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EARLY VERBS AND THE ACQUISITION OF TENSE FEATURE IN SPANISH AND CATALAN

1. INTRODUCTION*

The acquisition of tense by young children is a controversial topic within the field of language acquisition. Some authors argue for the initial absence of this category in early grammar (Radford 1990, Tsimpli 1992, Meisel 1994); others consider it optional (Wexler 1994, Rizzi 1994) although for different reasons. Still others propose that this category, although underspecified, is already present in the first sentence structures (Hyams 1996). Using as a point of departure developmental verb forms in Spanish and Catalan, two languages with rich morphology, this chapter aims to discuss the following two questions:

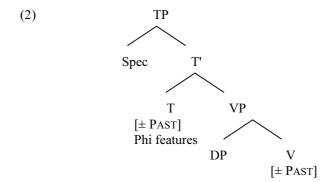
- (1) a. Do early child sentences have a Tense (T) projection?
 - b. Do children understand tense?

The answer to the questions in (1) is based on three types of evidence: morphology, syntax and semantics of tense. I will take the presence of verbal morphology in child language production as morphological evidence. Verb syntax related to the Tense feature is evidenced by certain properties such as the position of arguments, subjects, negation and pronominal clitics, and pertinent naturalistic data will be discussed. Regarding the semantic evidence, I will argue that children (and adults) give the appropriate interpretation to the verb forms that they use and we/I will present data to analyse the meaning of the variable presence of tense contrasts.

2. SOME ELEMENTS OF VERB SYNTAX IN SPANISH AND CATALAN

In the following paragraphs I provide a brief description of the syntactic behavior of verbs in Spanish and Catalan. I start with a short sketch of verb syntax in the minimalist framework. Within the Minimalist Program (MP), the verb and the tense affix form a unit which also contains a feature t for Tense and a phi group of agreement features inherent to the lexical item (V). This V is to be associated, by means of the operation MERGE, with a functional category T. This category contains an abstract feature T for Tense which expresses the tense of the structure, [±PAST], and phi features expressing person and number. While the agreement features of V are not interpretable and, therefore, must be deleted, the feature t in V is interpretable and, as such, cannot be deleted so that it is accessible to interpretation in the semantic interface (LF). The category T also contains an EPP feature which will permit a nominal category to occupy the position of its specifier, [Spec, TP], that is, the (surface) subject; a full DP or pro may occur as sentence subject with its interpretable phi features accessible to interpretation at LF. This group of features must be checked through the CHECK operation. Thus, the derivation converges, becoming readable at the interface level (i.e., it can receive full interpretation). As for AGRP, in Chomsky's (1995) Minimalist version, the functional node AGR ceases to be an independent projection. Verbs are base-generated fully inflected with the head T being able to check more than one feature.

After checking (either by movement, the MOVE operation, or by a simpler operation, which is the combination of MERGE+AGREE, see note 1), we have a configuration in which the basic functional category T is projected, as indicated in (2):



I am assuming the VP-internal subject hypothesis. The [Spec, TP] position is projected as a Case position, where (Nominative) Case is checked against T. Nevertheless, the DP subject may remain *in situ* allowing postverbal subjects, that have 'default' nominative case. Moreover, as temporal and agreement morphology is rich in Spanish and Catalan, I assume that T has strong V-features and thus it attracts V by overt movement in order to have its features checked. The configuration in (2) is the structure we need in order to account for finite structures in Spanish and Catalan.

As far as the position of negation is concerned, the negative marker *no* must obligatorily precede the verb, either finite or non-finite (examples from Spanish):

- (3) a. El niño no come galletas. (finite) the child neg eats cookies
 - b. No comer galletas es bueno. (non-finite) neg eat-INF cookies is good

The position of the functional projection Neg is higher than T. The evidence is provided by the observation that the negative marker *no* always precedes both the verb (whether finite or non-finite) and the clitics.

In both Spanish and in Catalan, the placement of clitics varies depending on the following distinction: clitics are placed to the left of the verb in the case of finite forms and to the right of the verb in the case of non-finite forms and imperatives (examples from Spanish):

- (4) a. El niño las come. (finite) the child CL-3pp eats
 - b. El niño quiere comerlas. (non-finite) the child wants eat-INF-CL-3pp

To account for their distribution, most analyses of pronominal clitics imply the existence of a higher functional category to which the verb must move, independently of whether it is assumed that object clitics move from an argument position and adjoin to the left of the verb in T in an incorporation process (Kayne 1991) or that they are directly generated in a non-argument adjunct position by means of an agreement relation (Borer 1984).²

From the acquisition perspective, I consider two accounts: the Continuity Hypothesis and the Maturation Hypothesis. According to the former, all principles and categories, including functional projections, are part of the early grammar. On the other hand, the proponents of the Maturation

Hypothesis postulate that initial grammars lack functional content, having only lexical projections.³

In the Maturation Hypothesis it is proposed that in children's initial grammars, Tense as a functional category does not project. As a consequence, one must conclude the following:

- 1) Tense cannot be interpreted and therefore it is not interpreted (Prefunctional Stage Hypothesis, Radford 1990, Tsimpli 1992),
- 2) There are substitutory mechanisms, as in the Defective Tense Hypothesis or Aspect before Tense Hypothesis (Antinucci-Miller 1976 or the modified version by Meisel 1994).

I consider these two proposals together in (5b) under the label *Maturation*. In the present work, however, I adopt the proposal in (5a), the *Continuity* hypothesis, according to which the feature of Tense is already projected in early grammars. This facilitates the presence of the functional category T and its associated properties (presence of tense inflection markings, possibility of interpreting the tense of the structure and availability of the positions capable of hosting nominal categories):

- (5) a. Continuity Hypothesis: *«Child grammar has Tense»*Children *understand tense.* The different tense forms documented are what they seem to be and carry the tense expressed by the corresponding morphology.
 - b. Maturation Hypothesis: *«Child grammar does not have Tense»* Children do not understand tense, and that is why they scarcely use the different verb forms. The alternation of forms may be a reflection of the input but, nevertheless, the different forms "mean" the same (either they do not express tense or they all express present tense, or they derive from other mechanisms).

The two hypotheses in (5) imply different answers to the questions in (1). These two hypotheses, however, make very different predictions that will be checked against first language acquisition data from Spanish and Catalan.

3. DATA COLLECTION AND PRELIMINARY RESULTS

The data used in this work belong to a natural production corpus which originates from different sources (see Table 1). Six children were video-recorded (with the exception of Juan, who was audio-recorded) either every two weeks or every month.

