been found in non null-subject languages where subjects are obligatory, and second, uninflected Vs in a language like Slovenian are hardly attested. In Child Slovenian the few agreement errors showed up mainly in utterances with null subjects, as seen in the Table in (14) in the text.

[17] We will see below that we get the same morphosyntactic facts in constructions involving bare past participles, another piece of evidence for the presence of functional material in early Slovenian.

contexts where the finite V that was entirely omitted by the child required a nonfinite complement ((8)a.) or after the omitted preposition that required the infinitive ((8)b.). In both cases we are dealing with some elision, but note that both contexts *require* infinitival complementation. Hence, these infinitives cannot be categorized as RIs at all:[18]

(8) a. Pit. (Katja, 1;10)
drink.$_{INF}$
'I want to/must drink' (saying it to a caretaker)
cf. the adult form:
a'. Hočem pit.
want$_{1SGPRES}$ drink$_{INF}$
b. ADULT: Zakaj pa ima ključ?
why part have.$_{3SGPRES}$ key$_{ACC.}$
'Why does he have the key?'
CHILD: *Zap(r)et.* (Lenart, 1;9)
closeI_{NF}

cf. the adult form:
b'. Za zapret
for close.$_{INF}$ (for closing; lit. 'for to close')

Rus & Chandra (2005) studied the (Bare) Participles (BPs) in the same corpus. Recall from above that BPs represents almost 40% of early verbs. A few examples of these constructions found in our data are given below in (9):

(9) a. Tukele sk(r)ila pikapolonica. (Lenart, 1;9)
here hidden$_{SGFEMPERF}$ ladybug$_{SGNOM}$
'The ladybug has hidden/hid here'
b. Zajček kukuc naredu. (Vesna, 1;7)
little rabbit$_{NOM}$ peek-a-boo$_{ACC}$ made$_{SGMASCPERF}$
'The bunny has made/made a peek-a-boo'
c. Kaj (na)redu? (Tomaž, 1;9)
What made$_{SGMASCPERF}$

[18] Children cross-linguistically often omit prepositions, using only DP complements (Radford 1990, 1995 among others). Kranjc (1999) reports the same acquisition fact for Slovenian children.

'What has he done/did he do?'

Rus & Chandra (2005) showed that the following premises were true for Slovenian BPs (SBPs):

(10) (i) SBPs are extremely frequent (around 40% across all children).
(ii) SBPs almost always occur without AUXBE (roughly, 98% of them).
(iii) SBPs generally appear without the SUBJ (roughly, in 93% of the cases).
(iv) The SUBJs in constructions with SBPs appear not only preverbally but also postverbally around 30% of the time, which is a non-adult use.
(v) SBPs usually appear without reflexive clitics.

The findings in (10) above show striking similarities with other root nonfinites, particularly RIs. In fact, Varlokosta et al. (1998) argue that BPs (in Child Greek) are instantiations of RIs on the basis of the facts given in (10). However, they also argue that the premises in (7) above hold true for BPs. I believe that Rus & Chandra (2005) showed convincingly that this is *not* the case. On the basis of examples such as the ones in (9) above and similar other examples from the data, I argue that SBPs offer an additional piece of evidence that young Slovenian children know verb morphology and possess the inventory of functional material as early as we can test them since SBPs show:

(11) (i) a variety of structures,
(ii) productive participle morphology with 96% correct Agr on the participles (subject–participle agreement),
(iii) the presence of Nominative subjects,
(iv) the presence of dislocated objects (i.e., objects in pre-participle position),
(v) compatibility with wh-phrases.[19]

[19] For details about agreement facts, the use of subjects, reflexive clitics, and wh-phrases in SBPs, see Rus & Chandra (2005), who claim that BPs are full clauses with a missing AUXBE. This claim was made not only on the basis of the morphosyntactic facts but also the semantic ones since SBPs do not show the typical RI-like irrealis meaning,

6. Conclusion and Future Directions

The presence of T/Agr suffixes on the Vs, (Nominative) subjects in pre-verbal position, the use of reflexive clitics, yes/no as well as *wh*-questions, and topicalized/focalized DPs in the left periphery have all been taken in the field to be evidence for functional projections in both adult and child grammatical systems. Slovenian children seem to have all of these.

