

Peripheral Cross-linguistic Interference in the Acquisition of Accusative Clitics

by

Romanian-Hungarian Simultaneous Bilinguals

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Abstract. This paper presents the results of the first study of the acquisition of Accusative clitics in Romanian by Romanian-Hungarian bilingual children. Our data show that the acquisition route is similar to the one in a monolingual setting. An interesting observation which arises from this study is that two structures which are superficially similar in the two languages favour the occurrence of non-target constructions, unavailable in either of the two languages. They occur under bilingual conditions via non-language-specific mechanisms, such as comparison and analogy. This is why their use, age of onset and end of influence are subject to individual variation. Their analysis reveals that even structures which are the result of non-language-specific mechanisms, when drawing on morpho-syntactic knowledge, can fall within the range of constructions made available by Universal Grammar. The same superficial similarity seems to boost the acquisition of clitics by Romanian-Hungarian bilinguals.

Keywords: Accusative clitics, Romanian-Hungarian bilinguals, cross-linguistic interference, peripheral inventions

1 Introduction

This paper¹ investigates the acquisition of early Accusative clitics (AC) in Romanian by simultaneous Romanian-Hungarian bilinguals. Besides offering a detailed description of the data, it addresses three more general questions: (i) is the route of the acquisition of ACs in a Romanian-Hungarian simultaneous bilingual context similar to the one in monolingual acquisition?; (ii) does this route reflect cross-linguistic interference effects?; (iii) in what way is this route affected by principles which are not specific to the language faculty? The first issue is relevant to the discussion about the way in which genetic endowment constrains language development in different types of linguistic setting. Our investigation can contribute to the understanding of the nature of language development when two languages are simultaneously acquired from birth (see, e.g., De Houwer 1990; Meisel 1989, 2011; Paradis and Genesee 1996; Serratrice 2013 for relevant discussions and summaries). Since Hungarian does not have ACs, the investigation of how Romanian-Hungarian bilinguals acquire these pronominal elements in Romanian can shed light on the availability and the nature of possible cross-linguistic influence. The third issue is

¹ We thank two anonymous reviewers for their comments on an earlier version of this paper and valuable suggestions for improvement. All the remaining errors are ours. Work on this study was financed by research project PN-II-ID-PCE-2011-3-0959 for Larisa Avram.

related to our understanding of the role of those factors which are not operative in language alone, be they principles of data analysis, of structural architecture or of efficient computation (Chomsky 2005: 6). Simultaneous bilingual development has been argued to favour earlier and higher awareness of language (Bialystock 2001 and references therein; Sorace 2007). This may include an earlier and higher ability to compare language structures. It is therefore plausible to assume that these young language acquirers might make tacit use of language analysis in a way which reflects their bilingual linguistic experience and their alleged early awareness of language.

The remainder of the paper is organized as follows. Section 2 provides an overview of the findings reported in previous studies on the acquisition of ACs by simultaneous bilingual children. In Section 3 we compare Romanian and Hungarian with respect to the availability of ACs and referential null objects. Section 4 presents the study. It builds on data coming from two longitudinal corpora of Romanian-Hungarian bilinguals, compared to data from two longitudinal corpora of Romanian monolinguals. The results obtained in two elicited production tasks are then compared to the naturalistic data. The main findings and their contribution to our understanding of the language developmental route of simultaneous bilinguals in general are discussed in Section 5. The conclusions are summarized in Section 6.

2 Previous studies of Accusative clitics in simultaneous bilingual development

A growing number of studies provide convincing evidence that bilingual children separate the two systems from very early on; they acquire each language in a manner comparable to the route reported for monolinguals (Paradis and Genesee 1996; Hulk

and van den Linden 1996; Meisel 1994, 2001, 2011, among many others). This autonomous development approach builds on the attested qualitative similarity between monolingual and simultaneous bilingual development (2L1 bilinguals). One strong argument is that the same route and the same error pattern are found in both settings. This, however, does not exclude possible cross-linguistic interference effects (see, e.g., Müller and Hulk 2000, 2001). They can be reflected in the different frequency of particular structures or of attested errors, in the creation of structures unattested in monolingual speakers, as well as in the length of the stage during which children make these errors.