Table 1. Children and ages

Language	Child	Period	Number of sessions	Source
Catalan	Júlia	1;9-2;6.25	13	Bel (1998)
	Pep	1;6-2,6	11	Serra-Solé (CHILDES)
	Gisela	1;10-2;8	6	Serra-Solé (CHILDES)
Spanish	María	1;7-2:6	12	López Ornat (1994)
	Emilio	1;10-2;6	10	Vila (1984)
	Juan	1;9-2;8	8	Linaza (CHILDES)

Tables 2 and 3 present the developmental order of the different verbal tenses in the children's sentence productions. Note the parallelism between languages and also between the individual children: first comes the use of the present tense forms, followed by the past tense forms in a relatively short period of time, and then by the future tense forms. There is high frequency of present tense in every developmental stage (in every file), medium frequency of past forms, generally increasing from the moment they are first documented, and low or very low frequency of future forms. Regarding the frequencies, we should note that, in Spanish, of a total of 1951 forms collected, 1853 are present forms, corresponding to 81.6%. In Catalan, of 1068 verbs, 841, that is 78.7%, are present forms. This ratio is similar to other data from the acquisition of Spanish and Catalan (Hernández-Pina 1984, López-Ornat 1994 and Ezeizabarrena 1996, for Spanish; Cortés & Vila 1991 and Capdevila 1996, for Catalan).

In the case of Juan, some comments are in order. There are no verbs with future tense and, in fact, the first four past forms, corresponding to 2;1, are repetitions. These data belong to a child presenting a slower evolutionary path. Additionally, there are some important discontinuities from one transcript to the next, and the communicative exchanges are not very rich from a linguistic point of view. All these factors must be considered in interpreting his data.

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Table 2. Development of verb forms in Spanish (frequencies)

Child	Age	Present	Past	Future
Emilio	1;10 ^a	3		
	1;10b	1	1	
	1;11		7	
	2;0	5	2	
	2;1 ^a	10	8	
	2;1b	13	5	
	2;3	44		8
	2;4	64	11	3
	2;5	69	6	2
	2;6	69	12	6
María	1;7	41	2	_
	1;8	19		
	1;9	41	1	
	1;10	44	13	4
	1;11	50	12	2
	2;0	96	23	6
	2;1	139	28	14
	2;2	165	23	13
	2;3	193	33	20
	2;4	42	6	15
	2;5	189	33	11
	2;6	121	10	17
Juan	1;9	7		
	2;0	6		
	2;1	7	4	
	2;3	22		
	2;4	44		
	2;5ª	20	4	
	2;5b	32	3	
	2;8ª	27	1	
Total n		1.583	248	120
%		81.6%	12.7%	5.7%

Table 3. Development of verb forms in Catalan (frequencies)

Child	Age	Present	Past	Future
Gisela	1;10	1		
	2;1	6		
	2;2	27	1	1
	2;4	28	2	
	2;6	24		
	2;8	171	3	9
Júlia	1;9b	6		
	1;10	6		
	1;11a	6		
	1;11b	10	3	
	2;0a	9	6	
	2;0b	6	4	
	2;1a	33	15	3
	2;1b	18	9	1
	2;2	19	13	
	2;3	28	11	2
	2;4	35	11	1
	2;5	62	6	2
	2;6	55	12	
Pep	1;6	3	1	
	1;8b	5		
	1;10	22	11	
	1;11	10	14	1
	2;0	10	3	
	2;1	16	12	
	2;2	26	14	8
	2;3	59	19	4
	2;4	43	6	2
	2;5	76	14	1
	2;6	12	2	1
Total n		841	191	36
%		78.7%	17.9%	3.4%

In summary, in Spanish and Catalan, children mostly speak in present tense (and, as we might anticipate, about the present time). They also begin to use the past tense shortly after the present tense.

4. CONTRASTIVE TENSE MORPHOLOGY IN EARLY SPANISH AND CATALAN

Different criteria reveal different pictures. From the observation of the data in Tables 2 and 3, it could be argued that tense is inactive, at least until tense contrasts are detected. If we adopt the criterion that tense is only active when tense contrasts are attested, tense will appear not to be active during the first months. This stage is summed up in Table 4:

Table 4. Tense non activity stage for each child according to the absence of tense contrasts criterion

Language	Child	Period
Spanish	Emilio María Juan	1;10a- 1;11 1;7 - 1;10 1;9 - 2;5a
Catalan	Gisela Júlia Pep	1;10 - 2;2 1;9b - 1;11b 1;6 - 1;10

Assuming a productivity criterion as the one proposed by Meisel (1994) or Ezeizabarrena (1996) will yield different results from those in Table 4. Let us consider the stage in Table 4 as a whole. According to these authors we have a productive form, a present form in this case, from the moment in which two verbal lexemes with the same inflection or the same verb with two different suffixes are documented. After strictly applying this formulation to our children's verb forms, we obtain the results presented in Table 5.

With most of the children, present tense verb forms become productive during the stage in which tense appears to be inactive (compare Table 5 with Table 4). Furthermore, in the case of Júlia the realization of the present tense becomes productive in the file 1;9a, before her tense active stage (1;9b-1;11b), and in the case of Emilio, after the stage outlined by the data in Table 4. I am perfectly aware that I have used criteria of two different types. The concepts of (non-) productivity and (in)activity appear to be used to refer to

the same things, but that is not the case. The operationalization of these two criteria makes it obvious that the concepts, in fact, lack clear content.

Language	Child	Age	Verb forms
Spanish	Emilio	2;0	va, es, aguanta
•	María	1;7	cae, es, está
	Juan	1;9	como, tengo
Catalan	Gisela	2;1	cau, està, va
	Júlia	1;9a	menja, pinta
	Pen	1:8b	deixa. deixem

Table 5. Age of productive present tense usage according to the criterion of two verbal lexemes or two different inflections

The present tense forms are mainly third person forms; these forms do not actually display morphological marks of any kind, neither tense nor person; they consist of the root plus a thematic vowel, which leads Meisel (1994) and Ezeizabarrena (1996) to maintain for Spanish and Capdevila (1996), for Catalan, that they are bare forms. Within the Maturation Hypothesis that these authors defend, it becomes difficult to explain certain facts:

- 1) Distinct person markers are already present in these first verb forms.
- 2) These forms are in alternation with other verb forms in this same stage (imperatives; non-finite forms, particularly infinitives with which, according to this analysis, the forms of the present tense would share free distribution), although they are considered to be units without tense.
- 3) In the subsequent stage the same forms of the present tense are supposed to appear as capable of bearing tense. How can one account for the later content of tense of the present morpheme when initially it did not have any?

