# OVERT SUBJECTS IN CHILD ROMANIAN: EVIDENCE OF EARLY SENSITIVITY TO ARGUMENT STRUCTURE

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Abstract: Previous acquisition studies which investigated the distribution of early subjects provide evidence that children place early subjects in accordance with the argumental properties of verbs. In Teodorescu (2014) longitudinal data show that this sensitivity is attested in child Romanian as well. The present paper extends the investigation of the distribution of early subjects in child Romanian to narratives, with a view to identifying whether the way in which children use overt subjects reveals early sensitivity to the unaccusative / unergative/transitive distinction. The results offer evidence that the Romanian child is sensitive to unaccusativity, in spite of the fact that Romanian syntax does not encode it syntactically in a very transparent way.

Keywords: null subject, pre-verbal subject, post-verbal subject.

#### 1. Aim

Several studies have shown that children are sensitive to the distinction between unaccusatives and unergatives at a very early age (Larusso, Caprin and Guasti 2004, Cabre Sans and Gavarró 2007, Vernice and Guasti 2014, Teodorescu 2014), using subjects in accordance with the argument structure of verbs. The data reported in these studies reveal a lower subject omission rate with unaccusatives, as well as an early preference to place the subject of unaccusatives in post-verbal position. For child Romanian, however, the data used in Teodorescu (2014) come from only one longitudinal corpus. The goal of the present paper is to investigate the early use of subjects with transitives, unaccusatives and unergatives in narratives. This will allow me to use data coming from a more significant number of participants as well as to compare the use of subjects in two types of register: spontaneous speech and narratives. The paper is organized as follows: Section 2 briefly presents unaccusativity in Romanian. In section 3 I summarize the main previous findings in the acquisition literature with respect to subject use and verb classes. The present study is presented in section 4. Section 5 contains the conclusions

## 2. Unaccusativity in Romanian

One-argument intransitives have been argued to fall into two classes: unaccusatives and unergatives (see Avram 2006 and references therein). The argument of the former is assigned a Patient or Theme theta-role:

### (1) The leaf was falling from the old tree.

The class of unaccusatives includes verbs of existence or happening, verbs denoting 'non voluntary emission of stimuli that impinge on senses', the so-called duratives and aspectual predicates. Their argument has similar properties with those of an object. This is why it has been argued that it merges with the verb as an internal argument, in

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complement position. The D-structure of a sentence with an unaccusative verb is the one in (2), where the DP object is base-generated in the complement position of the verb, as an internal argument:

(2) 
$$[_{VP} \_ [_{V'}V DP]]$$

Unergative verbs differ from unaccusatives in terms of agentivity. The argument of this class of verbs is assigned an Agent theta-role and in most cases it has control over the action denoted by the verb. These verbs denote mainly volitional acts: *laugh*, *smile*, *run*, *work*, *walk*, *play*, etc.:

## (3) The children played in the park.

The argument of the verb in (3), as mentioned above, is assigned the Agent theta-role, like prototypical subjects. This is why it has been analysed as merging in the Spec,VP position. The D-structure of a sentence containing an unergative verb is shown in (4) below; the argument merges in Spec,VP as an external argument:

$$(4) \qquad [_{VP} DP [_{V'} V_{\_}]]$$

The few available studies which tackled the issue of unaccusativity diagnostics in Romanian have shown that unaccusativity is weakly encoded in this language (Dobrovie-Sorin 1994, Dragomirescu 2010, Cornilescu 2005, Iancu 2014); there is only one single strong unaccusativity diagnostic: the use of the past participle as a noun modifier inside the DP, which is licit with transitives (5a) and unaccusatives (5b), but not with unergatives (5c):

(5) a. cartea scris

b. om îmb trânit

'an aged person' (from Iancu 2014)

c. \*femeie str nutat

'woman sneezed' (from Iancu 2014)

According to these studies, the difference between unergatives and unaccusatives is not strongly encoded in the syntax of Romanian. For acquisition, this translates into an underspecified input, which does not contain transparent cues with respect to this distinction.

The use of subjects with these two classes of intransitives is not more transparent either. In Romanian, a *pro*-drop language, the argument whose syntactic function is that of subject can appear both in pre- and in post-verbal position, irrespective of verb class. Importantly, when the subject is in post-verbal position, there is no definiteness constraint (Alboiu 2002), as is the case in Italian or English, not even with unaccusatives (see 6 below). Both definite and indefinite subjects can occur in post-verbal position with unaccusatives:

(6) a. Vine un copil. is coming a child

- 'A child is coming.' b. Vine copilul.
  - is coming the child 'The child is coming.'

