EARLY NON-FINITE FORMS IN CHILD ROMANIAN

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Abstract: The properties of the early verbal forms in child Romanian are analysed with a view to identifying a possible optional infinitive analogue in this language. In particular, we investigate the following early verbal forms: (i) the imperative, as predicted by the Imperative as the Optional Infinitive Analogue Hypothesis (IAH) (Salustri and Hyams 2003, 2006) and (ii) the third person singular present tense form of the indicative, as proposed for Catalan and Spanish by Grinstead (1998, 2000). We argue that the form which Romanian children overuse is the present tense of the indicative; the optional infinitive analogue, however, is the bare subjunctive, an inflected verbal form without the subjunctive marker *să*. We therefore propose that the early overused form that children might use does not necessarily have the properties of optional infinitives.

Keywords: optional infinitive analogue, bare subjunctive, Romanian

1. Introduction

It is a well-documented fact that during the early stages of language acquisition children use non-finite forms in contexts where the adult grammar requires a finite construction. Cross-linguistic investigation has revealed that these are usually verbal forms which are overused at one particular developmental stage. The list includes infinitives, participles (Paradis and Crago 2001), bare perfectives (Varlokosta et al. 1996, Hyams 2002, 2005), as well as finite forms 'in disguise', i.e. verbal forms which are fully inflected but which do not behave like their genuine finite counterparts. This is the case of the third person singular form

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of the present tense of the indicative (Grinstead 1998, 2000, Paradis and Crago 2001) or the imperative (Salustri and Hyams 2003, 2006). The particular form as well as the length of the developmental stage during which it is attested have been argued to be language specific (Wexler et al. 2004, Legate and Yang 2007). But the availability of an early stage when non-finite forms are used in contexts in which a finite form is required seems to be universal.

In spite of the variety of non-finite forms attested across child languages, there is one that has received special attention in the acquisition literature: the infinitive. Optional infinitives (OIs) used in contexts in which the target language requires a finite form have been attested in several languages, among which English, German, Dutch, Icelandic, French, Mainland Scandinavian. A comparison of the findings reveals a systematic difference between the availability of early OIs in non-null subject languages (NNSLs), on the one hand, and inflection licensed null subject languages (ILNSLs), on the other hand. This led to the generalization that children pass through a stage when they optionally use the infinitive in finite contexts only if the target language is one which allows inflection-licensed null subjects. OIs have been attested in the former group, but have been argued to be completely absent or extremely rare in the latter (see Guasti 1993/4, for Italian), where only fully inflected forms are attested (Wexler 1998)[2]. The difference is illustrated with data from child Dutch, a NNSL in (1) and from child Romanian, an ILNSL in (2):

(1) a. Steven een boek *lezen*.

Steven a book read$_{INF}$

'Steven reads a book.' (M. 1;11,15)

b. Chris *lees*.

[2] Rhee and Wexler (1995) provide evidence in favour of this generalisation showing that it even holds within one and the same language. In Hebrew, OIs do not emerge in that part of the inflectional paradigm which allows null subjects but have been attested in the part which does not.

Chrisread$_{TRUNC.INF.}$

'Chris reads.' (M. 1;10,14)

(2) Mami *cântă*.

Mother sings$_{3.SG.}$

'Mother sings.' (B. 1;10)

Since one would expect the availability of an early stage during which children acquire finiteness, i.e. when non-finite forms are used in contexts which require a finite form, to be universal, the lack or low frequency of OIs in the acquisition of ILNSLs raises the question of whether one could identify a morpho-syntactic verbal construction whose properties are identical to those of the OIs in OI languages. For ILNSLs, several OI analogues have been identified. According to Liceras et al. (2007), children acquiring an ILNSL do actually go through an OI stage. During the early stages, they use the infinitive in contexts in which a finite form is acquired. Other researchers identify, besides morphological infinitives, other verbal forms as plausible analogues of the OI. Grinstead (2000) argues that the third person singular form of the present tense is used as a default form during the early stages in the acquisition of Spanish and Catalan. The interpretation of this fully inflected form is often modal (expressing volition and direction), on a par with OIs in several OI-languages (Hoekstra and Hyams 1998). Salustri and Hyams (2003) identify the imperative as an OI analogue for ILNSLs.

The aim of the present paper is to examine the early verbal forms in child Romanian with a view to identifying whether there is an early non-finite form in the acquisition of Romanian with the properties of the OI stage in OI-languages. In particular, two main questions are addressed:

(i) Do Romanian children use OIs during the early stages? If they do, how long is the OI stage?

(ii) If Romanian children do not use OIs, is there an OI-analogue which they use during the early stages when finiteness is being acquired?

The results of this investigation may provide an interesting insight into the nature of early non-finite forms across languages. This is because Romanian is a Romance ILNSL with Balkan properties. The distribution of the infinitive is more restrictive than in other Romance languages, being replaced by the subjunctive in contexts in which the subjunctive appears in Modern Greek, a Balkan language.

The paper is organized as follows. Section 2 briefly presents previous findings with respect to the early non-finite forms in child grammars, with a focus on ILNSLs. In Section 3, longitudinal data of child Romanian are analysed with the aim of identifying the OI-analogue in this language. We consider the infinitive, the imperative and the present tense of the indicative. We argue that the OI-analogue is actually a langue specific form, the bare subjunctive. The present tense of the indicative is overused during the early stages but it does not have the properties of the OI. The conclusions are summarized in Section 4.

2. Early non-finite forms in Romance

2.1. Optional infinitives in null subject languages

The optional use of the infinitive in root clauses during the early stages of language acquisition has been extensively analysed in a variety of languages (Dutch, French, German, English, Russian, etc.). During the OI-stage the infinitival form of the verb is optionally used instead of the finite form (Wexler 1994); but the child recognises the infinitive as a grammatical construction different from the finite form of the verb and places it in the

appropriate structural position. The data also show that children have tacit knowledge of the non-finiteness of the infinitive: they rarely negate OIs, *wh*-questions with infinitival verbs are absent or extremely rare, auxiliaries occur in finite clauses but not in OIs, subjects tend to be overt in finite clauses but either null or erroneously case-marked in OIs. All these facts have been interpreted as evidence that OIs cannot be interpreted as the result of lack of knowledge of inflection. What the child does not seem to know yet is that OIs are disallowed in those contexts which require a finite form.

As mentioned in the previous section, there seems to be a systematic difference between NNSLs like English, German, Dutch, Swedish or French, where OIs have been attested, and ILNSLs like Italian, Spanish, Catalan, where OIs are either completely absent or extremely rare. In such languages, fully inflected verbal forms are attested from the onset of acquisition.