To address these issues, I will focus on the following question:

(6) Are the children's first present tense forms actually elements of the present tense or are they something else?

For this purpose I concentrate on morphological evidence. I assume that verbal units which are present tense according to the adult model, whatever the person expressed may be, are in fact present forms when they correspond semantically to a present tense interpretation. I arrive at this interpretation both from contextual appropriateness and from the adult interpretation.

I also explore the validity of the Aspect before Tense Hypothesis (Antinucci-Miller 1976) or the parallel proposals by Meisel (1994) or Tsimpli (1992). This hypothesis claims that, although initial verb forms do not have tense, children do have some kind of tense notion they translate from the semantic properties of lexical elements, that is, from semantic aspect. In other words, what they use is the meaning of the verb itself or semantic aspect (or *Aktionsart*) and not grammatical aspect (*Viewpoint aspect*, in Smith's terms (1991)).

I also examine the existence of syntactic properties correlating with the presence of a functional category Tense, which will be justified by the reasonable presence of present tense morphology; null morphology but morphology after all.

4.1. Some morphological evidence

Let us examine the verbal repertoire displayed by children in the first stage, when there are no clear tense contrasts, which is delimited in Table 4.

As in previous works concerning early development of Spanish and Catalan (Hernández-Pina 1984, López Ornat 1994, Ezeizabarrena 1996, Cortés and Vila 1991, Capdevila 1996), it is confirmed in the data that the most common form in this first stage is the present tense (40 % in Spanish and 50% in Catalan), followed by the imperative and the participle. Infinitive forms are also observed in child productions from this initial stage, just as the gerund is, although the latter appears in a very low proportion. Past verbal units are very scarce: between 5% and 8% for Spanish and Catalan respectively.

Despite this striking scenario, note the existence of a certain contrast among the first verb forms employed by children and that the choice among the various forms is not random There is evidence that children match the linguistic and extralinguistic context. The use of these verb forms do not appear to be the consequence of simple memorization either, as we have evidence of lexical diversity and of creative use.

Let us now face what is our second argument: the appropriateness of the present tense forms to the contexts in which they appear. One way of measuring this type of evidence will be contrasting the context for every form of the present tense in Tables 2 and 3. I performed this analysis on the files represented in Table 4.

For the Spanish children during the period analyzed, every form of the present tense (a total number of 255 analyzed forms) has a present time meaning. These forms are either self-initiated utterances about ongoing events, or are answers to present tense questions posed by adults. Of these,

145 belong to María, 106 to Juan and 4 to Emilio. These are illustrated in (5)-(6):

```
(7) Emilio
          EMI: Ya
   a.
                         está.
                already is
            'That's it.'
          NAC: No está, no.
                'No, it is not.'
          EMI: Sí está. (Emilio, 1;9)
                yes is
                'Yes it is.'
          INE: Quién lo ha roto esto?
   b.
                'Who has broken this?'
          EMI: No sé. (Emilio, 1;10b)
                not know-1ps
             'I don't know.'
(8) Juan
   a.
          PAD: Tienes mocos.
                'You have a runny nose.'
          NIN: Ten(g)o mocos. (Juan, 1;9)
                have-1ps mucus
                'I have a runny nose.'
   b.
          NIN: (C)omo pan, (c)omo pan, aum. (Juan, 1;9)
                eat-1ps bread, eat-1ps bread., yam
          PAD: No sé dónde está el perro chiquitín.
   c.
                'I don't know where the little dog is.'
          NIN: Yo qu(i)ero quin. (Juan, 2;0)
                want-1ps little
                'I want the little (dog).'
(9) María
   a.
          MAR: ¿Dónde están los nenes, María?
                  'Where are the babies María?'
          NEN: No (es)tá(n) nenes. (María, 1;7)
                 not are-3pp babies
                'There are no babies.'
          MAR: Suéltale un discurso a papá por ser el día de los
   b.
                 trabajadores, anda mi vida. Un discurso, todas esas
                 cosas.
                'Give a speech for daddy just because today is Worker's
                day, come on, honey. A speech, all those things.'
```

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NEN: No oi(g)o. (María, 1;9) not hear-1ps 'I can't hear.'

In Catalan, I identified a total number of 92 forms of the present tense (34 belonging to the first three files from Gisela's, 28 to the first four from Julia's, and 30 to the first three from Pep's). All of these forms, without exception, refer to ongoing events, either as the answer to questions posed by the adults in this same tense, or as the children's own about facts or situations taking place at the very moment of utterance. Let us see some examples:

```
(10) Gisela
```

a. com: The girl puts some tokens over her head and they fall

GIS: Ara cau. (Gisela, 1;8b)

now falls

b. com: The girl takes a piece representing a girl.

GIS: Això és nena. (Gisela, 1;10)

this is girl

c. MAR: Un petit suisse vols?

'Do you want a yogurt?'

GIS: Jo tinc un petit suisse. (Gisela, 2;2)

'I have a yogurt.'

(11) Júlia

a. MAR: Júlia, què fas?

'Júlia, what are you doing?'

JUL: Pi(n)ta. (Júlia, 1;9a)

paints

b. JUL: Escapa. [% epapa]

escapes

MAR: Agafa-la, que s'escapa, eh? (Júlia, 1;9b)

'Hold her, she's running away, eh?'

JUL: Surt. (Júlia, 1;11a)

goes

c. MAR: Què fa els matins el papa per no punxar, Júlia?

'What does daddy do in the mornings not to prickle, Júlia?'

té. (Júlia, 1;11b)

JUL: Afaita. (Júlia, 1;11b)

shaves

d. PAR: I on té els peus el cavall?

'And where does the horse have the feet?'

JUL: No, no·n

no, not-CL-PARTITIVE has

'No, it does not have any.'

(12) Pep

a. MAR: Què fa aquesta nena? 'What is this girl doing?' PEP: Ti(r)a aigua. (Pep, 1;10)

throws water

b. PEP: No queda aigua. not remains water

'There is no water left.'

MAR: Quanta aigua ha begut!

'She has drunk so much water.'

PEP: Ja no queda aigua a la granota. (Pep, 1;10)

now not remains water to the frog

'There is not any water left for the frog.'

In (7)-(12) we can observe that the verb forms used by the children are contextually adequate as well as lexically varied. I will return to this point later on.

