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Theoretical implications of children's early production of Romanian Accusative clitics

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Abstract

This study examines the acquisition route of object clitics with a view to identifying to what extent language acquisition data can shed light on the old debate with respect to the first Merge position of clitics: in the V-domain or in a higher position in the functional layer of the clause. The analysis of three longitudinal corpora of monolingual Romanian and the results of two elicited production tasks reveal an early stage when Accusative clitics occur exclusively in post-verbal position followed by a stage when the production rate is higher in post-verbal than in pre-verbal position. Building on the assumption that acquisition stages are 'intermediate' grammars which represent sub-grammars of the adult system, we argue in favour of a first Merge position of object clitics in the V-domain. In support of this claim the results obtained in a task eliciting the production of 3rd person Accusative clitics as well as the response pattern in a 2nd vs. 3rd person accusative clitic production task reveal an effect on early clitics of feature mismatch between the antecedent of the clitic and the subject of the clause.

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1. Introduction

In the literature dealing with the derivation of object clitics one can identify two major theoretical approaches. According to one point of view, object clitics surface in their first Merge position, in a pre-existing slot in the inflectional domain of the clause (as, for example, in Sportiche, 1998). According to the second point of view, they merge in an argument position within the VP domain and are spelled-out in an internal Merge position, higher in the functional structure of the clause (Kayne, 1975, 1994; Uriagereka, 1995, 2008 among many others), which they reach via Move. We will refer to this as the 'Move no Move' (henceforth, MnoM) debate.

A second important issue, rooted in the previous one, is related to whether a unifying Move/no Move analysis is descriptively and explanatorily adequate for all object clitics. Some analyses focused on what they have in common (e.g. deficiency, distribution) (see, for example, the paper by Cardinaletti and Starke, 1999), whereas others chose to look more closely into the different properties of various object clitics. According to the latter, for example, 1st/2nd person Accusative clitics (1st/2nd AC) were shown to behave differently from 3rd person Accusative clitics (3rd AC) (Kayne, 2000; Uriagereka, 1995) but similarly to reflexives, which have been analyzed as surfacing in their first Merge position (see, for example, Dobrovie-Sorin, 1998). Therefore, it is not implausible to assume that 1st/2nd and 3rd ACs might first merge in different structural positions.

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Acquisition studies investigating the properties of early object clitics usually adopt one existing theoretical approach or the other and evaluate the developmental data building on the assumed analysis. In this paper we take a different route: we start from acquisition data in an attempt at investigating to what extent the stages undergone by children in acquisition can shed some light on the derivational process of AC constructions in the adult grammar and thereby on the MnoM debate.

We start from the assumption that the sequence of grammars adopted by the child can provide a window onto the derivational steps of the adult conceptual system, with each developmental stage reflecting a plausible stage in syntactic derivation. In this, we follow the hypothesis put forth by Lebeaux (1988) according to which the intermediate grammars in acquisition are sub-grammars of the adult system. A similar view was advocated by Roeper (1999), who interprets Merge structures as micro-steps of acquisition. According to him, the child creates, via Merge of formal features, structures which are possible sub-structures of Universal Grammar. The primary advantage of such an approach lies in the fact that it could provide acquisition evidence bearing on the main debate mentioned above.

To evaluate the two main approaches to the derivation of object clitic constructions from this perspective one needs to look at the acquisition of a clitic system which includes both pre- and post-verbal clitics with finite verbs, i.e. a system which dissociates (at least in part) between finiteness and clitic placement. This is why the empirical data on which we build come from Romanian, a language in which the feminine singular 3rd AC meets the requirement stated above: it occurs pre-verbally in some finite constructions and post-verbally in others (see Section 2 for details). We focus on the developmental route of non-reflexive ACs, using both longitudinal and experimental data, which we compare to previously published findings on early clitics in child Romanian as well as to results reported for other Romance languages.

The remainder of the paper is organized as follows: Section 2 contains a brief presentation of the main properties of ACs in Romanian which are directly relevant for the present study. In Section 3 we identify the acquisition stages of ACs in child Romanian and evaluate to what extent they can provide support in favour of one of the two answers to the MnoM debate. Both longitudinal and experimental data are investigated, with focus on the production of 3rd ACs in pre- and post-verbal position. The main finding of this section is that the acquisition route of ACs in child Romanian provides evidence that 3rd ACs merge lower in the structure, in the V-domain, from where they move to a higher functional projection when they occur in pre-verbal position. Section 4 addresses the question of whether the Move analysis holds for both 1st/2nd and 3rd ACs. The results of experimental data compared to previous results from longitudinal studies are argued to provide evidence in favour of a Move analysis for all ACs, irrespective of their person features. In Section 5 we identify the intermediate grammars which are claimed to represent possible derivational steps in the adult grammar. The conclusions of the study are summarized in Section 6.

2. Accusative clitics in Romanian in a nutshell

2.1. Third person Accusative clitics

Third person ACs in Romanian evince the set of properties standardly associated with Romance clitics in general, homophony with the article included (see Table 1).

As the data in Table 1 show, the feminine singular AC is the only one which is homophonous with the indefinite article. All the other ACs are homophonous with the definite article.¹ It also differs in terms of distribution; it displays hybrid behaviour with respect to its position relative to the finite verb to which it attaches. On a par with all the other ACs, it occurs in pre-verbal position in finite constructions (1a), with infinitives (1b) and negative imperatives (1c), but in post-verbal position in non-finite clauses (2a) as well as in affirmative imperatives (2b):

- | | | | |
|-----|----|--------------------------------|----------------------------|
| (1) | a. | o / ȳ | <i>desenează</i> |
| | | clitic ACC 3RD SG FEM/MASC | draws |
| | | | 'He/she sees her.' |
| | b. | a o / ȳ | <i>desena</i> |
| | | INF clitic ACC 3RD SG FEM/MASC | draw |
| | | | 'to draw her/him' |
| | c. | Nu o / ȳ | <i>desena!</i> |
| | | not clitic ACC 3RD SG FEM/MASC | draw _{IMP 2nd sg} |
| | | | 'Don't draw her/him!' |

¹ From a historical point of view, the feminine clitic *o* 'her' is said to derive from the Latin feminine demonstrative *illam*, i.e. it has the same history as the other 3rd ACs. The resulting homophony between the feminine Accusative clitic and the indefinite article (<Lat. *unam*) in Modern Romanian is therefore to be considered as purely coincidental.

Table 1
Article – 3rd ACs homophony.

		Singular		Plural	
		Masculine	Feminine	Masculine	Feminine
Article	Indefinite		o		
	Definite	-l		-i	le-
3rd person AC		-l-	o	-i-	-le-

- (2) a. *desenînd-o/ desenîndu-l*
draw_{GER} clitic ACC 3_{RD} SG FEM draw_{GER} clitic ACC 3_{RD} SG MASC
'drawing her/him'
- b. *deseneaz -o!// desenează -l!*
draw_{IMP} 2_{nd} sg clitic ACC 3_{RD} SG FEM draw_{IMP} 2_{nd} sg clitic ACC 3_{RD} SG MASC
'Draw her/him!'

However, it differs from all the other ACs in that in some periphrastic finite² constructions, as is the case of the periphrastic perfective and of the periphrastic conditional, illustrated in (3a) and (3b), respectively, the feminine clitic *o* 'her' occurs exclusively in post-verbal position:

- (3) a. *a văzut- o ; l- a văzut*
has seen- clitic ACC 3_{RD} SG FEM clitic ACC 3_{RD} SG FEM has seen
'He/she has seen her/him.'
- b. *ar vedea-o ; l -ar vedea*
aux see – clitic ACC 3_{RD} SG FEM clitic ACC 3_{RD} SG FEM aux see
'He/she would see her/him.'