There is no consensus, however, with respect to the complete absence of an OI stage in ILNSLs. For Italian, for example, Guasti (1993/1994) shows that Martine uses infinitives 22% at 1;9 but only 16% at 1;11. OIs are also attested in child Spanish, though at a low rate (see Buesa García 2007). As already mentioned, Liceras et al. (2007) provide evidence that OIs are used by children acquiring ILNSLs such as Catalan, Spanish and Basque, especially at earlier stages. The percentage of early infinitives, though, is significantly lower than in NNSLs and they are attested during a shorter period of time. This is not unexpected; several studies argue that children who acquire an ILNSL would acquire finiteness or verbal functional categories very early (Torrens 1995, Phillips 1995, Legate and Yang 2007). Torrens (1995), for example, shows that Spanish and Catalan children use inflected verbal forms correctly as early as 1;9. This is why even when low percentages of early infinitives are attested in some ILNSLs, they are used for a very short period of time. This could make the

identification of this stage difficult, especially in longitudinal corpora which do not contain very early recordings/transcripts.

Several studies which investigate the early verbal forms in ILNSLs, such as Ezeizabarrena (1997) and Grinstead (1998, 2000), for example, argue that the fully inflected forms which children use during the early stages have the properties of OIs. They propose that the analogue of the OI in Spanish and Catalan is the third person singular of the present tense of the indicative. The same analogue is proposed for Spanish in a bilingual setting (Spanish/English) (Castro and Gavruseva 2003).

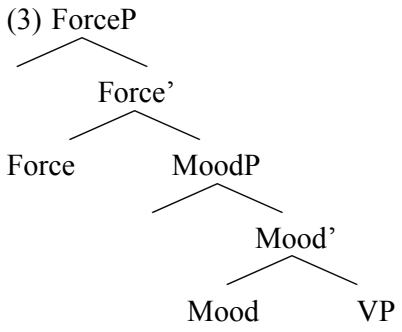
Other researchers identify several verbal forms which are not used in a target-like manner. According to them, some finite forms can behave as OIs instead of or in addition to non-finite verb forms; these are early default forms (Paradis and Crago 2001, Pratt and Grinstead 2007). In French, for example, children would use the third person singular form of the present tense on the indicative in addition to the past participle and the infinitive. The variety of possible OI-analogues led Wexler et al. (2004) to the conclusion that the OI-analogue is a frequently used underspecified form, language-specific.

2.2. Early non-finite forms and modality

The semantic properties of OIs are addressed in Hoekstra and Hyams (1998); they argue that OIs are compatible with a prevalent modal interpretation (mainly deontic and volitional), "determined by the inherent quality of infinitives as being marked [-realized]" (Hoekstra and Hyams 1998:103). This generalization is known as the Modal Reference Effect (MRE). Because of the prevalent deontic value of the form, the verbs which appear as OIs are mainly eventives. Since this is a semantic property, one would expect a similar effect to show up across languages, even in those for which an OI stage has not been attested. Salustri and

Hyams (2003) start precisely from this assumption, i.e. that the mapping of irrealis mood onto a tenseless clausal structure is a universal property of the OI stage. They propose that in ILNSLs the analogue to the OI is the imperative which has mainly deontic modal meaning and is restricted to eventive predicates. On their analysis imperative verbs check an irrealis feature in a MoodP. Importantly, imperatives are not marked for either tense or agreement, which are underspecified; therefore, an imperative configuration lacks tense and agreement projections, i.e. there is no intervening projection between the verb and MoodP:

(3)



Their arguments are that in ILNSLs (i) imperatives occur more frequently in child language than in adult speech, and (ii) they are more frequently encountered than in the early grammar of the children who are acquiring an OI language.

One should also mention that, according to Salustri and Hyams (2003), early imperatives and early OIs can co-exist, though with different frequencies.

2. 3 Predictions for Romanian

As shown in the previous section, the findings reported in previous studies indicate different developmental routes for children who acquire an ILNSL. According to one direction, children would go through a stage when they actually use the infinitive in finite

contexts, though the use is low and the forms are attested only during the very early stages. Other studies argue that there is an equivalent of the OI stage in every language and they try to identify OI analogues. The search for an OI analogue follows two main directions. One focuses on the non-finiteness of OI structures. The OI analogue in ILNSLs is, according to this view, the third person singular form of the present tense of the indicative, which is not used in a target-like way. The second direction focuses on the modal value of child OIs and identifies the imperative as a possible OI analogue. Importantly, such an approach assumes that imperatives have underspecified tense and agreement features.

The early verbal forms, possible analogues of the OI, which one could find in child Romanian, a Romance ILNSL, are the following: (i) the infinitive (though with a very low frequency); (ii) the present tense of the indicative; (iii) the imperative. In what follows we will be considering these accounts against data from child Romanian.

3. Early non-finite forms in child Romanian

3.1. Data and method

Our analysis relies on data coming from two longitudinal corpora of monolingual Romanian (B. 1;3-3;2 and A.1;9-3;6), consisting of 60 minute audio recordings of natural unstructured conversations. The investigated files have been transcribed according to the CHILDES system (MacWhinney 2000) and, for child B., they are available on CHILDES. The child data analysed for the present study are summarized in Table 1 below.

Child	Age	MLU	Number of examined files	Number of examined verbal forms
A.	1;9 – 2;6.30	1.514-2.730	11 (= 11 h)	1,804
B.	1;6 – 2;11	1.122 – 2.790	21 (=21 h.)	1,919
TOTAL			32 (=32 h)	3,723

Table 1. Child data used in the analysis

Each verbal form was coded in terms of morphological status (indicative, subjunctive, imperative, infinitive) and intended meaning (temporal, modal). The following examples illustrate how coding was done:

(4) a. present tense of the indicative (temporal value):

Se joacă An tonio cu ele.

refl.3rd sg play.3rd sg Antonio with them

'Antonio is playing with them.' (A. 2;6)

b. present tense of the indicative (modal value):

nu # cu baba # *că(u)tăm* baba.

no # with old woman.the # look.1st pl for old woman.the

'No, with the old woman, let's look for the old woman.' (B. 1;10)

c. bare past participle (aux omission):

nu vrut pisica

no want-past part cat.the

'She (has) not wanted the cat.' (B. 2;2)

d. indicative mood - periphrastic past:

n'am şte(r)s.

no have.1st wiped

'I haven't wiped (it).' (B. 2; 5)

e. bare subjunctive:

Hai să facem un castel. Aicea *facem* o castel.

'Let's build a castle. Let's build a castle here.' (B. 2;4)

f. subjunctive:

Vreau *să strig* la rața.

want 1st sg *să* shout 1st sg at duck.the

'I want to call the duck.' (B. 2;2)

g. subjunctive in periphrastic forms:

am să strig.

aux.1st sg să.subj. shout.1st sg

'I am going to shout.' (B. 2;2)

h. imperative

Hai mănâncă!

come on eat IMP 2nd sg

'Come on, eat!' (A. 2;9)

Imitations, repetitions, formulaic uses and unclear forms were not included in the analysis. We compared our data to findings reported for other child languages.