The relevant data to ascertain whether the forms of the present tense do not refer to the present time should be those in which children would use elements from the present tense paradigm to make reference to other tenses such as the past or the future tense. It seems logical to think that, if tense is not operative as suggested by Tsimpli (1992), Meisel (1994) or Capdevila (1996), these verbal units should not be interpreted as they are for the respective adult language.

Do children use the present tense morphology to refer to situations or events that take place during some other time, that is, past or future tense? In other words, are present tense verb forms a kind of widely applicable, all-purpose tense which is used to express all present, past and future tense?

By examining the utterances which children formulate unprompted, one can confirm that there are no erroneous productions: these are restricted to talk about the present time using present tense as shown in (8b), (10a,b), (11b) or (12b). As to answers to adults' questions, note that adults formulate questions mainly in the present tense during the initial period, in a form of controlled talk about the "here and now". What is observed in the spontaneous production data of this corpus is that all the answers by the children are adequate in the present tense, as shown by the examples in (7b), (8a), (9a), (10c), (11a, c, d) and (12a).

Summing up, in this first stage, children make use of forms of present tense only to express situations that happen in the present time. This last observation constitutes a second argument in favor of the hypothesis that argues that children do understand tense -at least present tense- and they express it with the appropriate grammatical elements.

We should also be careful when interpreting these data. This first period is characterized by the absence of clear tense contrasts in the children's productions; the questions formulated by the adults and answered by the children both contain verbs in the present tense and mostly refer to a present situation. Thus it could be that the adults only talked in and about the present tense and, therefore, children's linguistic behavior is merely a reflection of adult behavior. How can we ascertain whether the children are properly interpreting a distinction, [$\pm PASS$], which is absent from primary linguistic data?

Table 6. Time reference in parents' questions. Initial stage

Child	Age	Total number of questions	Presen t	Past	Future	No marking
Júlia (Catalan)	1;9b 1;10	27 30	3 18	12 3	7 2	5 7
	1;11a	25	13	11		1
	1;11b	117	62	19	6	30
Total n		199	96 48%	45 23%	15 7.5%	43 21.5%
María	1;7	347	243	29	12	63
(Spanish)	1;8	89	54	1	6	28
/	1;9	252	153	16	12	71
Total n		688	450 65%	46 7%	30 4%	162 24%

Let's articulate this question further in other terms: (1) in this first stage are there references to tenses other than the present tense in the child's environment speech? Are the temporal references strictly circumscribed to the time of speech? (2) In relation to the children's speech, which forms carry time reference to the past and future time, if any?

I limited the study of the parents' speech to two children (see Table 6): a Catalan-speaking child (Júlia) and a Spanish-speaking child (María). These

are the largest corpora available. Under the category 'No marking' I include questions with no verb or with a non-finite verb, normally an infinitive.

Contrary to what is sometimes asserted about the idea that adults limit their input to the present tense (Snow 1986), adults asked questions about past and future events in this first stage, although it is true that they do show a clear tendency to ask questions in the present tense. The following examples illustrate parental questions in other tenses (in contrast with the examples in (5)-(10)):

```
(13) Júlia (Catalan)
         MAR: Què has fet a la platja?
                 'What have you done on the beach?'
          JUL: Petar. [% peà] (1;9b)
                burst-INF (balloons)
     b.
          MAR: I on anirem ara?
             'Where shall we go now?'
          JUL: A jugar. [% buar]
               to play-INF
          MAR: A on?
                 'Where to?'
          JUL: A (dor)mir. (1;9b)
               to sleep-INF
          com: the father is hidden behind the door and the girl will
     c.
          MAR: Aviam, digues-li papa surt i sortirà.
                 'Let's see, tell daddy to come out and he will come out.'
          MAR: Què li diràs?
                 'What will you tell him?'
          JUL: Sortir. (1;10)
                come out-INF
          PAR: Què ha dit la mama?
                'What did mommy say?'
          JUL: Ha anat. [% ha manat]
                has gone
          PAR: se n' ha anat ? (1;11b)
                'Has she gone?'
(14) María (Spanish)
```

a. MAR: ¿Qué ha pasao, María?

'What has happened María?'

NEN: Acá [% caer] a bota. (1;7)

fall-INF the (?) boot

b. PAR: ¿Qué tenías cuándo estabas malita?

'What did you have when you were ill?'

NEN: Tenía pupa. [...]

had-1ps sore

PAR: ¿Dónde te dolía?

'Where did it hurt?'

NEN: Aía [% dolía] e(s)ta pupa.

hurted-1ps this sore [% signalling her face] (1;7)

c. MAR: [...] Ponte las gafas y di adiós a papá.

'Put on your glasses and say bye to daddy.'

NEN: *Ha loto* [% se ha roto] . (1;9)

has broken

In Table 6 and in the sentences (13)-(14) we learn that, in their questions, parents use references to the past tense and, less frequently, to the future tense. Judging from the appropriateness of the girl's answers in (13) it seems that she understands what she is being asked including, obviously, the time situation. It could be argued that, in the questions, there were contextual cues (linguistic or not) that favor or at least facilitate the child's interpretation. Nevertheless, if children did not understand tense at all, and more precisely the tense of these verb forms, their sentence answers (those containing a verb) should present errors in the verbal items: their answers would randomly show any form from the parents input. But this is not the case: children do not produce these errors when answering questions formulated in the present tense.

Initially, Júlia conveys the reference to the past and the future tense in her answers by using the infinitive at the beginning. Gradually, she incorporates other forms for the past tense, concretely the present perfect, both with and without the auxiliar "haver" ('to have'). The option of using the infinitive remains during the process of development since it is a legitimate option: it is actually possible to answer many questions in the adult grammar with the infinitive. Table 7 illustrates these findings.

Table 7. Development of the verb forms in Julia's answers (1;9b-1;11b)

Parents' questions	Girl's answers
Past (què haver + past participle) (what have + ppart)	Infinitive participle haver + participle
Future	(a) + infinitive

Therefore, the multi-purpose element found in the children's initial verb paradigm is not the present tense, but the infinitive, which is neither tensed nor has a zero morphology; then, the infinitive is a very strong candidate to function as a multi-purpose element.