Given the current understanding of unaccusativity in Romanian, one can say that this language is not very transparent with respect to the different properties of verb classes. The input which children receive does not contain robust cues for unaccusativity.

### 3. Previous studies

Larusso, Caprin and Guasti (2004) investigate the distribution of overt subjects in early child Italian. They focus on the way in which children use overt and null subjects in the context of various verb classes: transitives, unergatives and unaccusatives. Their analysis relies on both longitudinal and cross sectional data.

Their results are summarized In Tables 1 and 2 below. Table 1 presents the use of overt and null subjects, Table 2 presents the use of subjects relative to verb class.

Table 1. Null vs. overt subjects in child Italian (Larusso, Caprin and Guasti 2004)

Type of data	Overt subject	Null subject
Longitudinal	25%	75%
Cross-sectional	21.5%	78.5%

Table 2. Subject use with verb classes in child Italian (Larusso, Caprin and Guasti 2004)

	Unaccusative	Unergative	Transitive
Longitudinal			·
Null	25%	75%	78%
Post-verbal	21.5%	78.5%	28%
Pre-verbal	21%	79%	72%
Cross-sectional		·	
Null	71.3%	88%	33%
Post-verbal	53.71%	26.09%	26.38%
Pre-verbal	46.29%	73.91%	73.62%

As the data in the two tables show, the distribution of subjects with transitives, unergatives and unaccusatives verbs is different both in the longitudinal and in the cross-sectional data; the omission rate is lower with unaccusatives than with the other two classes of verbs and the overt subjects used with unaccusatives are preferentially placed in post-verbal position.

Cabre Sans and Gavarro (2007) investigate the acquisition of subjects in early child Catalan to see whether there are differences between the use of subjects in the context of transitive, unergative and unaccusative verbs. They use only longitudinal data. Their findings are summarized in Tables 3 and 4.

Table 3. Null and overt subjects in child Catalan (Cabre Sans and Gavarro 2007)

Type of data	Overt subject	Null subject
Longitudinal	31.08%%	68.92%

Table 4.Subject use with verb classes in child Catalan (Cabre Sans and Gavarro 2007)

	Unaccusative	Unergative	Transitive
Longitudinal			
Post-verbal	64.1%	33.4%	28.7%
Pre-verbal	35.9%	66.6%	71.3%

The results reveal that Catalan children use more post-verbal subjects in sentences with unaccusatives, and a tendency to place the subject in front of the verb when it is unergative or transitive. The omission rate is higher with transitive and unergative verbs than with unaccusatives. The authors' conclusion is that children differentiate between the various classes of verbs very early and are able to use the subject in accordance with the syntactic properties of each class.

Teodorescu (2014) investigated the use of subjects in child Romanian on the basis of longitudinal data, coming from one corpus of monolingual Romanian (one child, age range 1:9-2:2). The results are similar to those reported for child Italian and Catalan, as can be seen in Tables 5 and 6.

Table 5. Null and overt subjects in child Romanian (Teodorescu 2014)

Tra	Transitive		Unaccusative		Unergative
Overt	Null	Overt	Null	Overt	Null
18.55%	81.45%	55.44%	44.56%	30.96%	69.04%

Table 6. Subject use with verb classes in child Romanian (Teodorescu 2014)

	Transitive		Unaccusative		Ţ	Jnergative			
	Ove	ert	Null	Ov	ert	Null	O	vert	Null
	pre-V	post- V		pre-V	post-V		pre-V	post-V	
1	1.71%	6.82%	81.45%	14.63%	40.79%	44.56%	5.65%	25.27%	69.0 4%

The data used in Teodorescu (2014), however, come from one single child. Moreover, the number of files investigated was relatively small. This is why in the present study I use data coming from a larger corpus.

## 4. Subject distribution in child Romanian

## 4.1 Aim

The main question which I address in this study is whether subject use is determined by verb class in child Romanian in spite of input underspecification.

As discussed in section 2, Romanian does not provide the straightforward syntactic encoding of unaccusativity found in languages like Italian or Catalan. The input which

the Romanian child receives with respect to the argument structure of intransitives is underspecified. Moreover, subjects of any verb can occur in either pre- or post-verbal position. But, in spite of input underspecification, the data reported in Teodorescu (2014) reveal that Romanian children are sensitive to the difference between the argument structure of unaccusatives and that of unergatives. In the present study, I extend the investigation of early subject use in child Romanian to a larger corpus and to a different register: narratives.