3.2 Optional infinitives in child Romanian?

One interesting fact is that no early infinitive has been attested in the files which we examined (see also Coene et al. 2005, Avram 2010, for similar conclusions). The Romanian data provide evidence in favour of Wexler's (1998) generalization, according to which there is no OI-stage in ILNSLs. In this respect, child Romanian differs from other Romance null subject languages for which low percentages of early infinitives have been reported (Liceras at al. 2007). The comparison is summarized in Table 2 below:

Type of language	**Language**	**Child**	**Age**	**% of Ois**
NNSL	French	Nathalie (Pierce 1992)	1;9	96%
	Swedish	Markus (Rohrbacher & Vainikka 1994)	1;9-1;11	82%
		Embla (Guasti 1994)	1;8-1;10	61%
	Dutch	Peter (Wijnen 1994)	1;9 -1;11	94%
		Tobias (Weverink 1989)	1;10-1;11	36%
ILNSL	Catalan	Julia (Liceras et al 2007)	1;10	21%
	Spanish	Maria (Liceras et al 2007)	1;7	20%
	Basque	Mikel (Liceras et al 2007)	1;7-1;11	31.6%
		Oitz (Liceras et al. 2007)	1;6-2;2	38.6%
	Romanian	A.	1;9 – 2;6	0%
		B.	1;6 – 2;11	0%
		I. (Avram 2010)	1;9	0%

Table 2. Early OIs: Frequencies in Romanian compared to NNSLs and other ILNSLs

One should notice that at least for one of the children in our corpora, the recordings began at a very early age (1;6). However, no early infinitive has been found in the available transcripts. Contemporary Romanian has an infinitive, on a par with other Romance languages, but it has been replaced by the subjunctive in a variety of contexts in which the infinitive is used in Romance. Modal verbs, for example, with the exception of *a putea* 'can'[3], do not take infinitival complements, but subjunctive ones:

[3] But such constructions are rarely used in the contemporary language.

(5) a. Ei pot să deseneze/desena.

they can.3rd pl. *să* draw.3rd pl. / draw

'They can draw.'

b. Vreau să plec/ *pleca.

want.1st sg *să* leave.1st sg./ *leave

'I want to leave.'

c. Trebuie să termini lucrarea/ *termina lucrarea.

must *să* finish.2nd sg paper.the/ * finish paper.the

'You must finish the paper.'

The subjunctive is also used in the equivalent of the so-called "mad magazine" sentences (where the infinitive is never an option) (6) and in some periphrastic forms which express futurity (7a) and which are used in the spoken language to the detriment of the periphrastic future with the auxiliary *vrea* 'will', followed by a bare infinitive (7b):

(6) Ion să te ajute cînd ai nevoie? Niciodată!

Ion *să* you.Acc help.2nd sg when have.2nd sg need? Never.

'Ion help you when you need help? Never!

(7) a. Ion o să plece la munte.

Ion aux *să* leave.3rd sg at mountain

'Ion will go to the mountains.'

b. Ion va pleca la munte.

Ion will.3rd sg leave at mountain

'Ion will go to the mountains.'

The very low frequency of infinitive forms in the input may explain the lack of OIs in child Romanian.

3.3 The imperative: the OI analogue in child Romanian?

3.3.1 The imperative as the OI analogue

As mentioned in section 2.2, according to the Imperative as the OI Analogue Hypothesis (IAH) put forth by Salustri and Hyams (2003), in ILNSLs, the imperative has the properties of OIs in OI languages. In this section we investigate whether the IAH is borne out by the Romanian data.

The first prediction of the hypothesis is that children will use more imperatives than adults do. In order to test this prediction we compared the use of imperatives in child and adult Romanian. For the comparison with adult speech we investigated both child-directed speech and adult-directed speech in informal conversation. For the former, we examined the use of imperatives by adults engaged in conversation with the child in some of our own recordings (in the A. and in the B. files), for the latter we relied on the corpus of spontaneous conversation available in Dascălu-Jinga (2002). The data are summarized in Table 3:

Type of data	Source	Nr of examined verbal forms
Child-directed speech	B. 1;8	543 (60')
	B. 2;2	579 (60')
	A. 3;5	684 (60')
Adult-directed speech (informal conversation)	Dascălu-Jinga (2002)	
	Adult 1 (CJ)	481 (approx.30')
	Adult 2 (VJ)	416 (approx.30')

Table 3. Adult data used in the analysis.

The analysis of the verbal forms used in the two corpora reveals that Romanian children do not overuse the imperative. The comparison of the frequency of imperatives in child (Table 4) and adult speech (Table 5) shows that Romanian children use the imperative less frequently than adults do in child-directed speech.

Child	% Imperative	Verb utterances
A. 1;9-2;6.30	6.04% (n=109)	1,804
B. 1;10 -2;9	9.90% (n=190)	1,919

Table 4. The use of the imperative in child Romanian

Type of discourse	Source	% IMP	Verb utterances
Child-directed speech	B. 1;8	Adult 1: 14.28% Adult 2: 13.11%	154 389
	B. 2;2	Adult 1: 8.1% Adult 2: 11%	269 310
	A. 3;5	Adult 1: 12.86%	684
Adult-directed speech	Dascălu-Jinga (2002)	CJ :0.6 % (n=3) VJ :1.7 % (n=7)	481 416

Table 5. The use of the imperative in child-directed

The analysis also reveals, as expected, that the use of imperatives in adult speech is sensitive to discourse type. The percentage is lower in adult-directed speech. At first sight, it seems that we do not have conclusive evidence either in favour of or against the first prediction made by the IAH. Children use the imperative at a rate comparable to that of imperatives used by adults in child-directed speech, but higher than the rate of imperatives in adult-directed speech. However, the comparison with the data coming from child-directed speech is the relevant one, since we are comparing the use of the imperative in a similar conversational setting. This is why we believe that the first prediction made by IAH is not borne out by the Romanian data.

In order to test the second prediction, according to which Romanian children would use the imperative more frequently than their peers who are acquiring an OI language, we compared the use of imperatives in child Romanian to the use of the imperative in OI languages as well as in non-OI languages. The comparison of the percentage of imperatives in early child Romanian to the one reported for other null subject languages indicates that the imperative is less frequently used in the former. On the other hand, it seems that Romanian children use the imperative at a rate similar to the one attested for child German, an OI language. The data are summarized in Table 6:

Language	Source	% Imperative
Child-Italian	Salustri & Hyams (2003)	27.5
Child-Slovenian	Rus & Chandra (2006)	56
Child Spanish	Liceras, Bel, Perales (2006)	29.6
Child Catalan	Liceras, Bel, Perales (2006)	29.4
Child German	Salustri & Hyams (2003)	10
Child Romanian		8

Table 6. The use of imperatives in child Romanian vs. other null- and non-null subject languages

The data indicate that the second prediction is not borne out by the Romanian data either. Romanian children do not use the imperative at a rate higher than the one found in OI-languages.