This observation becomes even more important because of its relationship to the phenomenon of Root Infinitives (RI) in child language. In the initial stages, children produce infinitives in main declarative clauses in ways which are very different from the licit ones seen in the examples of (13a, b) or used with a modal value in (13c). In previous work (Bel 1997, 1998) I have argued that the most appropriate analysis for children's RIs is found in the Truncation Hypothesis (Rizzi, 1993/94), which establishes that a given structure with a RI is a truncated structure at the level of the TP (Tense Phrase) (the arrow indicates the place where the structure is truncated):⁴

The lack of a TP projection allows the time interpretation of an infinitive (RI) to be temporally free: present, past or future tense. The fact that in the adult grammar infinitives also lack tense, favors in part their use with varied time references. The Truncation Hypothesis in (15), along with the hypothesis in (5a), which states that child grammar has Tense, makes the following predictions:

- (16) a. The infinitive possesses a free time reference (from (15))
 - b. The present tense displays a time reference related to present time (from (5a); then
 - c. Infinitives and present tense forms are not the same thing.

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The examples in (17) and (18) exemplify the production of RIs with different time values:

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(17) María (Spanish)
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- a. NEN: (S)e(n)ta(r). [% she sits down] (1;8) (present) sit-INF
- b. MAR: Deja los calcetines en el suelo, hija; déjalos.

'Leave the socks on the floor, baby, leave them.'

NEN: El ot(r)o *busca(r)*. [% she gets down and looks for something](1;11) (*present*)

the other look for-INF

- c. E(s)te (t)apa(r). [% showing the bottle she has just put the cap on] (1;7) (past)
 - this cover-INF
- d. E(s)te (t)apa(r). [% with another bottle with the cap on in her hand] (1;7) (past)
 this cover-INF

(18) Júlia (Catalan)

- a. JUL: Això *recollir*. [% she picks up a comb from the floor]
 (2;1.11)
 (present)
 this pick up-INF
- b. JUL: No *bufar*. [% looking at the birthday picture] (2;1.25) not blow out-INF (present)
- c. JUL: Mira, e(l) conill ha amagat e(l) nas. 'Look, the bunny has hidden his nose.'

MAR: El conill què?

'The bunny what?'

JUL: Amagar. (2;1.25) (past) hide-INF

d. MAR: Ballava així?

'Did she dance like this?'

JUL: (L)a mama colava. [% corria].

the mommy ran-3ps

JUL: (L)a mama *colar*. [% córrer]. (2;2.11) (*past*) the mommy run-INF

Root Infinitives (RIs) are used in an average of 6% of the total sentences during the RI stage. RIs and present tense verb forms were tabulated according to their temporal interpretation in Tables 8 and 9:

Table 8. Time values of the present tense and the infinitive. María (1;7-2;1)

Verb forms	Present	Not-present
Present	420	0
Infinitive (RI)	22	28

p < 0.001

Table 9. Time values of the present tense and the infinitive. Júlia (1;10.24-2;5.8)

Verb forms	Present	Not-present	
Present	232	0	
Infinitive (RI)	14	10	

p < 0.001

The differences between these values are significant and confirm the predictions in (16). As a provisional conclusion, and in descriptive terms, the initial stage can be characterized as follows:

(19) Verb forms of the initial stage

- a. Verb forms of the present tense are, in fact, present forms.
- b. Reference to other moments in time is done with the infinitives.
- c. Past tense verb forms are scarce, but when they appear their content is past time.

The conclusion in (19) answers the question in (6) and also accounts for the (little) variety of verb forms and for the presence of RIs during the first syntactic stage. At the beginning children understand (or have intuitions about) tense but they possess a very limited morphological repertoire in the same sense that we note that their lexical repertoire is very limited when compared to the adults' or to their own repertoire just a few months later. The units which are part of their active knowledge, such as the present tense, appear to be understood and used correctly. Why then are the forms of the present tense the most frequently used and the first to appear? To answer this question we could consider cognitive factors (it is easier to understand and process facts occurred in the present time, the *here and now*) and also factors concerning the input (the forms of the present tense are the ones most frequently used by the adult language (see Table 8)). Finally, if it is true that, as we have argued so far, child grammars have Tense, when children have to

make reference to moments in time other than the present tense, they substitute for an unmarked form, the infinitive, until they acquire the necessary elements.

What acquisition theory can encompass the perspective I have outlined? The data presented can only be explained within a model which proposes that the initial computational system is already very complex and complete. In other words, children do possess some knowledge of functional syntax and, consequently, they project functional categories capable of hosting the appropriate features in their corresponding head. In the case of the forms of the present tense, the feature hosted by the head T is [- PAST]. As for the infinitives and other non-finite forms the head T is not projected and they are inserted in truncated structures.⁵

This overall view is, then, consistent with the view that children have a completely specified functional structure (Continuity Hypothesis). The deficit is not to be found in the syntax but rather in a lexicon which is not yet rich enough.

4.2. Syntactic Evidence in Favor of the Projection of T

The data examined here demonstrates that, both in early Spanish and Catalan, verbs appear accompanied by morphemes whose choice is not arbitrary. Evidence comes from the morphological variation of the verb forms documented and their contextually appropriate use. Consequently, these verb forms cannot be learned by rote. Early verbs are not just projections of a lexical category V. The facts prompt a search for a better explanation within a proposal that postulates the existence of a functional category T from the beginning.

This analysis makes a series of predictions concerning early syntax. If Tense is operative, children's finite and non-finite utterances will show different syntax with respect to:

- a) the context of insertion of finite and non-finite forms,
- b) the relative position of clitics with respect to the verb,
- c) the placement of negation and
- d) the agreement paradigm and the subjects (explicit or not).

4.2.1. Contexts of insertion of verb forms

First of all, we should say that children do not generally mistake the structural contexts in which they have to use finite and non-finite forms. Concretely, an over-extension of finite forms to non-finite contexts is never documented. Sequences as the ones below are never registered:

We may then state that children are sensible to the finite/non-finite distinction. The only exception to this is Ris: the over-extension of infinitives to finite contexts. Nevertheless, there are cases of correct usage of infinitives in this stage, as the following examples show:

```
(21) Preposition + Infinitive
     Spanish
     a.
          A tapar (María, 1;7)
          'To eat.'
          A bañar. (Emilio, 1;11.12)
     b.
          'To bathe
     Catalan
          Per pintar. (Pep, 2;0.0)
          for paint-INF
          (For painting)
         A jugar. (Júlia, 1;9.28)
          'To play.'
(22) Verb + Infinitive
     Spanish
     a. Voy a busca(r)
                                la pelota. (María, 1;11)
         go-1ps to look for-INF the ball
         'I'm going to look for the ball.'
     b. Tenía que t(r)abaja(r). (María, 2;0)
         had-1ps to work-INF
         'I had to go to work.'
     Catalan
     c. No li
                  agrada cantar molt.(Pep,1;10,6)
         not him like sing-INF much
         'He doesn't like to sing very much).'
         Vo(1) pujar. (Júlia, 1;10)
```

wants go up-INF

4.2.2. Distribution of clitics

In relation to b), following the same procedure as in Guasti (1993/94) I will consider the distribution of clitics with respect to the finite or non-finite verb as additional evidence. The problem with this type of evidence is that children initially omit most of these elements due, among other reasons, to the fact that they are unstressed forms (similar to the omission of unstressed determiners). At any rate, when clitics appear, they occur in the correct position according to the finiteness or non-finiteness of the verb. Consider the following examples: 6