With the periphrastic future with *vrea* 'will', *o* 'her' can occur either in pre- or in post-verbal position (4a–b), with the latter being perceived as poetic or outdated³:

- (4) a. *o!il vei vedea*
clitic ACC 3_{RD} SG FEM/MASC will_{2nd} sg see
- b. *vei vedea -o*
will_{2nd} sg see clitic ACC 3_{RD} SG FEM
'You will see her.'

² Notice, however, that the exceptional behaviour of *o* 'her' is not related to finiteness; it behaves like all the other clitics with respect to non-finite constructions, where it occurs exclusively in post-verbal position. Its placement differs from that of the other clitics only in *some* (finite) periphrastic constructions with auxiliaries, where it exceptionally occurs in post-verbal position. Romanian clitics do not seem to be singular in this respect. In Italian, clitics have a similar dual behaviour, but only with restructuring verbs: they may occupy either a low position in the structure (as in *Vorrei andarci con Maria* '(I) want to go-clitic with Maria') or in a high projection of IP (as in *Ci vorrei andar con Maria* 'clitic (I) want to go with Maria') (see Cardinaletti and Shlonsky, 2004 for details).

³ One reviewer suggests that we should offer an account for these data. Unfortunately, it is still unclear why this clitic occurs post-verbally in some finite constructions in Romanian. Dobrovie-Sorin (1994, 1999) suggests that this might be due to its being phonologically weak, excluding the possible role of its indefiniteness. However, the reason for which *o* 'her' is placed post-verbally in these periphrastic constructions cannot be (fully) explained in terms of the phonetic environment in which it occurs, since it surfaces post-verbally both in periphrastic constructions with the auxiliary *avea* 'have' and in those with *vrea* 'will'; moreover, it occurs in front of the lexical verb *avea* 'have' (i) as well as in front of the conditional auxiliary (ii):

- (i) *Cartea asta o am de mult.*
book.the this clitic ACC 3_{RD} SG FEM have of long
'I have had this book for a long time.'
- (ii) *da -o- ar*
give clitic ACC 3_{RD} SG FEM cond aux
'(s)he would give her'

2.2. Third person vs. 1st/2nd person Accusative clitics

Third person ACs in Romanian are obligatory in: (i) left dislocation structures with d-linked direct objects (5a); (ii) direct object relative clauses (both restrictive and non-restrictive) introduced by the relative pronoun *care* 'who, which' (5b); (iii) *wh*-questions with *care* 'which' (5c); (iii) sentences where the post-verbal complement position is phonetically empty (single clitic constructions), and where the clitic has a salient discourse antecedent (5d) (see also Avram and Coene, 2009):

- (5) a. *Cartea, am dat *(-o).*
book.the have given clitic_{3RD FEM SG ACC}
'The book, I gave away.'
- b. *Mărul pe care *(l-) am mâncat.*
apple.the pe which *(clitic_{3RD SG MASC ACC}) have eaten
'The apple which I have eaten.'
- c. *Pe care *(l-) ai ales?*
pe which/whom *(clitic_{3RD SG MASC ACC}) have_{2ND SG} chosen
'Which one have you chosen?'
- d. A: *Ce-ai făcut cu mărul?*
'What have you done to the apple?'
B: **(-) am mâncat.*
clitic_{3RD MASC SG ACC} have eaten
'I have eaten it.'

But they are optional⁴ in clitic doubling constructions (irrespective of whether they occur in pre- or post-verbal position), when the direct object position is filled in by any lexical DP object (proper names included) (6a); the only context where the AC has to appear is that of definite pronominals (6b) (see Carabulea, 2008:398–400). In this type of construction the 'double' is preceded by the preposition *pe*, which has been traditionally analyzed as an Accusative case marker.

- (6) a. *(O) avem aici pe Maria.*
clitic_{ACC 3RD SG FEM} have here PE Maria
'We've got Maria here.'
- b. **(-) a văzut pe el.*
clitic_{ACC 3RD SG MASC} has seen PE he
'(S)he has seen him.'

1st/2nd ACs can occur both in single clitic and in clitic doubling constructions and are never optional:

- (7) a. **(-) a văzut pe mine.*
clitic_{ACC 1ST SG} has seen PE me
'(S)he has seen me.'
- b. **(-) a văzut pe tine.*
clitic_{ACC 2ND SG} has seen PE you
'(S)he has seen you.'

They are homophonous with the 1st and 2nd person reflexive ACs. Unlike 3rd ACs, 1st and 2nd person ACs all follow the distribution pattern of Romance clitics in general, i.e. pre-verbal position in finite clauses and post-verbal position in non-finite clauses and in affirmative imperatives.

2.3. Predictions for possible derivational steps

The empirical data presented so far are transparent with respect to why the study of the acquisition of Romanian ACs may be directly relevant to the MnoM debate.⁵ If the acquisition data provide evidence that children go through a stage

⁴ Irrespective of whether they occur in pre- or post-verbal position.

⁵ Actually, the available studies of the syntactic structure of clitic structures in Romanian mirror the main debate in the literature: some adopt the analysis of Sportiche (1998) (see, for example, Alboiu, 2002), others adopt a movement analysis in the spirit of Kayne (1975, 1994) or Uriagereka (1995) (see, for example, Avram and Coene, 2009; Ciucivara, 2009).

Table 2
Longitudinal data.

Corpus	Age	MLU	Total hours recordings	Total number child utterances
B.	1;10–2;11	1.091–2.790	15 h	8155
A.	1;09–2;11	1.514–3.174	15 h	6917
I.	1;10–3;00	1.407–3.689	15 h	7358
Total			45 h	22,430

when ACs are placed exclusively in post-verbal position,⁶ that might be taken to suggest that there is a developmental stage during which ACs merge in a position lower than the inflectional domain of the verb. And if intermediate structures in acquisition correspond to possible derivational steps in the target grammar, then we could interpret the acquisition data as indicating that this developmental stage corresponds to a possible step in the derivation of AC constructions.

Since in Romanian the position is licit, early post-verbal ACs would not represent a deviation from the properties of the target language. Therefore the structure could be analyzed as a possible sub-structure of the adult grammar without the need to account for the difference between child and adult grammars. Early post-verbal ACs could therefore provide evidence in favour of the Move analysis, revealing a possible derivational step during which the clitic is in a low position, in the verbal domain. However, if such a stage is attested only with some ACs, for example only with 3rd person ACs but not with 1st/2nd person ones, one might assume that the developmental route indicates different derivational steps for the two classes of ACs in the adult grammar.

It is important to mention at this point that the results reported in various studies raise the question of whether object clitics can be analyzed in a unifying way across languages. Recent acquisition studies pointed out that the different and often contradictory findings with respect to early object clitics in child grammars can be accounted for by identifying different sources of vulnerability crosslinguistically (see, for example, [Costa and Labo, 2010](#)). The acquisition data would, in this case, suggest that clitic constructions might not be derived in the same way across languages. Therefore, since in the present paper we focus on child Romanian, we take the data to primarily answer the MnoM question with respect to Romanian clitic constructions and only indirectly to offer a possible crosslinguistic answer. The main goal of the study is to investigate how plausible it is to build one's theoretical analysis of a given syntactic construction starting from a non-biased investigation of the acquisition data. That option obviously depends on the assumption that the developmental stages in child grammar can be treated as the correspondents of steps in the derivational system of the adult grammar.

3. The MnoM debate: 3rd ACs

3.1. Aim

In this section we investigate longitudinal and experimental data from child Romanian with a view to identifying the very first stages in the acquisition of ACs. Since in Romanian finite constructions can contain either a pre- or a post-verbal object clitic (depending on clitic and temporal-aspectual construction), we focused on whether one can identify an asymmetry in the early grammar between the two types of configurations.