Importantly, the analysis of imperatives in child Romanian indicates a slight increase across files, not a decrease, as expected if the imperative were a sort of an early overused form. The trendline in Figure 1 shows that the use of the imperative slightly increases with age in both corpora:

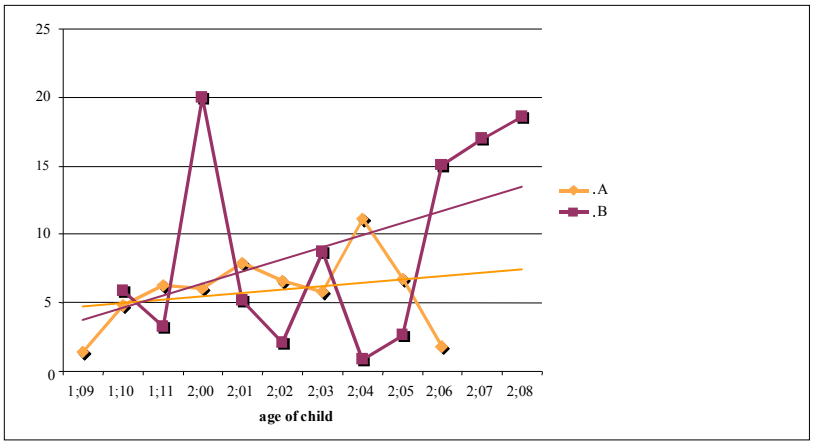


Figure 1. The use of imperatives across files in corpora A. and B.

(% on total verb utterances)

The data examined so far show a relatively low percentage of imperatives (280/3487 = 8%) in child Romanian, especially during the early stages. Imperatives are not more frequent in child language than in child-directed adult speech. Importantly, they do not decrease over time; on the contrary, there is a slight increase across files in both corpora. This shows that the imperative cannot be analysed as an overused verbal form in child Romanian. Nor can one notice any optionality in the use of the imperative, which indicates that it cannot be the OI analogue, in spite of its jussive semantic feature. Our conclusion is not singular. Rus and Chandra (2006), for example, also argue that not all null subject languages need choose the imperative as an OI-analogue.

Two questions arise at this point: (i) why isn't the imperative the OI-analogue in child Romanian? and (ii) which is the OI-analogue in child Romanian? We will be addressing these questions in the next sections.

3.3.2 Why the imperative is not an OI-analogue in child Romanian

3.3.2.1 Imperative structures in adult Romanian

In order to understand why child Romanian differs from other null subject languages with respect to the use of the imperative during the early stages one has to analyse the properties of the imperative and its use in the target grammar.

One important fact is that in adult speech the imperative is frequently substituted by the present subjunctive, which can be used as a "surrogate imperative":

(8) Să te duci acolo imediat!
Să you-ACC go 2nd sg there immediately
'Go there immediately!'

A second important fact is that the present tense of the indicative can also acquire directive illocutionary force:

(9) Te duci acolo imediat şi îţi ceri scuze!
'You should go there immediately and apologize to them.'

This is why one usually makes a distinction between "true" imperatives (the ones with overt imperative morphology) and "surrogate imperatives" (i.e. the subjunctive, the indicative, the infinitive)[4]. Isac and Jakab (2004) propose that the imperative and the subjunctive check their imperative force in the same left-periphery position, MoodP (lower than ForceP and highet than NegP) but via different mechanisms: Merge of the modal particle

[4] Vasilescu and Vântu (2008:28-29) also list, among the various types of structures used with imperative value, the infinitive, as in *A nu se deschide fereastra* 'Do not open the window', and the supine, as in *De rezolvat aceste probleme până data viitoare!* ' Solve these problems until next time!'. These two structures, however, are very rarely used in the spoken language and are not found in child-directed speech. For the present study, This is why we are not discussing them in this section.

să in the head of the left-periphery projection in the case of the subjunctive and verb movement to the same left-periphery position in the case of true imperatives. Indicatives with directive illocutionary force check their imperative feature via pragmatic inference.

That the verb moves to a higher projection only in the case of "true" imperatives can be seen from the way in which Accusative object clitics attach to the verb in each of these constructions. It is only in the case of "true" imperatives, illustrated in (10c), that the clitic surfaces in post-verbal position, indicating that the verb has moved to a position higher than the one occupied by the clitic (the head of TopicP in the left periphery, Avram 2000 or an FP, in Avram and Coene 2009). In (10a) the clitic surfaces in front of the verb, indicating that the verb is lower in the structure, in T/AgrP. Similarly, in (10b), the clitic surfaces in front of the inflected verb but follows the subjunctive marker *să,* which has been analysed as occupying a Mood projection, higher than T/AgrP (Avram 1999):

(10) a. O duci imediat la gară.
her.Acc take.2nd sg immediately to station
b. Să o duci imediat la gară.
subj. her.Acc take.2nd sg immediately at station
c. Du- o imediat la gară.
take.IMP her.Acc immediately to station
'Take her to the station immediately.'

The fact that the clitic surfaces in front of the indicative verb in (10a) shows that the indicative verb has not moved to the left periphery. It checks its imperative force via pragmatic inference.

Summing up, we notice that in the spoken language there is a "competition" between various means of expressing directive illocutionary force. Their derivation involves different degrees of computational complexity. One should also mention that the imperative is the only mood whose morphological form for the affirmative differs from the one for the negative. The 2nd person singular affirmative form is identical to the 2nd person present tense of the indicative with some verbs (11) but with the 3rd person present tense of the indicative with others (12), depending on morphological and syntactic factors (Manea, Pană Dindelegan, Zafiu 2008: 379):

(11) a. Tu mergi.
you go 2nd sg
'You go.'
b. Mergi!
go 2nd sg
'Go!'

(12) a. El cîntă.
he sing 3rd sg present indicative
'He sings'
b. Cîntă!
sing IMP 2nd sg
'Sing!'

The 2nd person singular form used in the negative is identical to the infinitive (13), but the 2nd person plural is identical to the indicative (14).

(13) a. infinitive : desena

'draw'.

b. imperative: nu desena!

'Don't draw!'

(14) a. voi desenați

you draw 2nd pl

b. Nu desenați!

not draw 2nd pl

The 'hybrid' nature of its morphology, doubled by the observed syncretisms may turn the imperative into a form which is morphologically more difficult.

3.3.2.2 Imperative structures in child Romanian

The language specific data discussed in 3.3.2.1 suggest that there is a coalition of factors which prevent the imperative from being a possible OI-analogue in child Romanian. Firstly, we saw that the imperative is not frequently encountered in adult speech. Our data indicate a rate slightly higher than the 7.5%, taken as the threshold for late acquisition according to Yang (2000).