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(23) Spanish
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- cae e nene . (María, 1;7) a. CL-REFL falls the baby 'The baby falls.' A ata(r)lo. (Juan, 2;1.0)
- To tie it

(24) Catalan

- E(1)po(r)to aquí. (Júlia, 1;11a) CL-3ps bring-1ps here 'I bring it here.'
- PAR: I on té els peus el cavall? b. 'And where does the horse have the feet?'

té. [% no·n té] (Júlia, 1;11b) JUL: No, no en no, no CL-PARTITIVE has 'No it does not have any.'

As Guasti (1993/94) suggests, data about cliticization are not fully conclusive because clitics are only used in a relatively small number of cases in obligatory contexts. Within the period studied, we do not find occurrences of postverbal clitics. The only clear example is to be found in Juan's data (23b). For the other children there are examples of postverbal clitics but at a later point as shown in (25) and (26):

(25) Spanish

- Témelo. [% tráemelo] (Emilio, 1;9) a. bring-IMP me it 'Bring it to me.'
- Da(r)le culo. (María, 1;10) give-INF him bottom'

'Slap his bottom.'

(26) Catalan

- a. Mama, aixeca't. [% ateta't] (Júlia, 2;1a) mommy, get-IMP up you'
 'Mommy, get up.'
- b. Posar-lo. [% potà-lo] (Júlia, 2;1b) 'Put it.'

The examples of 1;9 in the case of Emilio and of 1;10 for María could still be considered as belonging to the first stage.

4.2.3. Sentence negation

One of the predictions of the Truncation Hypothesis is that, in child productions, sequences including a negation marker followed by an infinitive should not be expected. If the structure in (15) is truncated at the TP, there is no room to project NegP. In fact, after revising our RI data, the sequence Neg+Infinitive is not documented, as reflected in (27):⁷

(27) * Neg + Infinitive

In contrast, negation should be able to appear with finite forms, since, in this case, the structure should contain full projections (see (5a, b), (7a, b), (9b), (10b) and (22b, d)). Tables 10 and 11 show the comparative results. The results of Table 10 are significant (χ^2 = 9.860, p=0.0017), but those of Table 11 are not (χ^2 = 2.444, p=0.1180).

One might think that these results are normal because children produce few negations in sentence contexts. Nevertheless, according to the ratio between affirmative and negative finite sentences in Tables 10 and 11, one would expect to find 9 negated RIs in Spanish (a 18.5%) and 4 in Catalan (a 18.4%), if there was not a structural incompatibility, as I am suggesting here.

Table 10. Proportion of María's affirmative and negative sentences (1;7-2;1)

	Affirmative	Negative	
Finite	436 (81.5%)	99 (18.5%)	
Infinitive (RI)	50	0	

Table 11. Proportion of Júlia's affirmative and negative sentences (1;9b-2;5)

	Affirmative	Negative
Finite	265 (81.6%)	60 (18.4%)
Infinitive (RI)	24	1

4.2.4. Subjects

More evidence in favor of the analysis defended here comes from the distribution of null and overt subjects depending on the verb's finiteness. If RIs are truncated structures without a [Spec, TP] position for the subject to move for checking its phi features against T, there should not be overt subjects in RI clauses. The data confirms this prediction: from a total number of 113 RIs documented in the six children, only eight co-occur with a subject. I reproduce some of them here:

(28) Spanish

- a. Bibi [muñeco] dormi(r). (María, 1;8) baby doll sleep-INF
- b. Yo gu(ard)a(r). (María, 1;10) I keep-INF

(29) Catalan

- a. (L)a mama colar. (Júlia, 2;2) the mommy run-INF [% the mommy ran]
- b. (L)a Júlia se(u)re aquí. (Júlia, 2;2) Júlia sit-INF here'

According to Rizzi's analysis, the null subject of a RI would be a *null constant* (nc) accessible to identification via discourse because in a truncated structure it would occupy the highest position in the tree.

On the other hand, finite verbs occur frequently with overt subjects: 32.7% in Spanish and 32.3% in Catalan. The examples in (30) and (31) are a sample of overt subjects in different positions:

(30) Spanish

- a. No está *mariquita*. (Emilio, 1;11) not is ladybird
- b. Papá e(s) ma(lo). (María, 1;7)

'Daddy is mean.'

c. Se cae *e(l) nene*. (María, 1;7) CL-REFL falls the baby

(31) Catalan

- a. Ja està *el conte*. (Gisela, 2;1) already is the tale 'The tale is finished.'
- b. (L)a Neus, *(l)a Neus* cau. (Júlia, 1;11b) 'Neus, Neus falls.'
- c. S'ha t(r)encat *la pilo(ta)*. (Pep, 1;11) CL-REFL broken the ball 'The ball has broken.'

4.3. Aspect before Tense Hypothesis

To examine the Aspect before Tense (ABT) Hypothesis, we take Meisel's classification of verbs (1994: 104) as a point of departure:

- (32) a. Change of state verbs will appear as participles
 - b. State verbs will appear in present tense
 - c. Action verbs will appear in imperative and infinitive

It is difficult to apply this classification to child language data since early utterances often lack the essential elements to assign a verb or a predicate to a lexical semantic category.

I classified the present tense forms of every child's first period in three groups: change of state (verbs presenting a clear result), actions (processes which imply certain change of state although their result is not clear) and states. According to the predictions made by Meisel (1994) and by the Aspect before Tense Hypothesis, one expects to find that the majority of the present tense forms correspond to state verbs and, perhaps, also to action verbs. Tables 12 and 13 present actual tokens and the number of occurrences for each verb is included in brackets:

The results in these tables illustrate the variety of verbs that I found in the present form. If the Aspect before Tense Hypothesis was correct in its predictions for present tense forms, we would find that the Change of State column should be empty.