Furthermore, we saw that Slovenian children do not go through a BV or an RI stage, nor do they produce any other early root nonfinite verb in finite contexts. A few infinitives appear in the data, but these are correctly used as nonfinite complements to finite Vs or prepositions.

In sum, Slovenian children seem to be sensitive to morphosyntactic and semantic properties of the target language from the earliest utterances on. They seem to be faithful to the subject setting, word order (e.g., second position clitics), and Nominative subject case marking. They also distinguish between finite and nonfinite verbs, as seen in the knowledge of finite verb inflections and nonfinite complementation.

However, though children seem to be extremely fast and efficient language learners and conform to the target system extremely early, some of the data on early Slovenian (and early syntax in general) are still very puzzling when evaluated cross-linguistically. First, the lack of RIs (and BVs) in null subject grammatical systems with complex verb morphology such as Slovenian is still poorly understood. The existing formal tools from syntactic theories are (still) inadequate to categorize the interplay between rich morphology and early root nonfinites. Hence, I believe that the field needs to move on to look at the interplay between morphology and semantics, rather than merely between morphology and syntax (see also Hyams 2002, 2003). Second, while there has been quite a lot of an interest in early RIs, very little has been done in the area of other early root nonfinites. Only a few studies have reported early BPs, for example, but their status and use are still not well-understood. What is more, current formalisms on the acquisition of finiteness (e.g., the omission/underspecification theories or the phrase structure truncation

---

aspectually denoting both perfective and imperfective meaning and temporally both past as well as future events (for details, see Rus & Chandra 2005).

theories) cannot adequately explain the emergence and use of all these forms. Thus, the existing accounts should aim at extending their technologies and predictions to other early root nonfinites.

Last but not least, I would like to add a conceptual observation regarding the entire research program concerning the acquisition of early verb morphosyntax. We know that children are extremely sensitive to morphosyntactic and semantic properties of the target language from the earliest stage on and we know that we do find empirical differences among child systems in terms of early finite and nonfinite forms. Hence, (a) we either have not been able to pinpoint the right (biological) mechanism responsible for these differences, or (b) there might be some learning/statistical mechanism(s) at stake which divide child grammars into RI languages vs. non-RI languages (or even more narrowly into BV languages vs. RI languages vs. BP languages). Since UG-based accounts rest on internally-driven approaches rather than externally-driven ones, factors such as frequency, consistency, and saliency in the input have been largely ignored, or have not been incorporated into the theory. I believe that the field needs to move beyond this static approach and also start looking at the findings of corpus linguistics which may provide some answers to the frequency and use of early root nonfinites and specific finite forms in child corpora. This is not to say that a child is an input-matcher and cannot project beyond her experience, which is what a constructionist approach would claim, for example, but corpus linguistics (analyzing mother-child, child-child, as well as adult-directed corpora) might give us some new insights into why children initially seem to prefer certain (polyfunctional?) verb forms (e.g., progressive *-ing* in English, perfective *-i* in Greek, imperative forms, and/or participial *–l* in Slovenian) and to what extent these early forms are conditioned by the input (if at all). Hence, more research into early verb morphology is needed, particularly of other morphologically complex languages, by combining the tools of generative linguistic theory and corpus linguistics.

7. References

Becker, M. 2000. *The Development of the Copula in Child English: The Lightness of Be*. Ph.D. Dissertation. UCLA.

Chomsky, N. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.

Davidiak, E. and J. Grinstead. 2005. *Root non-finite forms in child Spanish*. Poster presented at The GALANA 1 (Generative Approaches to Language Acquisition North America). University of Hawaii.