If computational complexity matters in the acquisition process, it is plausible to assume that the imperative cannot be the early overused form in child Romanian because it involves a

relatively heavy computational load. Imperatives require movement of the verb from the lexical layer to the left periphery of the clause. This, however, cannot be the only explanation. When children use the imperative, there is evidence that the verb correctly moves to a higher position; if the imperative verb appears with a clitic, the latter is correctly placed in post-verbal position. Compare (15a) to (15b) below, where the clitic, used with the same verb, appears in pre-verbal position when the verbal form is a present tense of the indicative, but in post-verbal position when the verb is imperative:

(15) a. Mă tragi cu covoru(l)?
me drag.2nd sg present tense with carpet.the
'Will you drag me with the carpet?' (A. 2;9)

b. Hai # trage-mă.
come on drag.IMP 2nd sg me
'Come one, drag me!' (A. 2;9)

Wh-questions also involve verb movement to the left periphery; but they emerge early and are used target-like at an early age (Avram and Coene 2006). One difference between *wh*-questions and imperative structures is that the former are frequently encountered in child-directed speech, which may enhance their acquisition.

If morphological complexity can be taken as part of the computational load, the fact that the imperative is actually a mixture of morphological forms, whose choice depends both on morphological and syntactic properties, may also add to the complexity. This may account for the rare erroneous morphological forms found in the data:

(16) a. hai # *cade că ai loc!

come on fall.IMP that have 2nd sg room

'Come on, fall down, there is room.' (A. 2;9)

b. hai # *face.

come one do.IMP 2nd sg

"Come on, do (it)!' (A. 2;9)

A comparison of the complexity involved in the three types of structures with directive force used in the spoken language, i.e. the imperative, the present tense of the indicative and the subjunctive, reveals that the imperative is the only one associated both with verb movement to the left periphery and with morphological complexity. The other two forms involve verb movement to Inflection and acquire directive force either via Merge (the case of the subjunctive) or via pragmatic inference (the case of indicatives used with directive illocutionary force).

3.4 The present tense of the indicative: a possible OI-analogue?

The data discussed in the previous section indicate that the present tense of the indicative has the modal properties associated with OIs and that it could be the OI-analogue in Romanian. Previous studies have shown that this is indeed the most frequently encountered verbal form during the early stages in child Romanian (Coene et al. 2005, Avram 2010). 2nd and 3rd person singular forms of the present tense of the indicative are attested from the onset of acquisition and the percentages are similar to the ones reported for OIs in OI-languages. The comparison is summarized in Table 7:

	Child	age	% of RI
French	Nathalie (Pierce 1992)	1;9	96%
Swedish	Markus (Rohrbacher & Vainikka 1994)	1;9-1;11	82%
	Embla (Guasti 1994)	1;08-1;10	61%
Dutch	Peter (Wijnen 1994)	1;9-1;11	94%
	Tobias (Weverink 1989)	1;10-1;11	36%
	Child	age	% of forms inflected for T and Agr
Romanian	A. (Avram and Coene 2005)	1;9	73%
	B. (Avram and Coene 2005)	1;9	87.5%
	I. (Avram 2010)	1;9	75%

Table 7. Frequencies of root verbal forms in early child speech

The analysis of the early verbal forms in the files used for the present study also indicate that the present tense of the indicative seems to be the most frequently encountered form. In the examined files from the A. corpus 70.07% (=1,264) of all the inflected verbal forms are indicative present tense forms. The analysis also reveals that the third person singular form is a frequently encountered one. In the B. corpus, during the period 1;06-2;01, 49 % (n= 57) are 3rd person singular forms. In the A. corpus, during the period 1;09-2;06.30, the use of the 3rd person singular amounts to 48.6 % (n=878) of all the inflected forms.

The question is whether these early verbal forms have the properties of OIs. Among other properties, early infinitives used during the OI stage are non-finite and optionally used in finite contexts. To what extent can the attested present tense forms be analysed as non-finite non-agreeing forms with a modal value which optionally occur in finite contexts? Since they are all fully inflected forms, it is extremely difficult to analyse to what extent they match the *phi*-features of the intended subject when the subject is phonetically null (see also Pratt and Grinstead 2007). And obvious agreement errors, though attested, are extremely rare in the two corpora which we examined.

The availability of overt Nominative subjects cannot be taken as a reliable test either because Romanian is a null subject language which allows phonetically null subjects in finite contexts. Moreover, overt Nominative subjects are allowed in sentences in which the morphological form of the verb is non-finite:

(17) L-am văzut înainte de a pleca <u>voi</u>.
him have seen before of INF leave you.Nom
'We saw him before you left.'

This is why the analysis of early subjects cannot be a good indicator of finiteness. One should mention, however, that in both corpora overt Nominative subjects appear with indicative verbal forms.

In terms of interpretation, the present tense of the indicative is used in child Romanian with either a temporal value, or with modal value, both available in the target language. In the former situation, it is used to express present or future tense situations, in opposition with other forms (the periphrastic perfect and the bare past participle) which are used with past time reference. One should notice that the opposition present vs. past tense is robust extremely early in the Romanian corpora:

(18) Nu e Babi. A p(l)ecat cu Titi.

'Babi is not here. She left with Titi.' (B. 2;02)

At the same time, many present tense forms have the modal value identified for OIs, i.e. during the early stages of child Romanian these indicative mood forms can convey both modal and non-modal meanings. As already mentioned, the present tense of the indicative can also be used with directive force in adult speech as well. It matches both tense and mood features, with the latter being checked via pragmatic inference. But it is a property of early grammar that the present tense of the indicative matches the mood feature more often than in the adult grammar.

One non-trivial methodological problem, though, arises with contexts like those illustrated in (19) below. In a significant number of cases it is difficult to state whether the inflected form (mainly 1st and 2nd person) is an indicative or a bare subjunctives (BS), i.e. a subjunctive form without the modal particle *să:*

(19) a. căutăm leul. [possible intended meaning = hai să căutăm leul]

look.1st pl lion.the [possible intended meaning = let us look for the lion]

'Let's look for the lion.' (B. 1;10)

b. pui aicea [possible intended meaning = vreau/trebuie să pui aicea]

put.2nd sg [possible intended meaning= I want you to put it here// you must put it here]

'Put it here.' (B. 2;0)

In what follows, we will be analysing the two forms with a view to identifying which if them has the properties of a possible OI-analogue.