3.2. Longitudinal data

3.2.1. Corpus and method

The longitudinal data which we investigated come from three corpora of child Romanian, consisting of weekly 60 minute audiotape recordings (transcribed in Chiles format, [MacWhinney, 2000](#)) of natural unstructured conversations of monolingual Romanian children: a girl (B. 1;3–3;2) and two boys (A. 1;9–3;6 and I. 2;0–3;5). For the present analysis, we examined one recording per month for the period 1;10 – 2;11 for child B., 1;9 – 2;11 for child A. and 1;10 – 3;00 for child I.⁷ The data are summarized in [Table 2](#).

Only spontaneous utterances which contained a verb were included in the analysis (imitations, song lyrics, repetitions, poems, and obvious formulaic chunks were excluded). Ambiguous utterances were also excluded. We investigated the

⁶ The data are the more interesting as most acquisition studies indicate that children do not misplace object clitics; post-verbal clitics are illicit in finite constructions in Romance languages and they are not attested with either TD or SLI children. See, however, [Petinou and Terzi \(2002\)](#), who provide evidence for clitic misplacement in early Cypriot Greek and with SLI children.

⁷ The I. corpus was recorded and transcribed by Ioana Stoicescu, whom we thank for generously sharing her data with us.

production/omission of ACs only in obligatory clitic contexts (see Section 2.2). A clitic was analyzed as omitted only when the child failed to produce it in an obligatory context.

The focus of the analysis was to compare the production and the omission of ACs in pre- and post-verbal position. This is why we focused on 3rd person clitics, the only ones that can occur in both contexts in finite clauses. We also analyzed the production/omission of the feminine clitic *o* 'her' separately, in order to check whether there might be a significant difference between the production/omission of all 3rd ACs and the production/omission of one 3rd AC with 'variable' distribution.

3.2.2. Results

3rd ACs are attested very early in all the corpora investigated, at a time when the MLU is below 2. In the B. corpus, for example, a post-verbal 3rd AC is attested at 1;10 (see 8), but no other 3rd AC is found in between 1;10 and 2;00 in the files examined for the present study:

- (8) *apa pus -o*
water.the put_{PAST PART} clitic ACC 3RD SG FEM
'I have put the water.' (B. 1;10)

Similarly, in the I. corpus, a post-verbal 3rd AC is attested at 1;11, but in the next two available files, only one more 3rd AC was found:

- (9) *Anucu a făcut -o.*
Anucu has made clitic ACC 3RD SG FEM
'Anucu has made it.' (I. 1;11)

The number of produced clitics is very low in the first files examined, where one notices random omission of ACs. Sometimes in one and the same file the child might use and omit the clitic in the same context:

- (10) a. *Antonio rupt -o.*
Antonio broken clitic ACC 3RD FEM SG
'Antonio broken it.'
b. *Antonio rupt.*
Antonio broken
'Anotonio broken.' (A. 1;9)

- (11) a. *Eu îl vreau pe ăla cu care vorbește.*
I clitic ACC 3RD MASC SG want PE that with whom talks
'I want the one with whom (s)he is talking.'
b. *Eu vreau pe ăla care vorbește.*
I want PE that whom talks
'I want the one who is talking.' (I. 2;6)

It is at about 2;6 that the number of contexts which require a 3rd AC and the number of 3rd ACs begin to increase. By age 3;0 the production rate reaches around 90% in all corpora investigated, which indicates early acquisition of 3rd ACs in Romanian.

Interestingly, one notices a developmental asymmetry between pre- and post-verbal 3rd ACs. The first attested clitics are all post-verbal and the production rate is higher for post-verbal ACs in the first months after emergence. This post-verbal bias is strong in the A. corpus, where only post-verbal feminine ACs are found for the period 1;9–2;1, in some very rare cases even when the antecedent was masculine:

- (12) Adult: *a călcat pe balon și ...?*
has stamped on balloon and
'He has stamped on the balloon and...?'
Child: *a spart -*o.* [instead of *I-a spart*]
has broken clitic ACC 3RD FEM SG [instead of clitic ACC 3RD MASC SG has broken]
'She has broken it.' (A. 1;10)

Clitics are attested slightly earlier in this corpus than in the other two. The number of obligatory 3rd AC contexts is also higher: 307, almost double when compared to the B. corpus, where only 144 obligatory contexts have been found, or to the I. corpus, with only 158 obligatory clitic contexts.

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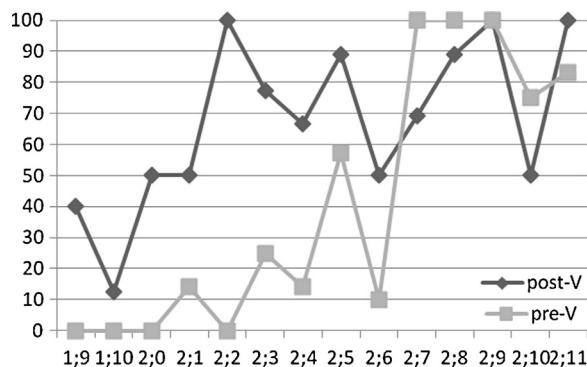


Fig. 1. Pre- vs. post-verbal 3rd AC production (%). A. corpus.

The first pre-verbal 3rd AC is found at 2;1, but it is only at 2;3 that A. begins to use them in a more regular way. Between 1;9 and 2;1 all the 13 produced 3rd ACs occur in post-verbal position.

The rate of produced post-verbal 3rd ACs (calculated against the total number of obligatory post-verbal AC contexts in the corpus) remains higher than that of pre-verbal ACs (calculated against the total number of obligatory pre-verbal AC contexts) until 2;7–2;9, as can be seen in Fig. 1.

The early post-verbal clitics are found exclusively with the periphrastic past (the *perfect compus*) in the A. corpus, which explains why they are all associated with perfective predicates. The first post-verbal 3rd ACs with an imperative verb are found at 2;8. Actually, out of the total of 41 omissions in a post-verbal context, 14 represent omissions with an imperative verb.

In the B. corpus as well one finds only post-verbal 3rd ACs for a short stage (1;10–2;2), though because of the very low number of ACs this developmental fact is not as robust as in the A. corpus. The number of pre-verbal clitics begins to increase only after 2;8.

Unlike in the A. corpus, some of the early clitics also appear with imperatives:

- (13) *la -o, Dolly!*
 take_{IMP} clitic_{ACC 3RD FEM SG} Dolly
 'Take it, Dolly!' (B. 2;0)

One should, however, mention that these early imperative structures might actually be used as frozen chunks; they contain only the verbs *give* and *take*, frequently encountered in the imperative in the input, which otherwise does not contain many imperatives.⁸ The very few late clitic omissions in post-verbal position also include omissions in the context of an imperative.

- (14) Adult: *Uite-o aicea!*
 look clitic_{ACC 3rd FEM SG} here
 'Look, it's here!'
 Child: *Dă!*
 give_{IMP}
 'Give!' (B. 2;10)

The analysis reveals the same asymmetry between clitic production in pre- and post-verbal position as in the A. corpus. Until 2;6, the rate of post-verbal 3rd ACs produced (against the total number of post-verbal contexts) is higher than the rate of pre-verbal 3rd ACs (against the total number of pre-verbal contexts) (see Fig. 2).

I. uses a higher percentage of ACs overall, with a slight difference between the pre-verbal (87.39%; $n = 104/119$) and the post-verbal ones (92.30%; $n = 36/39$). The asymmetry between the production of the two is more obvious when one looks at the data by file. Fig. 3 shows that until 2;7–2;9 I. uses a higher percentage of post-verbal ACs. Actually, he practically does not omit ACs in post-verbal position. The lower percentage at 2;6 is an artefact of the lower number of post-verbal contexts (2 with one omitted clitic).

⁸ See Avram and Coene (2007) for a discussion on the use of imperatives in child Romanian, in child directed speech and in adult to adult interaction.