Table. 12. Types of verbs used in the present tense. Spanish

Child	Change of state verbs	Action verbs	State verbs
Emilio (1;10a- 1;11)			estar (1) (to be, situation) ser (2) (to be, existence) saber (1) (know)
María (1;7-1;9)	caer (7) (fall) sentarse (6) (sit down) pasar (3) (pass)	pinchar (3) (prickle) botar (3) (bounce) cortar (1) (cut)	estar (58) ser (7) oír (1) (hear) tener (1) (have)
Juan (1;9-2;5a)	caer (2) (fall) ir (1) (go)	comer (3) (eat) pegar (4) (slap)	estar (13) querer (2) (want) ser (4) poder (4) (can) saber (2) (know)

As for the past tense forms in this stage, it is interesting to notice that the majority of them belong to the participle form, either with or without the auxiliary. However, the prediction in (32a) is not supported by the participle forms found in children's utterances. Verbs in the 'Action verbs' and 'State verbs' columns in Tables 12 and 13 are often used in the participle form (28% of the utterances containing a participle form).

The data presented is not compatible with the ABT hypothesis. As Wagner (1997) suggests, if children followed a different grammatical behavior from adults (i.e. by using aspect morphology to mark the semantic aspect of situations), they would be –erroneously- grammaticalizing the notion of semantic aspect, which is not grammaticalized in their own language. Furthermore, they would have to *un-learn* the morphological marking of semantic aspect, which does not exist in the target language, and learn that the same morphological marking is used to mark another distinction: grammatical aspect. Even more: they should learn that the temporal distinction is not made through aspectual mechanisms (i.e. using the perfective aspect where adults use the past tense) but through specifically temporal mechanisms. Essentially, the ABT Hypothesis assumes that aspectual morphology is multi-purpose: it carries both semantic aspect and

tense and not the grammatical aspect or, in Smith's (1991) words, the viewpoint aspect. This creates a learnability problem.

Table 13. Types of verbs used in the present tense. Catalan

Child	Change of state verbs	Action verbs	State verbs
Gisela (1;10-2;2)	cremar (5) (burn) caure (12) (fall)	menjar (1) (eat) pintar (1) (paint)	ésser (11) (to be existence) estar (2) (to be, situation) voler (6) (want) agradar (2) (like) tenir (2) (have)
Júlia (1;9b- 1;11b)	tirar (2) (throw) escapar (2) (escape) anar-se'n (1) (leave) sortir (1) (get out) caure (3) (fall) portar (1) (carry)	menjar (1) (eat) pintar (2) (paint) pujar (5) (go up) volar (1) (fly) punxar (1) (prick) afaitar (1) (shave)	estimar (2) (love) estar (1) voler (2) espantar-se (2) (be scared of)
Pep (1;6-1;10)	cremar (4) (burn) deixar (1) (leave) tirar (1) (throw) caure (1) (fall) tancar (1) (close)	buscar (1) (look for) menjar (1) (eat) plorar (2) (cry)	voler (8) agradar (2) ésser (1)

4.4. Summary on Empirical Data

In the previous sections I presented three sources of evidence bearing on the issue of early tense: morphological, syntactic and semantic. To answer the questions in (1) on one hand we have a grammar which does not project Tense and, on the other hand, one that does. The evidence suggests that the answers to these questions should be affirmative: *children understand tense and project the corresponding category T in their early grammars, but also project truncated structures*.

Why, then, if child grammar is so similar to adult grammar is the variety of productions by children so scarce when compared to the adults'? Why do their productions suggest defectiveness? The next section presents some speculations on these issues.

5. LEARNABILITY PERSPECTIVES ON THE DEFECTIVE NATURE OF EARLY TENSE GRAMMAR

We have seen that child grammar presents a rich picture from a syntactic point of view but a poor or defective picture from a point of view of the tense contrast expressed. Let us consider two hypotheses:

- (33) i. Lexical Learning Hypothesis (LLH)
 - ii. Defective Referential System Hypothesis (DRSH)

For the former I will adopt the formulation by Clashen *et al.* (1995). The latter constitutes the common denominator of works like Guasti (1993/94), Hyams (1996) or Schaeffer (1997a, b).

The main idea in LLH is that, besides what is specified for UG, there is another part of language which must be acquired after direct exposure to data, namely, the lexicon and the lexical content of morphological markers.

In the MP it is assumed that the syntactic properties of languages can be reduced to differences in their formal features. The variation across languages is then transferred to the morphology. There is a general expectation that formal features should possess a morphological counterpart. From an acquisitional point of view, a transparent morphology should have a direct translation in terms of feature strength. We may expect that development will differ from one language to another.

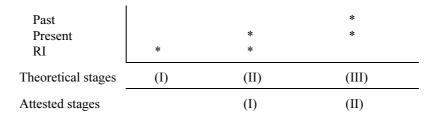
We cannot believe that the lexical knowledge of a child is just like an adult's at the end of his/ her second year of life, and similarly do not expect either that the child's morphological repertoire is like the adult's. There must necessarily be a gradual increase. The LLH does not tackle the acquisition order of inflected forms. In order to formalize the notion of morphological development I adopt the Distributed Morphology (DM) model of Halle and

Marantz (1993). According to the DM framework the insertion of lexical items is done in a specific order going from less specified to more specified items. Similarly, the acquisition of inflection elements follows this order in such a way that, if the child lacks a particular affix, he/ she will make use of a suppletive element which does not explicitly encode the required features. Hence, the following prediction is derived: over-generalized forms are always those less specified and not the other way around.

At this point the data concerning the RIs become relevant, as it shows that the polyfunctional element is not the present tense form but rather the infinitive form. RIs (infinitives) are free of time reference as opposed to the forms of the present tense, which make reference to the present time. If both forms were not marked for tense, why then should children have two forms in free distribution and not just one for economy (one form = one function) reasons? Moreover, the data has shown that these two forms are not in free distribution.

Let us imagine a developmental sequence as depicted in Figure 1, where stages are represented in the horizontal axis, while asterisks indicate the type of verb form attested in each stage.

Figure 1. Development of verb forms



In this developmental scenario, there is not a stage in which only RIs are attested. RIs coexist with present tense forms, but with a different time value between them. How can we explain, then, their presence in the data? The data in our corpus produces evidence for theoretical stages II and III in Figure 1, that can be relabeled as I and II of the attested stages.