3.5 The present tense of the indicative or the bare subjunctive?

Data like the ones in (19) above show that in some cases it is difficult to identify the early inflected forms as either indicative or BS. What may seem to be at first sight an indicative form may actually be a BS. And such cases are not restricted to 1st or 2nd person person contexts:

(20) face mami. [possible intended meaning = vreau/trebuie să facă mami ?]
does mother [possible intended meaning = I want mother to do it ?]
'Mother should do it.' (A. 2;2)

The cause of the difficulty of the analysis lies in the available syncretisms in the verbal paradigm in Romanian, where (i) the 1st and 2nd person singular and plural forms of the present tense of the indicative are identical to the 1st and 2nd person singular and plural forms of the subjunctive, and (ii) for a small number of verbs, all the inflected forms of the present tense of the indicative are identical to those of the subjunctive. In Table 8 below the shaded cells indicate the homophonous inflected forms:

***cânta* 'sing'**	**PR-IND**	**SUBJ**	***tăia* 'cut'**	**PR-IND**	**SUBJ**
1st sg	cânt	să cânt	1st sg	Tai	să tai
2nd sg	cânți	să cânți	2nd sg	Tai	să tai

3rd sg	cântă	să cânte	3rd sg	Taie	să taie
1st pl	cântăm	să cântăm	1st pl	Tăiem	să tăiem
2nd pl	cântați	să cântați	2nd pl	Tăiați	să tăiați
3rd pl	cântă	să cânte	3rd pl	Taie	să taie

Table 8: Indicative-subjunctive syncretism in Romanian

This shows that many of the early inflected forms with modal value can be either present tense forms of the indicative or BS forms. It is difficult to distinguish between the two because the early attested 1st and 2nd person forms of the present tense of the indicative can express, besides on-going events, volition/ intention and orders:

(21) *Dai* *o bomboană de-acolo*.
give.2 sg a candy from over there
'(You should) give a candy from other there.' (A. 2;4)

The early system uses a strategy which is also available in the target system. BSs used with imperative force are also attested in the adult grammar, but their use is reduced to a very small number of specific contexts and it is mainly formulaic:

(22) a. Fiarbă vinu-n cupe.
boil.subj.3rd sg wine.the in bowls
'Let the wine boil in bowls.'
b. Întîmplă-se ce s-o întîmpla.
happen.subj.3rd.sg what refl it happens
'Come what may.'

Their early overuse in modal contexts becomes more obvious at the moment when the subjunctive particle *să* emerges (at 2;02 and an MLU of 2.180 in the A. corpus, and at 1;11 and an MLU of 1.406 in the B. corpus). This coincides with the emergence of distinct inflected subjunctive forms (in the case of the 3rd person). Interestingly, the subjunctive has deontic value from the very first attested forms and it is found in two types of context: as the complement of a verb which requires obligatory mood shift, such as *a vrea* 'want', *a trebui* 'must/need' or in purpose clauses. The data show, as expected, that the first subjunctives occur in obligatory contexts first:

(23) a. trebuie să văd
must 3nd sg să see 1st sg
'I must see.' (B. 2;2)

b. Merg să iau borş la tanti Miţa
go 1st sg să take borsch at aunt Miţa's
'I'll go and buy borsch at aunt Miţa's.' (B. 2;2)

An obvious trade off between the present tense of the indicative (used with directive force) and the *să* subjunctive can be noticed in both corpora. After the emergence of the modal particle, the children optionally use a *să* subjunctive or a BS in similar contexts. In (24a) and (24b) the particle is optionally used in the complement of a modal verb by the same child, at the same age, during the same recording session:

(24) a. vrei [să] papi pe măsuţa asta.

want.2 sg [să] eat.2sg on table.the this

'You want to eat at this table.' (A. 2;6)

b. nu pot să mă ridic.

not can.1 sg *să* me refl. stand.up.1 sg

'I cannot stand up.' (A. 2;6)

A gradual increase in the use of the modal particle and a gradual decrease in what seems to be an indicative form with modal value is noticed. This correlation points to a trade off between functionally equivalent structures (see Figures 2 and 3 below):

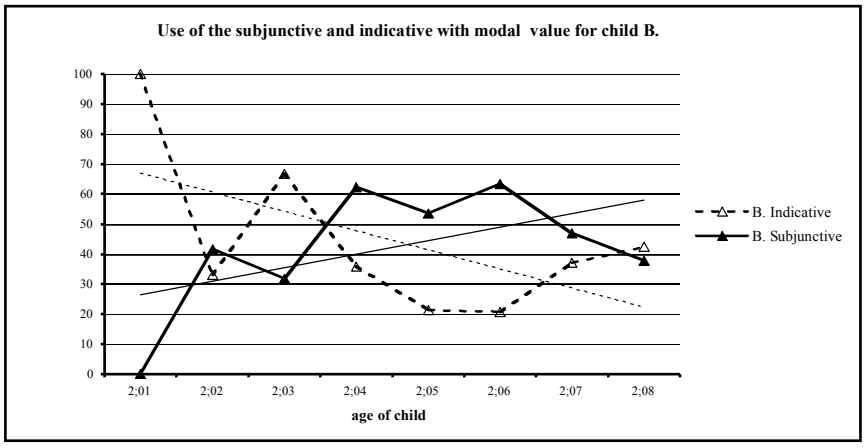


Figure 2. The trade off between the indicative (used with modal value) and the *să* subjunctive: the B. corpus

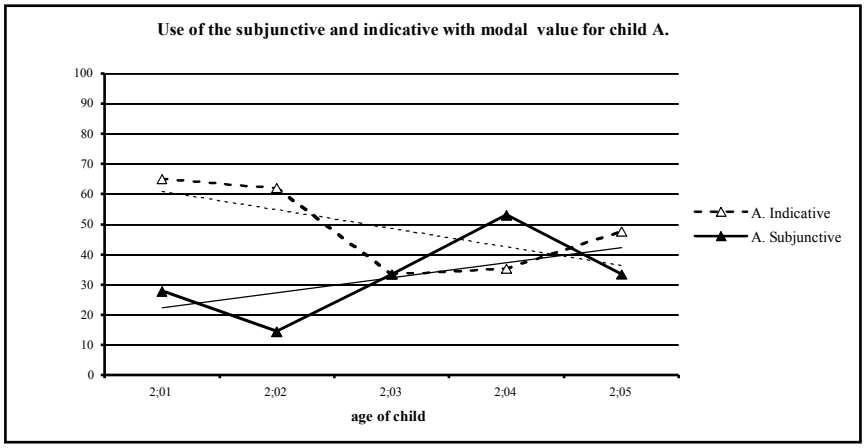


Figure 3. The trade off between the indicative (used with modal value) and the *să* subjunctive: the A. corpus

At first sight, the absence of the modal particle *să* during the early stages and its optional omission after emergence leads to the possible conclusion that the trade off reduces to the acquisition of the modal particle *să*, i.e. it is the analogue of the decrease of OIs as modals increase in OI languages (Blom 2002). The Romanian *să,* however, has a hybrid status (Farkas 1985); it can occur in the inflectional domain of the verb as a marker of mood and it can also move to C in the absence of a lexical complementizer. The presence of *să* signals, besides mood, finiteness. It is plausible to assume that for the early grammar, the emergence of *să* indicates that an active C-domain is fully available and that finiteness is gradually becoming part of the system. The short stage when the particle is optionally omitted (in the B. corpus 1;11-2;4, in the A. corpus 2;1-2;6) can be interpreted as the analogue of the OI stage in OI-languages. Romanian children optionally use a BS (a non-finite form) in contexts where a finite form is required in the target language:

(25) a. Hai <u>să facem</u> un castel. Aicea <u>facem</u> o castel.

let us *să* make 1st pl a castle. Here make 1st pl a castle

'Let's build a castle. We (should) build a castle here.' (B. 2;4)

b. Să plimbi cu bicicleta # te urci aicea.

să walk 2nd sg with bike.the # you.refl Acc climb 2nd sg here

'You should ride the bicycle # you (should) climb up here'. (B. 2;4)

As can be seen, the BS conveys the modal values of early OIs (volition, imperative force) and it is (arguably) an underspecified form. Interestingly, the frequency of BSs in Romanian is comparable to the frequency of OIs in other Romance languages (see Table 9 below):

Language	%RI / BS
Catalan (Bel 2001) Italian (bilingual) (Salustri & Hyams 2003) Spanish (Bel 2001)	0% - 3% RI 2% - 7% RI 0%- 2% RI
Romanian	**3% BS**

Table 9. The use of optional BSs in Romanian compared to early infinitives in null subject Romance languages

In OI languages bare infinitives are rarely attested in the adult system in a very restrictive set of contexts. BSs with imperative force are also rarely attested in adult Romanian, being licit in a small number of contexts. This indicates that the early grammar does not differ qualitatively from the target grammar. Schütze (2010) defines the OI stage as involving "underspecification of features of the Infl system within the narrow syntax but no missing structure and no nonadult spell-out principles" (p. 250). The Romanian BS seems to have these properties. During the "optional *să*" stage, the imperative force feature is checked via Merge of *să* or, when the particle is omitted, via pragmatic inference Both alternatives are

available in the target grammar. When *să* emerges, checking of mood features via Merge leads to a gradual decrease in the use of BS.

We propose that the OI analogue in Romanian is the BS. In this respect Romanian patterns with Greek, where a language specific form, the bare perfective, similar to the bare subjunctive in Romanian, has been analysed as the OI-analogue (Varlokosta et al. 1998, Hyams 2002, 2005). But Romanian, unlike Greek, has an infinitival form. However, no bare infinitive has been attested in finite contexts in early Romanian.

4. Conclusions

The goal of the present paper has been to identify a possible OI analogue in child Romanian. We have examined the early non-finite verbal forms which Romanian children use in contexts in which the target grammar requires finite forms. Three possible accounts have been considered. The first one assumes that early infinitives are attested both in Germanic and Romance languages. The second approach tries to look for OI analogues starting from the verbal form which is the most frequently encountered in the early grammars. For various Romance languages, this form has been argued to be the present tense of the indicative. A third approach focuses on the modal interpretation of early optional infinitives and looks for forms with similar modal value which are overused by children; it identifies the imperative as a possible optional infinitive analogue in a variety of languages. We have showed that these approaches are not borne out by the Romanian data. The data which have been examined provide evidence that the imperative cannot be the Romanian OI-analogue, as predicted by Salustri and Hyams (2003). The imperative is not the most frequently encountered form in early speech. Romanian children do not use the imperative more frequently than children who acquire an OI-language or than adults, nor does the percentage of used imperatives decrease

with age as expected if it were an early overused form. Two other inflected verbal forms are attested during the early stages: the present tense of the indicative and the BS, a subjunctive form without the modal particle *să.* The third person singular form of the present tense of the indicative is the most frequently encountered one. In this, Romanian follows a pattern also found in Spanish, Catalan, Basque, French and Greek. However, the optionality associated with OIs can be detected in the system only after the emergence of the modal particle *să.* It is only after its emergence that non-finite forms (BS) optionally used in finite contexts can be identified in the corpora. The trade off between BSs and *să* subjunctives is similar to the trade off between OIs and structures with modal verbs reported for OI-languages (Blom 2002, among others).

We have argued that the Romanian OI-analogue is the BS. In this respect, Romanian patterns with Greek, a Balkan language with no infinitive form. Data from child Romanian adduce evidence in favour of the view that the OI-analogue is language specific (as argued, for example, in Wexler et al. 1994, Varlokosta et al. 1996).

We believe that the present investigation illustrates how hypotheses about early underspecified forms might benefit from the analysis of language specific properties as well as from a qualitative analysis of the data. Our findings provide evidence that a verbal form which is overused in development need not be the analogue of the OI.

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References

Avram, L., 1999, Auxiliaries and the Structure of Language, Bucharest, Editura Universității din Bucureşti.

Avram, L., 2000, "O analiză minimalistă a cliticelor în acuzativ din română", Studii şi cercetări lingvistice LI (1), 33-47.

Avram, L. 2010, "Early optional infinitives or early default forms? The view from child Romanian", paper presented at The Annual Conference of *Transilvania* University, Braşov, April 16-17, 2010.

Avram, L., M. Coene, 2005, **"**On the acquisition of finiteness. The case of child Romanian", in: M. Coene, L. Tasmowski (eds), On the Expression of Time and Space, Cluj-Napoca, Clusium, 2005, 151-172.

Avram, L., M. Coene, 2009, "Null objects and Accusative clitics in Romanian", Bucharest Working Papers in Linguistics, XI, nr. 1, p. 233-254.

Bel, A., 2001, "The projection of aspect: A key in the acquisition of finiteness?", in: M. Almgren et al. (eds) Research in Child Language Acquisition. Proceedings of the 8th Conference of the International Association for the Study of Child Language, Somerville, MA, Cascadilla Press , 2001, 1274-1313.

Blom, E., 2002, "On the use and interpretation of root infinitives in early child Dutch", in: S. Barbiers, F. Beukema, W. van der Wurff (eds), Modality and its Interaction with the Verbal System, Amsterdam, John Benjamins, 2002, 103-131.

Buesa García, C. 2007, "Early root infinitives in a null-subject language: A longitudinal case study of a Spanish child", in: A. Belykovaet al. (eds.) Proceedings of the 2nd Conference on Generative Approaches to Language Acquisition in North America (GALANA), Somerville, MA, Cascadilla Proceedings Project, 2007, 39-50.

Castro, D., E. Gavruseva, 2003, "Aspect and finiteness in the English/Spanish bilingual acquisition", First Language 23 (2), 171-192.

Coene,M., H.Taelman, L. Avram, S. Gillis, 2005, "Early bare infinitives are universally non-finite...but not always infinitives". Paper presented at Congress of International Association for the Study of Child Language (IASCL), Berlin, July 2005.

Dascălu-Jinga, L., 2002, Corpus de română vorbită [CORV]. Eşantioane. Bucureşti, Oscar Print.

Ezeizabarrena, M. J. ,1997, " Morfemas de concordancia con el sujeto y con los objetos en el castellano infantil", in: A. T. Pérez-Leroux, W. R. Glass (eds), Contemporary Perspectives on the Acquisition of Spanish, Vol. *1:* Developing grammars, Somerville, MA, Cascadilla Press, 1997, 21-36.