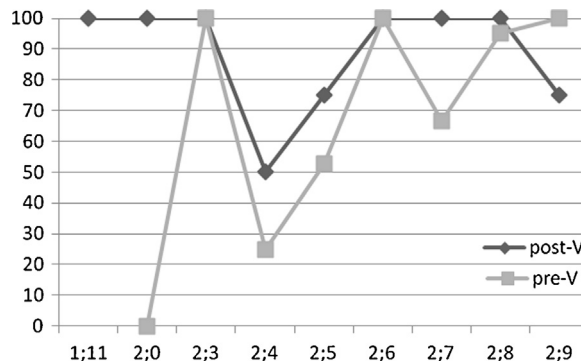


Fig. 2. Pre- vs. post-verbal 3rd AC production (%). B. corpus.

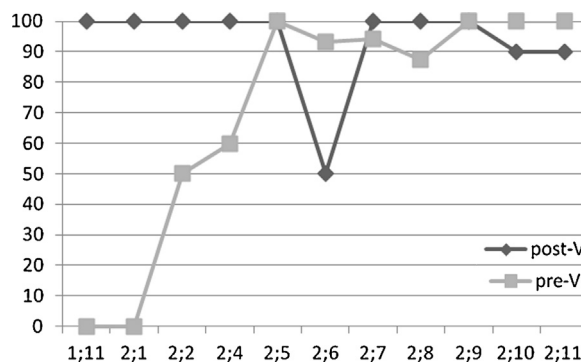


Fig. 3. Pre- vs. post-verbal 3rd AC production (%). I. corpus.

The analysis of the production of the feminine clitic reveals a preference for the post-verbal position in all the corpora. The first pre-verbal o ‘her’ is attested a few months later than the first post-verbal one and there is a difference between the production/omission rate for post- and pre-verbal feminine clitics across files.

Agreement errors are extremely rare in all the three corpora (11 in the A. corpus, 12 in the B. corpus and only 4 in the I. corpus) but they are not restricted to the early files, as can be seen in (15). Case errors with ACs are absent.

- (15) Adult: *și ce făcea leu (l) în povestea asta?*
 Child: **îl mănîncă.* (the antecedent is ‘the princess’)
 clitic_{ACC 3RD} *_{MASC SG} eats
 ‘He is eating him.’
 Adult: *Pe cine mănîncă el?*
 ‘Whom is he eating?’
 Child: *Pe prințesă.*
 ‘The princess.’ (I. 2;11)

The corpus also contains many utterances with transitive verbs used with a null object whose content can be easily retrieved from the extralinguistic context:

- (16) Adult: *Ce faci, măi Bianca?*
 ‘What are you doing, Bianca?’
 Child: *Gata, am spălat, e curată.*
 ready have washed is clean_{FEM}
 ‘Ready, I have washed, it’s clean.’ (B. 2;4)
- (17) Adult: *ce faci cu ciocanu’ ăla?*
 ‘What are you doing with that hammer?’
 Child: *bați.*
 hammer_{2ND SG}
 ‘I am hammering.’ (A. 2;3)

The referent of the object is 'active', making the use of the clitic informationally 'superfluous' to the child.

Verbs with prototypical objects are also occasionally used with a null object, but such uses are marginally acceptable in the target grammar and we did not code them as omissions:

- (18) Adult: *Cuțu' tău a mâncat mămăligă?*
'Did your doggy eat polenta?'
Child: *N- a mâncat cuțu.* (A. 2;0)
not has eaten doggy
'Doggy didn't eat.'

3.2.3. Interim conclusions

Summing up, the longitudinal data indicate that there is a short developmental stage when 3rd ACs occur exclusively in post-verbal position.⁹ In all the three corpora there is a post-verbal position bias: the omission rate is higher in pre-verbal context and the production rate is higher when the AC targets the post-verbal position. The use of 3rd ACs becomes adult-like very early, at around the age of 3;0.

In spite of the fact that the general picture indicates that there is a pre- vs. post-verbal asymmetry, the longitudinal data contain low numbers of 3rd AC contexts overall, some of which occur in imperative clauses. This is why we verified the longitudinal data with experimental data which focused exclusively on the production of 3rd ACs in pre- and post-verbal position with non-imperative verbs. The elicited production task allowed us to test for the obligatory use of 3rd ACs in both pre- and post-verbal position (while keeping other factors constant) with a larger number of subjects. If the post-verbal bias is indeed significant (whichever its underlying cause might be) one would expect to find a pre- vs. post-verbal AC production/omission asymmetry in experimental data as well.

3.3. Experimental data: 3rd ACs production

3.3.1. Task design

The main aim of the present task was to test whether the pre- vs. post-verbal clitic asymmetry found in the longitudinal corpora is also confirmed by experimental data. An elicited production task, similar to the one used in Schaeffer (2000), was used. It elicited only 3rd person feminine singular ACs (the only ones which can occur both pre- and post-verbally in finite contexts). It contained 16 test scenarios, 2 warm-ups and 4 control sentences. In each test scenario, the antecedent of the elicited AC was mentioned in the elicitation question in order to force the use of an AC in the answer. The protocol is illustrated in (19), where the DP *hîrtia* 'paper.the' is overt in the question:

- (19) Experimenter:
Fetița asta are o foarfecă și o foaie de hîrtie.
'This little girl has a pair of scissors and a sheet of paper.'
Uite, acum taie hîrtia. Ce face fetița cu hîrtia?
'Look, she's cutting the sheet of paper. What is the little girl doing to/with the paper?'
Expected answer: O taie.
clitic_{ACC 3RD FEM SG} cuts
'She is cutting IT'.

However, a question like the one in the scenario in (19), in which the use of a Dative clitic is avoided by using a prepositional phrase (*cu hîrtia* 'with the paper') is 'natural' only when the antecedent of the clitic is a [–animate] referring DP. With [+animate] referring DPs the most natural way of asking the question is with a Dative DP, which can be clitic doubled. But the presence of the clitic in the question, be it a Dative one, might have an effect on the use of the AC in the elicited answer, providing an overt clue with respect to the discourse prominence of the antecedent. In order to balance the possible effect of these factors ('naturalness' and Dative clitic) on the answer, two types of questions were used: (i) What is X doing **with Y?** (i.e. with no Dative clitic) (see 19 above) when Y was [–animate] (8 questions); (ii) What is X doing **Y-Dative?** (i.e. "feeding" a Dative clitic)(see 20) when Y was [+animate] (8 questions).

⁹ It seems that language acquisition steps somehow mimic historical patterns of language evolution (see, for example, Slobin, 2004) as well. In earlier stages of Romanian, clitics occurred exclusively in post-verbal position. The early post-verbal position in the acquisition data could then mimic the earlier stages of language development.

- (20) *Ce i- a făcut mama fetiței?*
what clitic_{DAT 3RD SG} has done mother.the girl.the_{DAT}
'What did mother do to the little girl?'

The task contained 8 elicitation questions which targeted an answer in the present tense (with the clitic in pre-verbal position) and 8 which targeted an answer in the periphrastic past tense (with the clitic in post-verbal position):

- (21) Target sentence with pre-verbal clitic: (*Tigrul o piaptănă.*
(tiger.the) her combs
'The tiger is combing her.'
Target sentence with post-verbal clitic: (*Băiatul a spart-o.*
(boy.the) has broken-it_{FEM}
'The boy has broken it.'

In order to control the possible effects of the *phi*-features of the subject on clitic production, in 8 elicitation scenarios there was gender match between the targeted clitic and the subject (as in 22b) and in 8 scenarios there was gender mismatch (see 22a) (8 x 8, also balanced across type of question, with/without a Dative clitic¹⁰).