Deen, K. 2002. *The acquisition of Nairobi Swahili: The morphosyntax of inflectional prefixes and subjects*. Ph.D. Dissertation. UCLA.

Guasti, M.T. 1993/1994. Verb syntax in Italian child grammar: Finite and nonfinite verbs. *Language Acquisition* 3: 1-40.

Guasti, M.T. and L. Rizzi. 2000. Agreement and tense as distinctive syntactic positions: evidence from acquisition. University of Siena Ms.

Guasti, M.T. 2002. *Language acquisition: the growth of grammar*. Cambridge, MA: MIT Press.

Hoekstra, T. and N. Hyams. 1998. Aspects of root infinitives. *Lingua* 106: 81-112.

Hyams, N. 1986. *Language acquisition and the theory of parameters*. Dordrecht: Reidel.

Hyams, N. 2002. Clausal structure in child Greek. *The Linguistic Review* 19: 225-269.

Hyams, N. 2003. Child non-finite clauses and the mood-aspect connection: Evidence from child Greek. To appear in *Aspectual Inquiries*, eds., R. Slabakova and P. Kempchinsky. Springer.

Montrul, S. 2004. *The acquisition of Spanish. Morphosyntactic development in monolingual and bilingual L1 acquisition and adult L2 acquisition*. Amsterdam: John Benjamins.

Poeppel, D. and K. Wexler. 1993. The full competence hypothesis of clause structure in early German. *Language* 69: 1-33.

Radford, A. 1990. *Syntactic theory and the acquisition of the English syntax*. Oxford: Blackwell.

Radford, A. 1995. *Phrase structure and functional categories*. In *The handbook of child language*, eds., P. Fletcher and B. MacWhinney, 483-507. Cambridge, MA: Blackwell.

Rizzi, L. 1993/1994. Some notes on linguistic theory and language development: The case of root infinitives. *Language Acquisition* 3: 371-393.

Rus, D. and P. Chandra. In press. Questioning the 'Imperative as Root Infinitive Analogue' Hypothesis. To appear in *Proceedings of the 30th annual Boston University Conference on Language Development*. Cambridge, MA: Cascadilla Press.

Rus, D. and P. Chandra. 2005. Bare participles are *not* root infinitives: Evidence from early child Slovenian. In *Proceedings of the 29th annual Boston University Conference on Language Development*, eds., A. Brugos, M. Clark-Cotton and S. Ha, 493-503. Cambridge, MA: Cascadilla Press.

Rus, D. 2005. Embedded Imperatives in Slovenian. In *Georgetown Working Papers in Theoretical Linguistics IV*, eds., C. Brandstetter and D. Rus, 153-183. Georgetown University Department of Linguistics.

Salustri M. and N. Hyams. 2003. Is there an analogue to the RI stage in the null subject languages? In *Proceedings of the 27th annual Boston University Conference on Language Development*, eds., B. Beachley, A. Brown and F. Conlin, 692-703.Cambridge, MA: Cascadilla Press.

Toporišič, J. 2000. *Slovenska slovnica*. Maribor: Založba Obzorja.

Valian, V. 1991. Syntactic subjects in the early speech of American and Italian children. *Cognition* 40: 21-81.

Vainikka, A. 1993/1994. Case in the development of English syntax. *Language Acquisition* 3: 257-325.

Varlokosta, S., B. Rohrbacher and A. Vainikka. 1998. Functional projections, markedness, and 'root infinitives' in early child Greek. *Linguistic Review* 15: 187-207.

Wexler, K. 1994. Optional infinitives, head movement and economy of derivation. In *Verb movement*, eds., N. Hornstein and D. Lightfoot, 301-350. Cambridge: CUP.

Wexler, K. 1998. Very early parameter setting and the unique checking constraint: A new explanation of the optional infinitive stage. *Lingua* 106: 23-79.