Farkas, D., 1978, "Direct and indirect object reduplication in Romanian", in: D. Farkas, W. M. Jacobsen, K.W.Todrys (eds), Papers from the Fourteenth Regional Meeting of Chicago Linguistic Society, 1978, 88-97.

Grinstead, J., 1998, Subjects, Sentential Negation and Imperatives in Child Spanish. Doctoral dissertation, University of California, Los Angeles.

Grinstead, J., 2000, "Case, inflection and subject licensing in child Catalan and Spanish", Journal of Child Language, 27, 119-155.

Guasti, M. T.,1993/4, "Verb syntax in Italian child grammar: Finite and non-finite verbs", Language Acquisition, 3(1), 1-40.

Hoekstra, T., N Hyams, 1998, "Aspects of root infinitives", Lingua, 106 (1), 81-112.

Hyams, N. ,2002, "Clausal structure in child Greek. A reply to Varlokosta, Vainikka and Rohrbacher and a reanalysis", The Linguistic Review, 19 (3), 225-269.

Hyams, N., 2005, "Child non-finite clauses and the modal-aspect connection: Evidence from child Greek", in: P.Kempchinsky, R. Slabakova (eds), The Syntax, Semantics and Acquisition of Aspect, Dordrecht: Kluwer, 2005, 293-316.

Isac. D., Jakab, E., 2004, "Mood and force features in the languages of the Balkans", in: O. Tomic (ed), Balkan Syntax and Semantics, Amsterdam: John Benjamins, 2004, 315-338.

Legate, J.A., C. Yang, 2007, "Morphosyntactic learning and the development of tense", Language Acquisition, 14, 315-344.

Liceras, J.M., A Bel, S. Perales, 2006, "Living with optionality: Root infinitives, bare forms and inflected forms in child null subject languages", in: N. Sagarra, A. J. Toribio (eds), Selected Proceedings of the 9th Hispanic Linguistics Symposium, Somerville, MA: Cascadilla Press, 2006, 203-216.

Liceras, J.M., S. Perales, A. Bel, 2007, "Modality, non-finite forms and the manifestation of the RI stage in null and non-null subject languages", in: S. Baauw, J. van Kampen, M. Pinto (eds), The Acquisition of Romance Languages. Selected Papers from The Romance Turn II 2006, Utrecht: LOT., 2007, 97-111.

MacWhinney, B., 2000, The CHILDES Project: Tools for Analyzing Talk. Third edition, Mahwah, NJ, Lawrence Erlbaum Associates.

Manea, D., G. Pană Dindelegan, R. Zafiu, 2008, "Verbul", in: V. Guțu Romalo (ed), Gramatica limbii române, vol. I Cuvântul, Bucharest: Editura Academiei Române, 2008, 323-584.

Paradis, J., M. Crago, M., 2001, "The morphosyntax of specific language impairment in French: An extended optional default account", Language Acquisition, 9(4), 269-300.

Phillips, C., 1995, "Syntax at age two: Cross-linguistic differences", in: C. Schütze, J. Ganger, K. Broihier (eds), Papers on Language Processing and Acquisition. MIT Working Papers in Linguistics 26, 325-382.

Pierce, 1992 Pierce, A. 1992. *Language acquisition and syntactic theory: A comparative analysis of French and English child grammars*. Dordrecht: Kluwer.

Pratt, A., J. Grinstead, 2007, "Optional infinitives in child Spanish", in: A. Belikova, L. Meroni, M. Umeda (eds), Proceedings of the 2nd Conference on Generative Approaches to Language Acquisition in North America (GALANA), Somerville, MA: Cascadilla Proceedings Project, 351-362.

Rhee, J., K. Wexler, 1995, "Optional infinitives in Hebrew", in: C. Schütze, J. Ganger, K. Broihier (eds), Papers on Language Processing and Acquisition, MITWPL 26, 383-402.

Rizzi, L., 1993/1994, "Some notes on linguistic theory and language development", Language Acquisition , 3(4), 371-394.

Rohrbacher, B., S. Vainikka, 1994, "Verbs and subjects before age 2: The earliest stages in Germanic L1 acquisition", in: J. Beckman (ed), Proceedings of NELS 25 (vol.2), GLSA, Amherst, 55-69.

Rus, D., P. Chandra, 2006, "Child Slovenian imperatives: Root infinitives analogues?", in A. Belletti, E. Bennati, C. Chesi, E. DiDomenico, I. Ferrari (eds), Language Acquisition and Development. Proceedings of GALA 2005, Cambridge: Cambridge Scholars Publishers, 2006, 463-475.

Salustri ,M., N. Hyams, 2003, "Is there an analogue to the RI stage in the null subject languages?", in: B. Beachley, A. Brown, F. Conlin (eds), Proceedings of the 27th Annual

Boston University Conference on Language Development, volume 2, Cambridge, MA, Cascadilla Press, 2003, 692-703.

Salustri ,M., N. Hyams, 2006, "Looking for the universal core of RI", in: V. Torrens, L. Escobar (eds), The Acquisition of Syntax in Romance Languages, Amsterdam, John Benjamins, 2006, 159-182.

Schütze, C., 2010, The status of nonagreeing *don't* and theories of root infinitives", Language Acquisition, 17, 235-271.

Torrens, V. 1995. The Acquisition of syntax in Spanish and Catalan: The functional Category Inflection. University of Barcelona Press.

Varlokosta, S., A. Vainikka, B. Rohrbacher, 1996, "Root infinitives without infinitives", in: A. Stringfellow, D. Cahana-Amitay, E. Hughes, A. Zukowski (eds), Proceedings of the 20th Annual Boston University Conference on Language Development, volume 2, Somerville, M, Cascadilla Press, 1996, 816-827.

Vasilescu, A., I. Vântu, 2008, 'Tipuri de enunțuri în funcție de scopul comunicării", in: V. Guțu Romalo (ed), Gramatica limbii române, vol. II Enunțul. Bucharest: Editura Academiei Române, 2008, 28-29.

Weverink, M., 1989, The subject in relation to inflection in child language. MA thesis, University of Utrecht.

Wijnen, F., 1994, "Incremental acquisition of phrase structure: A longitudinal analysis of verb placement in Dutch child language", paper presented at the *NELS Conference* (Workshop on Language Acquisition), Philadelphia.

Wexler, K.,1994, "Optional infinitives, head movement and the economy of derivations", in: D. Lightfoot, N. Hornstein (eds), Verb Movement, Cambridge, Cambridge University Press, 305-350.

Wexler, K., 1998, “Very early parameter setting and the unique checking constraint: a new explanation of the optional infinitive stage”, Lingua, 106 (1), 23-79.

Wexler, K., J. Schaeffer, G. Bol, 2004, “Verbal syntax and morphology in typically developing Dutch children and children with SLI: How developmental data can play an important role in morphological theory”, Syntax, 7 (2), 148-198.

Yang, C.D. 2000, Knowledge and Learning in Natural Language, doctoral dissertation, MIT.