- (22)
a. Elicitation question: *Ce i- a făcut șoricelul bufniței?*
what clitic_{DAT 3RD SG} has done mouse.the owl.the_{DAT}
'What has the mouse done to the owl?'
Expected answer: (*Șoricelul a scos-o din cutie.*
mouse.the_{MASC} has taken clitic_{FEM ACC 3RD SG} of box
'The mouse has taken it out of the box.'
b. Elicitation question: *Ce- a făcut maimuța cu banana?*
what has done monkey.the with banana.the
'What has the monkey done to the banana?'
Expected answer: (*Maimuța a mâncat -o.*
(monkey.the) has eaten clitic_{FEM ACC 3RD SG}
'The monkey has eaten it.'

All the verbs were in the 3rd person singular.

The test started with two training scenarios, which elicited the use of non-reflexive 3rd ACs. The order of the questions was the same for all the participants but randomized with respect to tense (present tense vs. periphrastic past), gender match, and type of question (with and without a Dative clitic). Each elicitation question was orally produced by the experimenter while two coloured pictures appeared on the monitor of a laptop, as a sequence in a short narrative. The control scenarios targeted the use of reflexive clitics.

3.3.2. Participants and procedure

32 subjects in total took part in the study, as shown in Table 3.

The children came from one kindergarten in Bucharest. They had no diagnosed language, hearing or speech pathologies. They were tested individually in a quiet room at their kindergarten, after institutional consent was obtained. There was no time limit. The answers were written down by one experimenter on a special answer sheet during the testing session and also audio recorded in order to allow double checking before analysis. This procedure was obligatory, given the phonological properties of clitics. The two experimenters who were present at the testing session listened to the audio recordings and compared their transcripts to the answer sheets.

Responses were analyzed both quantitatively and qualitatively. They were scored according to the following categories: (i) produced ACs; (ii) omitted ACs; (iii) a DP used instead. Produced and omitted ACs were further subdivided into pre- and post-verbal, and for the produced ones we also scored agreement errors. We examined clitic omission in

¹⁰ There is a third possible way of formulating the elicitation question: with a Dative clitic and a prepositional double, as in (i):

- (i) 'Ce i- a făcut crocodilul la pește?'
what clitic_{DAT 3RD SG} has done crocodile.the at fish
'What did the crocodile do to the fish?'

This is the question used in the task reported in Babyonishev and Marin (2006). Such questions, however, belong to one variety of Romanian which is not spoken in the Bucharest area. This is why we did not use it in the present task.

Table 3
Participants in production task 1.

Group	Age range (months)	Mean age (SD)	Nr
TD	40–50	44.92 (3.12)	24
Adult controls	276–420	331.88 (73.07)	8

Table 4
3rd AC production task: results.

AC production		AC omission	
82.9% (<i>n</i> = 296)		12.88% (<i>n</i> = 46)	
Pre-V position	Post-V position	Pre-V position	Post-V position
<i>n</i> = 130	<i>n</i> = 166	<i>n</i> = 37	<i>n</i> = 9

relation to gender match vs. gender mismatch between the subject and the elicited AC and also in relation to type of elicitation question (with/without Dative clitic). The analysis also included the investigation of clitic omission/production in relation to the aspectual class to which the predicate belonged.

3.3.3. Results

Of the total possible 384 responses, 27 were non-target,¹¹ which yielded an analysis database of 357 responses. The data reveal an asymmetry between the use of ACs in pre- and post-verbal production, similar to the one found in the longitudinal data. Though the omission rate is very low (12.88%), the comparison between the two clitic positions within this category reveals a higher number of clitic omissions in pre- than in post-verbal position (37 vs. 9) (Mann–Whitney *U*, *p* = .001). As for the clitics that are produced, a significantly larger number occurred in post- than in pre-verbal position (166 vs. 130) (Mann–Whitney *U*, *p* < .001). The data are summarized in Table 4 above.

There was no significant difference in overall clitic omission rate with respect to gender match/ mismatch (Mann–Whitney *U*, *p* = 0.193). We obtained 152 ACs for the gender match scenarios and 142 for the gender mismatch ones. The within subjects analysis, however, shows that when the clitic must occur in post-verbal position (with a periphrastic past tense verbal form), there are significantly more omissions in the gender mismatch contexts (Mann–Whitney *U*, *p* = 0.009) (where 72 responses contained a post-verbal clitic, compared to 87 post-verbal clitics in the gender match contexts). With pre-verbal clitics (i.e. the ones with a present tense verb), no significant difference in omissions in gender match vs. mismatch contexts (Mann–Whitney *U*, *p* = 0.899) has been found.

The rate of agreement errors is very low (only 4 agreement errors overall). But, interestingly, these erroneous clitics are in pre-verbal position and they all inherit the *phi*-features of the subject in the clause:

- (23) a. *Ce i-a făcut șoarecele bufniței?*
 ‘What did the mouse do to the owl?’
 Answer: ***L-** a dat cu făină.
 clitic ACC 3RD SG MASC has given with flour
 ‘He has covered him in flour.’ (owl = feminine/ mouse = masculine)
- b. *Ce-i face câinele pisicii?*
 ‘What is the dog doing to the cat?’
 Answer: ***îl** spală.
 clitic ACC 3RD SG MASC washes (cat = feminine, dog = masculine)
 ‘He is washing it.’

No significant difference has been found between the responses to elicitation questions with or without a Dative clitic (Mann–Whitney *U*, *p* = 0.458).

The rate of answers in which a full DP was used instead of the clitic (a grammatical but pragmatically infelicitous response) was below 5% (*n* = 15).

The analysis of clitic omission in relation to the verb used in the answer shows that the verbs *read* (*n* = 1) (see 24) and *drink* (*n* = 11) (see 25) in the present tense were associated with the lowest number of AC produced.

¹¹ Most of the non-target answers represented correct structures which did not require an AC, e.g. structures with a Dative clitic.

- (24) Elicitation question: *Ce face rățoiul cu cartea?*
'What is the duck doing with the book?'

Answer: *citește.*
reads
'It is reading.'

- (25) Elicitation question: *Ce face pisoiul cu Coca-cola?*
'What is the cat doing with the Coke?'

Answer: *bea.*
drinks
'It is drinking.'

At first sight, this seems to interfere with the fact that the context for these two verbs targeted pre-verbal clitics, which are omitted more often. But there are two other verbs for which we also received a small number of answers with a clitic, i.e. 14 for each verb; for one, the context elicited a pre-verbal clitic and for the other a post-verbal one. This suggests that the low number of clitics with *read* and *drink* cannot be accounted for in terms of clitic position alone. Actually, with these two verbs the omission gives rise to a potentially licit construction, since they both allow null prototypical objects.

The control sentences targeted reflexive clitics. No reflexive clitic omission was attested in the responses to the control sentences, confirming the reflexive vs. non-reflexive clitic asymmetry reported in several studies, for various languages (see, for example, Zesiger et al., 2010 for French), Romanian included (Coene and Avram, 2011, 2012).

The responses to the two types of question, with and without a Dative clitic, indicate that the presence of the Dative clitic in the elicitation question does not influence AC use in the answer.

For the adult group, the omission rate was, as expected, extremely low (1.5%) but the few omissions were attested only with pre-verbal clitics.

3.3.4. Interim conclusions

The longitudinal and the experimental data offer complementary and also converging pictures. The former show that post-verbal 3rd ACs emerge very early and, for a very short period of time, they are the only clitics produced by the three children. During this early stage, ACs occupy exclusively a low position in the structure of the clause. After the first pre-verbal clitics emerge, the system shows a bias for the post-verbal position, reflected in the children's preference to leave the AC in a low position in the structure. If the two developmental stages can be taken to reflect steps in the derivation of AC constructions, they can be said to indicate a first step when the AC merges low, in the verbal domain of the clause. It is only the second step which involves Move as well.