In this new context, the attested stages of Figure I, there are two points at which Tense (T) can be activated. If it is activated in attested stage I, it means that child grammar is like adult grammar but defective from a morphological point of view when expressing tense contrasts. If it is activated in attested stage II, it implies that there is no such a thing as Tense in the first stage but then we have to propose a mechanism to cause this conceptual and syntactic change between the two phases which is so

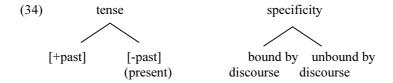
significant. To account for this developmental sequence, an explanation within the Prefunctional Stage (Maturation) Hypothesis must call for the existence of inner maturational mechanisms to justify the change in the grammar. If functional categories 'mature' it is because they mature internally, because they are pre-programmed. Within the Continuity Hypothesis, on the other hand, there is no need to propose a change in the grammar. It is the acquisition of lexicon (LLH) and inflection forms (DM) that account for that development.

In this sense, it seems theoretically more economical to adopt the proposal that in stage I children already have active Tense with a defective and faulty morphology of tense contrasts. Moreover, the predictions for acquisition in the DM framework are confirmed by the fact that early infinitives (RIs, i.e. elements underspecified for tense) are the verb forms that allow children to express different time references.

For Guasti (1993/94) the reason for the apparent optionality in early grammars (including RIs) is to be found in children's frequent failure to project functional categories. This failure is explained by the absence of mastery of the referential system which is sustained on certain functional categories such as Tense (T) and determiners (D). The main contribution of functional elements to sentence semantics is located on this referential level.

Referential properties do not reside solely within the lexical elements: they are modified depending on the extrinsic circumstances in which a statement is made. Referential properties concerning tense required by the situation in the statement are expressed in verbal affixes.

In the light of the proposal by Hoekstra *et al.* (1996) about the failure of children to grammatically encode specificity, Schaeffer (1997a,b) suggests an analogy between tense values and specificity, as outlined in (34) (Schaeffer 1997b: 163):



According to her analysis, if a verb is not marked either for past or for present tense, we will say that Tense is not marked (RI). Similarly, if the distinction between bound and unbound by discourse is not made, specificity remains unmarked: the pertinent feature is absent. ¹⁰

Schaeffer's formulation becomes very pertinent since it allows the consideration of learning within a domain different to the one I have been

examining up to now: the syntax-discourse interface. ¹¹ If we pay attention to the diagrams in (34) and compare them with the child data discussed here, one could infer that the defectiveness revealed by the data is mainly located on the left, in which tense (and specificity) is bound by discourse. Using reicheinbachian concepts, in the present tense the *speech time* (S) –the time of the speech act- and the *event time* (E) –the time for a specific situationalways coincide; tense can be anchored by the specific speech situation in a deictic way. In the past tense, on the other hand, E is anchored by discourse (or by an adverb). What I want to suggest here, as in Hornstein (1990), is that present tense is easier because the coincidence between E and S.

It seems very likely that there is some dependency between equality of S and E and the fact that early utterances frequently refer to the speech time. Consequently the past tense forms become crucial, as they are used by the child to mark the separation of S and E, but, as an additional cost, he/she must formulate a discursive rule that anchors the past tense to previous adult or child discourse. In more traditional terms, this is what has been known as *de-centralization* of language, the separation of the *here-and-now* (Weist 1986).

Thus, it seems that the child must learn things from his/ her own language. But the computational system is not responsible for this learning, it is rather the interface with the conceptual-intentional performance systems which relates syntax with other linguistic modules, such as discourse or pragmatics, according to the philosophy underlying the Minimalist Program.

If, by definition, the computational system is 'perfect' in the sense that it adjusts to the needs imposed by the performance systems (Chomsky, 1997), the *defectiveness* is to be found in the child's lack of a discursive principle which allows him/her to take discourse into consideration. In other words, as has been previously signaled by other authors in relation to different topics (Schaeffer 1997a, b, Hoekstra *et al.* 1996, Avrutin 1997), at the beginning, the child shows difficulties integrating his/ her own discourse as well as others' in his/ her production.

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NOTES

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- According to Chomsky's 1998 proposal, this is done through the AGREE operation which guarantees the identity of the features.
- Uriagereka (1995) proposes a compromise solution between both views. He alleges that clitics cannot be arguments but rather they represent the functional part of an argument which moves to the functional domain.
- ³ The Continuity Hypothesis is divided among the proponents of the strong and the weak version. The principal difference between them lies in the importance they concede to the learning of the lexicon. In this paper I only consider the strong version. I propose that the learning of the morphological lexical items is guided by the predictions derived from the Distributed Morphology Model (see section 5).
- ⁴ Notice that the structure in (15) contains an AgrP projection; this proposal is previous to Chomsky (1995). In Bel (1998, 2001) it is proposed that the truncation analysis also applies to gerunds and participles and also to sentences in which the auxiliary has been omitted. The proposal is that in child grammar truncated structures project Aspect. This analysis includes all non-finite yerb forms
- I do not consider here other accounts of RIs, namely the *Null Auxiliary Hypothesis* of Boser *et al.* (1992), which proposes a phonetically null auxiliary in contexts containing a RI, and the *Optional Tense Hypothesis* of Wexler (1994), which proposes that Tense for children is optional , thus allowing RIs.
- If anything is projected, this would be an Asp head (see note 4).
- ⁶ The clitic *se* in impersonal and pronominal constructions is assigned a different analysis to the one proposed before for object clitics. In any case, we include this clitic among the analyzed data, since it follows the same pattern as object clitics, in the sense that their behavior depends on the nature of the verb form they appear together with, whether finite or non-finite.
- ⁷ To be more precise, from the 113 attested RIs in the whole corpus, there is one occurrence of Neg+RI: *No bufar* (Júlia, 2:1.25).
- ⁸ An anonymous reviewer notes that the application of a Fisher Exact test, which is more suitable with such a low number of data, renders the results of Table 11 marginally significant. I would like to acknowledge this observation.
- ⁹ Distributed Morphology adopts a large part of the theoretical framework of the MP. It proposes the existence of an autonomous morphological component that acts as an interface between syntax and phonology (Halle 1996).
- ¹⁰ This proposal allows the author to elucidate, for instance, the optional realization of clitics in Italian: this optionality in the specificity feature makes the clitic optional in child grammar. A related phenomenon such as the determiner omissions in child language can also be explained within this same line.
- According to Chomsky (1995:168), the computational system –syntax- is in charge of giving instructions to performance systems such as the articulatory-perceptive system or the conceptual-intentional system: "A linguistic expression contains instructions for each of these systems."

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