### 4.2 Corpus and method

The data come from a corpus of narratives based on a 'frog story' corpus, i.e. one based on an elicited production task (Slobin and Berman 1994). I used the picture storybook for children *Frog, where are you?* (Mayer 1969), which contains 24 pictures and no text. It is the story of a boy and his dog in search of their lost pet frog. In their search, the path drives them into a forest. The boy finally finds his frog and they return home. Children were shown the book and asked to tell the story, using the sequence of the pictures. Each child was audio-recorded and then the data were transcribed. A group of adult controls was also included in the study.

The corpus used in the analysis is presented in Table 7. It contains 49 'stories', of which 32 come from the Buja corpus (Buja 2008) and 17 from my own corpus.

Table 7. 'Frog story' corpus: child Romanian

Age range	Nr of participants	TOTAL nr sentences with intransitive verbs
3-4 years	17	488
4-5 years	17	512
5-6 years	10	370
TOTAL	44	1370
Adult controls	5	167

I examined all the transcripts for the production of unaccusative and unergative verbs in declarative sentences. The subject was categorized as null or overt. The position of the overt subject was also considered in relation to verb classes.

#### 4.3. Results

Children used both null and overt subjects. Unlike what has been reported for the use of subjects in spontaneous production in child Romanian (Teodorescu 2014), where the rate of null subjects was higher (65%), in narratives the rate of null and overt subjects is similar. Since the percentage of null subjects is similar with children and adults, I assume that the difference can be accounted for in terms of register.

The null/ overt subject ratio in narratives is presented in Table 8 below:

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Age group	Overt subject	Null subject					

3-4 years	55.90%	44.10%
4-5	51.84%	48.16%
5-6	55.92%	44.08%
Adult controls	50.28%	49.72%

The data in Table 8 reveal no significant difference between the younger and the older children, or between children and the adult controls.

The analysis of the use of subjects with unaccusatives and unergatives reveals a higher rate of overt subjects with the former, i.e. there is an asymmetry between the rate of null subjects with unaccusatives and with unergatives in narratives, across age groups. The results are summarized in Table 9:

Table 9. Child Romanian: Subjects with unaccusatives and unergatives in narratives

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Age group	Unaccusative		Unergative				
	Overt	Null	Overt	Null			
3-4	72.3%	28.7%	49%	51%			
4-5	70%	30%	56%	44%			
5-6	72.8%	27.2%	57.81%	42.19%			
Total	71.7%	28.63%	54.27	45.73%			
Adults	71.5%	22.5%	41.7%	58.3%			

Overt subjects are placed in both pre- and post-verbal position. But one notices a difference between unaccusatives and unergatives. With unaccusatives, the rate of post-verbal subjects is higher than with unergatives across age groups and also with the group of adult controls. The findings are summarized in Table 10.

Table 10. Pre- vs. post-verbal subjects with unaccusatives and unergatives in narratives

Age group	Unaccusative		Unergative			
	Overt		Overt Null Overt		vert	Null
	pre-V	post-V		pre-V	Post-V	
3-4	33%	67%	28.7%	73.1%	26.9%	51%
	(n=48)	(n=98)	(n=59)	(n=98)	(n=36)	(n=140)
4-5	29.9%	71.1%	30%	69.9%	30.1%	44%
	(n=44)	(n=103)	(n=63)	(n=118)	(n=51)	(n=133)
5-6	29.89%	70.11%	27.2%	54.1%	45.9%	42.19%
	(n=29)	(n=68)	(n=36)	(n=74)	(n=63)	(n=100)
Adult controls	39.2%	61.8%	22.5%	75%	25%	58.3%
	(n=21)	(n=34)	(n=16)	(n=30)	(n=10)	(n=56)

#### 5. Conclusions

The main question addressed in this paper was whether Romanian children use subjects in accordance with the argumental structure of verbs, as has been argued for child Italian and child Catalan. The same results have been reported for child Romanian in Teodorescu (2014), on the basis of longitudinal data. In this study, I used data coming from a corpus of 39 'frog story' narratives. The analysis of the novel data revealed that in spite of the fact that Romanian does not encode unaccusativity in a transparent way the Romanian child differentiates between the two classes of monadic intransitives. Evidence in favour of this argument comes from the higher rate of overt subjects used with unaccusatives as well as from the fact that the majority of overt subjects of utterances which contained unaccusatives were post-verbal. In this respect, subject use in narratives does not differ from subject use in spontaneous speech.

The comparison of the data from narratives with previous results for the use of subjects in spontaneous speech reveals, however, a difference. In spontaneous speech, the rate of null subjects was lower overall. In narratives, the overall rate of null subjects is similar to that of overt subjects, most probably because of register. The difference is found with both children and adults. In spite of this overall similarity, the ratio of null subjects was lower with unaccusatives, reinforcing the conclusion that Romanian children are sensitive to the argument structure of intransitives and use subjects in accordance with this structure.

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