The pre- vs. post-verbal AC asymmetry is also found in the experimental data which also reveal that 3rd ACs are sensitive to (gender) feature mismatch between their antecedent and the subject of the clause. Feature mismatch has different effects on pre- and post-verbal ACs. When the gender feature of the subject was different from that of the antecedent of the clitic, the omission rate was higher for the post-verbal ACs than for the pre-verbal ones; on the other hand, the pre-verbal clitics occasionally erroneously inherited the *phi*-features of the subject. These subject intervention¹² effects indicate that the relation between the clitic and its antecedent is established *over* the VP internal subject, irrespective of whether the clitic (ultimately) occurs in pre- or post-verbal position, i.e. at one point in the derivation the Accusative clitic is lower in the structure than the VP internal subject. Another finding was that clitic omission was higher with two verbs which standardly allow a null prototypical object, *read* and *drink*, which triggered the lowest number of produced ACs (1 out of 24 in the case of *read* and 11 out of 24 in the case of *drink*). Secondly, the aspectual properties of the predicate also turned out to be relevant. The verbs *read* and *drink*, which are basically activities (Smith, 1991), are inherently atelic. In the task, they were elicited in the present tense, i.e. an aspectually imperfective form. Correlated with the availability of a null prototypical object, aspectual imperfectivity seems to favour clitic omission. This shows that clitic use is not indifferent to either the argument structure or the aspectual value of the predicate,¹³ a property associated with elements which occur in the lexical domain of the verb.¹⁴

¹² This seems to be the case even when the subject is null, which suggests that *pro* behaves in narrow syntax like an overt pronoun; the fact that it is unpronounced might be a PF matter (Roberts, 2010).

¹³ A correlation between aspect and object use has been reported for other child languages (see Tsimpli, 2012).

¹⁴ This finding is also relevant in terms of methodology. It shows that the results in any production task which elicits clitic production can be affected by the argumental and aspectual properties of the predicates targeted in the elicitation scenario. For one and the same language, different tasks may offer different clitic production rates if the argumental properties and the aspectual pattern of the elicited verbs are significantly different. This raises the question of whether one can straightforwardly compare the findings across various studies when these factors have not been eliminated or controlled for.

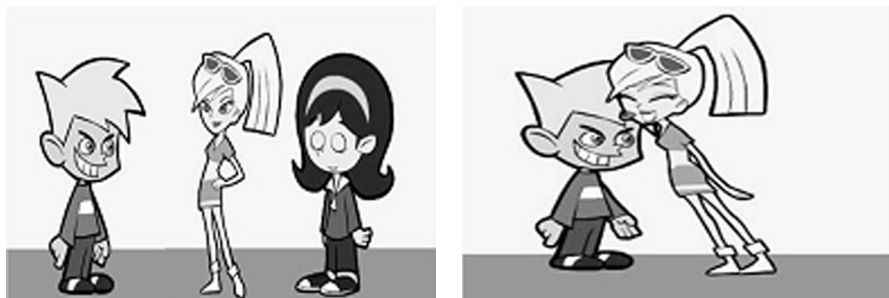


Fig. 4. Sample 1 of picture set used in task 2.

The derivational scenario which emerges from the longitudinal and the experimental data could be argued to include a derivational stage when the AC merges within the VP. The relationship between the clitic and its antecedent is established across the subject in Spec VP.

But whatever conclusions one can reach with respect to the derivation of clitic constructions building on the data analyzed so far might not necessarily carry over to 1st and 2nd ACs. As already mentioned in Section 1, the differences between 1st/2nd vs. 3rd ACs have been addressed in both theoretical (Uriagereka, 1995; Kayne, 2000) and acquisition studies. 3rd ACs have been argued to be omitted at a higher rate and for a longer period time, by both TD and speech impaired children (Silva, 2010; Tsimpli and Mastropavlou, 2007; Tuller et al., 2011). The same developmental asymmetry has been reported for Romanian on the basis of longitudinal data (Coene and Avram, 2011, 2012) which reveal that the acquisition route of 1st/2nd non-reflexive ACs is similar to that of reflexive clitics but different from that of 3rd ACs. The former emerge slightly later but are used target-like shortly after emergence, at a time when 3rd ACs are still occasionally omitted. The responses to the control sentences in task 1 offered a similar picture: reflexive clitics are not vulnerable while non-reflexives are.

Since reflexive clitics have been analyzed as first merging in a high functional projection (see, Dobrovie-Sorin, 1998 for Romanian, or Uriagereka, 2008 for the view that the reflexive clitics might start in the high Voice projections of Sportiche, 1998), it is interesting to investigate the derivational steps of 1st/2nd ACs as well. Previous studies, however, did not address the issue of the above mentioned person asymmetry with respect to the MnoM debate. For Romanian, only spontaneous speech was investigated, and, just like with 3rd ACs, the studies had to rely on a relatively small number of tokens. This is why we verified the longitudinal results with experimental data in this case as well.

4. 2nd person ACs vs. 3rd ACs

4.1. Aim and task design

The aim of this task was to identify the acquisition route of 2nd person ACs vs. that of 3rd person ACs with a view to answering the question of whether the move analysis can account for the derivation of both types of ACs.

Task 2 was an elicited production task which focused on 2nd and 3rd ACs. The participants were shown two visual stimuli involving 3 possible referents for the elicited object expression. These visual stimuli consisted of male and female cartoon-figures depicting an event oriented towards one of them (intended 3rd person referent) or towards a cartoon-figure representing the researcher herself (intended 2nd person referent), followed by a picture showing the cause of a particular state of mind (happy, sad, etc.) or of a particular process (e.g. laughing). The presentation of the picture set was accompanied by an oral introduction of all the participants in the event and then the situation depicted in the picture was described by the experimenter. The elicitation question ‘Why is X happy/sad/laughing...?’ was followed by the partial answer ‘Because Y (agent)...’¹⁵ The participants were required to complete this partial answer. The scenarios are illustrated in Fig. 4 for a 3rd person-oriented event in (26) and in Fig. 5 for a 2nd person-oriented event in (27):

- (26) *În poza asta sînt Vasile, Anca și Ioana. Acum Vasile e fericit.*
‘In this picture one can see Vasile, Anca and Ioana. Now Vasile is happy.’
De ce e fericit? Pentru că Anca...
‘Why is he happy? Because Anca...’

¹⁵ In the pilot version of the experiment, where we did not include the beginning part of the elicited answer, many of the responses contained structures which did not require the use of a clitic. That resulted in a high number of irrelevant responses. This is why we included the partial answer in the elicitation part.



Fig. 5. Sample 2 of picture set used in task 2.

Table 5
Task 2 conditions.

		Number of items	
2nd person		8	
3rd person	subj./obj. →	Masculine	Feminine
	↓		
	Masculine	2	2
	Feminine	2	2
Total items		16	

Expected answer: [...] *pentru că Anca îl pupă.*
 [...] because Anca clitic ACC 3RD MASC SG kisses.
 'Because Anca is kissing him.'

(27) *În poza asta sîntem Ioana, Vasile și cu mine. Iar eu sînt tare supărată.*
 'In this picture you can see Ioana, Vasile and myself. And I am very upset.'
În poza asta vezi de ce. De ce sînt supărată? Pentru că Vasile...
 'In this picture you can see why. Why am I upset? Because Vasile...'

Expected answer: [...] *te lovește/ te-a lovit.*
 [...] you ACC 2ND SG kicks/ you ACC 2ND SG has kicked
 '(Because Vasile) is kicking you/has kicked you.'

The task contained 16 test items, 2 training¹⁶ scenarios and 1 filler (not triggering an object expression). The test scenarios were equally distributed between 2nd and 3rd person-oriented events. For the scenarios with intended 3rd person referents, we balanced for gender (masculine or feminine) and for feature match or mismatch of clitic with the agent of the action depicted in the picture, i.e. the subject in the expected answer. Table 5 summarizes the different test conditions and the number of items in each of them. These conditions were presented to the test subjects in random order but the order was the same for all the participants.

The verbs targeted by the elicitation scenarios were: *bate* 'beat', *îmbrățișa* 'hug', *împinge* 'push', *gîdila* 'tickle', *pupa săruta* 'kiss'.

4.2. Participants and procedure

19 children (mean age 47 months, SD 5.8309) from two kindergartens in Bucharest took part in the study.

The participants were tested individually, in one room at their kindergarten. They had no diagnosed language, hearing or speech impairments. There was no time limit. The answers were marked on a specially designed answer sheet during the testing session and audio recorded in order to allow double checking before analysis. Double checking was necessary

¹⁶ The content of the training items did not differ from that of the actual test items. As they were used to get the children acquainted with the task by giving children feedback on their responses, the results of these training items were not taken into account in the test statistics.

because of the phonological properties of clitics. The two experimenters who were present at the testing sessions listened to the audio recordings and compared their transcripts to the answer sheets. Unclear answers were excluded.

The scoring procedure was similar to the one used in the analysis of the results in task 1. We analyzed the following: (i) produced ACs; (ii) omitted ACs; (iii) a DP used instead. Produced and omitted ACs were further subdivided into 2nd and 3rd person. Agreement errors were also scored.

4.3. Results

The data reveal a person asymmetry in AC production, with a significantly higher amount of 2nd ACs being produced when compared to 3rd ACs (Mann–Whitney U , $p < .001$ mean 2nd 3.58 (sd 2.06); mean 3rd 0.158 (sd .501). The omission rate is very low overall, with the omission rate of 2nd AC being slightly lower than the rate for 3rd AC: 1.97% ($n = 3$) vs. 6.57% ($n = 10$) (Mann–Whitney U , $p = .07$, marginally significant). One notices that the omission rate is lower than the one obtained in task 1.

A surprising finding was the relatively high number of clitic agreement errors (19 out of the total of 157 produced ACs) with both 2nd and 3rd ACs. These results differ from what has been reported for spontaneous speech, where agreement errors were attested only with 3rd ACs (Coene and Avram, 2011). Such errors are more numerous than in task 1 and they are found with both pre- and post-verbal ACs. But they have the same pattern: the clitic erroneously inherits the *phi*-features of the subject of the clause. In 12.10% ($n = 19$) of the responses which contained an AC, the clitic did not have the required person and/or gender features. In 14 out of these a 3rd AC was used instead of a 2nd AC and in 13 out of these the erroneous clitic had the *phi*-features of the subject DP inside the *because* clause:

- (28) Elicitation: [. . .] *Eu plîng. Spune-mi de ce plîng. Pentru că Anca . . .*
 'I am weeping. Tell me why I am weeping. Because Anca . . .'
 Expected answer: [*Tu plîngi*] *pentru că Anca te ține de gît.*
 [You are weeping] because Anca **you** holds by neck
 ' [You are weeping] because Anca has fallen on your neck.'
 Obtained response: [*Tu plîngi*] *pentru că Anca *o ține de gît.*
 [you are weeping] because Anca ***her** holds by neck
 ' [You are weeping] because Anca has fallen on her neck.'

In other 5 responses the clitic inherited the gender and number features of the subject:

- (29) a. [*Vasile_j râde*] *pentru că Anca *o_j gîdilă.*
 [Vasile_{MASC} is laughing] because Anca **her** tickles
 'Vasile is laughing because Anca is tickling **her**.'
 Target: Vasile is laughing because Anca is tickling **him**.
 b. [*Vasile_j e bucuros*] *pentru că Anca a pupat *o_j.*
 [Vasile_{MASC} is happy] because Anca_{FEM} has kissed **her**
 ' [Vasile is happy] because Anca has kissed **her**.'
 Target: Vasile is happy because Anca has kissed **him**.

The agreement errors revealed the same effects of the intervening subject as in task 1.

Though we balanced the elicitation questions for present vs. periphrastic past tense, more responses than expected were in the present tense, a context where all ACs are placed pre-verbally. But, in spite of this side effect, the analysis of the data reveals the same pre- vs. post-verbal clitic asymmetry: the few omitted clitics ($n = 13$; 8.55%) were exclusively in configurations which required a pre-verbal AC in the target language.

4.4. Interim conclusions

Summing up, the data obtained in task 2 indicate that 2nd person ACs might be less vulnerable than 3rd person ACs. They are similar to the results reported on the basis of the analysis of spontaneous speech in previous studies for Romanian (Coene and Avram, 2011, 2012) and on the basis of experimental data for other languages (Silva, 2010 for European Portuguese, Tuller et al., 2011 for French SLI). They show that there is a developmental difference between 1st/2nd and 3rd ACs, with the omission rate of 1st/2nd ACs being lower. The agreement errors in this task had an identical pattern: the erroneous clitic inherited the *phi*-features of the subject DP. In this respect, the findings in task 2 reinforce those in task 1. They point to the same conclusion: the object clitic (irrespective of its person feature), at one point in the

derivation, occurs lower than the subject. The relation between the antecedent and the clitic is affected by the *phi*-features of the subject of the clause with both 3rd ACs and with 1st/2nd ACs. This shows that whichever the underlying cause of the developmental difference between 1st/2nd vs. 3rd ACs might be (see, for example, Tsimpli and Mastropavlou, 2007, or Coene and Avram, 2011), it cannot be a difference in first Merge position.

The results in task 2, however, differ from the ones in task 1 in two respects. Firstly, the overall omission rate was lower. Secondly, in task 2, agreement errors were more numerous and they involved both pre- and post-verbal clitics.

The difference in overall omission rate was expected, given the fact that previous studies showed that in longitudinal data 1st/2nd ACs are practically never omitted; in task 2 both 2nd and 3rd ACs were elicited, whereas in task 1 only 3rd ACs were elicited. Another factor which could account for the different omission rates might be related to the verbs used in the two tasks: verbs which allow prototypical null objects (such as *drink* and *read*) were used only in task 1. It is also possible that this difference can be accounted for in terms of the context of occurrence of the elicited AC: simple clause in task 1 and a *because*-clause, i.e. an island, in task 2. Though in Romanian the acceptability of null objects is not generally sensitive to the distinction island vs. non-island (null objects are banned in both contexts), *because*-clauses are less flexible than main clauses: they disallow clitic omission even in contexts where omission is marginally acceptable in non-islands; for example, with activity predicates in an imperfective form or with verbs that have prototypical objects. Children might be sensitive to this property of islands very early. This may have also contributed to the very low clitic omission rate in task 2.

The difference in agreement error rate was unexpected; it could be correlated with the fact that in task 2 the clitic occurred in an island.

5. Putting the threads together

The main goal of the present study was to identify to what extent language acquisition data can shed light on the MnoM debate with respect to the derivation of ACs. One important assumption guided our work, that of Lebeaux (1988), according to whom “the grammar constructed by the child is a derivational one and that is later converted into alternative formats [. . .]. This would mean that the study of acquisition, the stages that are undergone, would give a unique purchase of grammar in its derivational mode” (Lebeaux, 1988:133).

We chose to use two types of data: early spontaneous speech coming from three longitudinal corpora of monolingual child Romanian and experimental data coming from two elicited production tasks. The former offered a picture of very early clitic configurations; the latter allowed us to control for pre- and post-verbal position, gender feature match/mismatch between the antecedent of the clitic and the subject of the sentence, as well as for the production of 2nd vs. 3rd ACs.

We addressed two related questions. The first one was whether acquisition data could shed light on the theoretical debate concerning the derivation of accusative clitics. In particular, our aim was to identify – building on the acquisition stages attested in the data available – the first Merge position of ACs as either one in the lower lexical domain of the clause (as in Uriagereka, 1995, for example), or as a specially designated one, high in the functional structure of the verb (as assumed, for example, in Sportiche, 1998).

The main empirical findings of the present investigation can be summarized as follows. The longitudinal data reveal an early stage when 3rd ACs occur exclusively post-verbally. Both the longitudinal data and the experimental data in task 1 show that there is a developmental pre- vs. post-verbal asymmetry in the acquisition of 3rd ACs; the omission rate is higher in pre-verbal position and the production rate is higher in post-verbal position. The results obtained in task 1 and in task 2 reveal that the feature make-up of the subject DP, when different from the features of the antecedent of the clitic, affects AC production: the clitics may either erroneously inherit the gender features of the subject or their omission rate gets higher. In task 1, 3rd AC use was also affected by the argumental and aspectual properties of the predicate.

If one can take micro-steps of acquisition as a mirror into the derivational process (Lebeaux, 1988, Roeper, 1999) then the early post-verbal ACs might offer evidence with respect to the first Merge position of 3rd ACs in the target language. This approach is, however, hindered at first sight by the fact that the early ‘verb AC’ order in child Romanian does not straightforwardly offer empirical evidence with respect to whether the AC is spelled out in a low position in the lexical domain or whether it has merged in a higher position with the lexical verb having moved to an even higher position, leaving it behind. There are, however, several indirect arguments that an analysis which assumes that the post-verbal clitic occurs in the V-domain is more plausible for this early structure in the child grammar.

The first reason is related to the trigger of verb movement, in particular movement of the past participle, since the post-verbal position of an AC in a finite construction attested in our data is associated with the periphrastic past (which contains an auxiliary and the past participle of the lexical verb). For the post-verbal clitic to occur in a high functional projection or in a projection in the left periphery, the past participle of the verb must have moved to the C-domain, leaving the post-verbal clitic behind. What exactly would trigger the movement of the past participle of the verb to a position in the C-domain in those configurations in which the clitic is the feminine *o* ‘her’, so as to leave it behind, but to a lower position with all the other clitics, which appear pre-verbally? Clitic misplacement has not been attested at any stage.

Second, in terms of learnability, it would be unusual for the very early grammar to contain clitic structures in which the verb has moved to the C-domain before the emergence of clitic structures in which the verb has moved to a lower projection in the functional domain, allowing the clitic to occur pre-verbally. The longitudinal data suggest that post-verbal clitics emerge early and the elicited production data show that the preference for clitics in post-verbal position lasts beyond this early stage. It would be unusual to find a (lasting) preference for more derivationally complex structures in child grammar.

We therefore conclude that there is an early stage when children use exclusively post-verbal ACs, which occur in their first Merge position in the V-domain. This stage might correspond to the first step in the derivation of object clitic structures in the target grammar.

The acquisition data discussed so far lead to the conclusion that there is a developmental stage when 3rd ACs first merge in a low position in the verbal domain. However, there is no direct empirical evidence with respect to where exactly the post-verbal AC surfaces in the early clitic constructions. The fact that verbs move to Inflection in Romanian makes word order even less informative in this case. The post-verbal AC might be in the Specifier of V (as assumed by Hale and Keyser, 1992 for affected objects), it might be the spell-out of the D-features of a null object in the complement position of the verb (as argued for ACs in Romanian by Avram and Coene, 2009), or it may have moved to a low K-acc position, lower than TP, as assumed by Ciucivara (2009) for Romanian ACs. But in whichever of these positions it might occur, the first Merge position is in the V-domain. This conclusion is reinforced by the sensitivity of early clitic production to the aspectual value of the predicate and to its argument structure; this indicates that (External) Merge takes place in the V-domain.

After the emergence of pre-verbal clitics, movement outside the VP seems to be treated as optional, as if cliticization could be reduced to (External) Merge. At first sight, this has the flavour of a Merge-over-Move preference. In the literature, however, there has been an on-going debate with respect to whether Internal Merge is more computationally complex than External Merge. Chomsky (1995) argued that Merge is preferred over Move, since the latter involves Merge plus Agree, i.e. Merge is simpler and therefore pre-empts more complicated operations. The Merge-over-Move hypothesis has been, however, questioned in several studies (see, for example, Castillo et al., 1999, 2009). There is also acquisition evidence that Move seems to be simpler than External Merge (Roeper, 2013), at least for certain derivations.

If this view is on the right track, it follows that the reason for the early preference of leaving the AC in its Merge position cannot be straightforwardly related to a general Merge-over-Move preference. But it could be related to the very nature of cliticization. Given the deficient nature of the clitic, once Merge has taken place, the clitic might incorporate into the verb, resulting in a ‘frozen’ post-verbal clitic construction. The child first checks the features of the clitic against information available within the vP (which has phasal properties) before seeking for the relation with its antecedent outside the vP (in the CP phase).

Further evidence that ACs merge in a position in the V-domain, lower than the subject, comes from the effect of feature match/mismatch on AC production. Instead of inheriting the features of the antecedent, the AC occasionally inherited the features of the subject within the vP. This shows that the dependency relation between the clitic and its antecedent is established over the subject. The higher number of agreement errors in task 2 could be correlated with the context in which the clitic was elicited (an island) as well as with the fact that in task 2 the subject of the *because*-clause was always an overt DP (a proper name), part of the ‘given’ elicited answer. In task 1 feature intervention effects were found even when the subject was null, suggesting that *pro* behaves like an overt pronoun in narrow syntax. In task 2 overt lexical DPs might have been stronger interveners than null pronouns because, being an overt part of the elicited answer, they had every chance to remain ‘active’ for the child, possibly more active than the antecedent of the clitic.

The second question which we asked was whether the first Merge position of ACs is the same for both 1st/2nd ACs and 3rd ACs. The reason for which this question seemed relevant for the main goal of the study was rooted in previous theoretical analyses and in recent acquisition findings, which all indicate an asymmetry between 1st/2nd vs. 3rd ACs and a similarity between non reflexive 1st/2nd ACs and reflexive clitics. Since for reflexive clitics several available analyses assume a high position in the functional structure as the position of first Merge, possibly Sportiche’s (1998) Voice (see, for example, Uriagereka, 2008), the similarity between 1st/2nd ACs and reflexive clitics might indicate the same first Merge position for the two clitic types.

The results in task 2 show that the 2nd vs. 3rd person asymmetry cannot be accounted for in terms of different first Merge positions. The responses do, indeed, reveal a developmental 1st/2nd vs. 3rd ACs asymmetry. But both the results obtained in task 1 and those obtained in task 2 reveal that the feature make-up of the subject DP may be erroneously inherited by the AC, irrespective of the person feature of the clitic. The fact that 2nd ACs can erroneously inherit the *phi*-features of the subject shows that just like 3rd ACs, at one point in the derivation, they occupy a position lower than the subject. Both 3rd and 2nd ACs acquire their referential properties in the derivation.

6. Conclusions

The present study attempted at answering a theoretical question (do ACs surface in their first position or do they reach it via Move?) building on acquisition data. If such an approach can offer an insight into derivational steps in the target

grammar, our acquisition findings show that ACs reach the pre-verbal position via Move. There is an early 'intermediate' grammar when ACs occur exclusively in post-verbal position. We argued that this early cliticization in post-verbal position might be taken to represent a micro-step in the derivation of AC constructions. The pre- vs. post-verbal clitic asymmetry as well as the agreement errors attested at later stages reinforce the conclusion that all ACs are, at one point, in a position lower than the subject. All the ACs investigated, irrespective of their person feature, can occasionally inherit the *phi*-features of the subject instead of retrieving the *phi*-features of their antecedent. This was taken to indicate that both 2nd and 3rd ACs occur, at one point, in a position in the V domain, lower than the subject.

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