A significant number of previous longitudinal studies provide support in favour of the autonomous development hypothesis (Meisel 1989, 2001, 2004; Paradis and Genesee 1996). Their findings show that the clitic acquisition route is qualitatively similar across 2L1 and monolingual learners (see Kaiser 1994; Schmitz and Müller 2008 for French-German 2L1 bilinguals; Granfeldt and Schlyter 2004 for Swedish-French 2L1 bilinguals; Hulk 2000 for French-Dutch bilingual development; Schmitz and Müller 2008 for German-Italian 2L1 children). Other studies, though providing evidence in favour of a similar acquisition route, also report some quantitative differences. The bilingual children in these studies omit ACs at a higher rate and for a longer period of time than monolinguals do (Müller and Hulk 2000, 2001; Larrañaga and Guijarro-Fuentes 2012). This difference has been accounted for in terms of cross-linguistic influence. Müller and Hulk (2000, 2001) investigated the acquisition of object drop by three 2L1 bilingual children: Ivar (German-French), Anouk (Dutch-French), and Carlotta (German-Italian). Since in French and Italian null referential objects are licensed by a clitic, early object drop in obligatory clitic contexts results in

clitic omission. With these bilinguals, the clitic production rate is slightly lower than with monolinguals, at least during the early stages. The authors argue that early object drop in the Romance language shows interference from the topic-drop Germanic language, resulting in a higher rate of clitic omission in the beginning. Similarly, Larrañaga and Guijarro-Fuentes (2012) show that Basque-Spanish 2L1 bilinguals and Spanish monolinguals go through the same stages in the acquisition of object clitics. But the bilinguals omit clitics at a rate which is higher than the one found with Spanish monolinguals. Because Basque allows object drop, the Basque-Spanish bilinguals will take longer to realize that topics are not recoverable in all contexts. Quantitative differences between clitic use by French-English bilinguals and French monolinguals have also been reported in spite of the fact that null objects are not allowed in either of the two languages. These have been accounted for either in terms of cross-linguistic interference (Paradis et al. 2005/2006) or in terms of more general effects of simultaneous bilingualism. Pîrvulescu et al. (2012) assume that null objects are part of the initial representation in the early grammar. But, because the input which bilingual children receive is reduced, they will retain this initial default setting of Universal Grammar longer than monolinguals. Possible delays and vulnerabilities are the result of “bilingualism itself” (p. 184).

Most studies report practically no clitic misplacement, with the exception of Hulk (1997, 2000), for a French-Dutch bilingual child, and Ferrari (2006) for two German-Italian 2L1 bilinguals. The rate is very low in both cases and the account is in terms of cross-linguistic interference from the Germanic language. Ferrari (2006) relates clitic misplacement to the acquisition of verbal syntax, not to clitic syntax.

In sum, most of the studies presented in this section show that the acquisition route of object clitics is qualitatively similar with monolingual and 2L1 bilingual children. Differences, when attested, are mainly quantitative in nature. The availability and the nature of cross-linguistic interference effects differ from one language combination to the other.

Most of the available studies, however, focused on early clitics in a bilingual context which involved a Romance and a Germanic language. Extending the investigation to other language combinations might contribute to our understanding of the nature of cross-linguistic interference in 2L1 acquisition. This is the aim of the present study. We examine the acquisition of ACs by Romanian-Hungarian bilinguals, a language pair for which, as far as we know, the acquisition of object clitics has not been investigated before. Our findings can therefore fill in a gap in the 2L1 acquisition literature on object clitics. More generally, they can shed light on cross-linguistic interference effects: their nature, age of onset, the role of language dominance, etc. Most studies which focused on clitics in 2L1 relied either on the analysis of spontaneous speech or of experimental data. In the present study, we use both longitudinal and experimental data.

3 Clitics and null objects in Romanian and Hungarian

3.1 Clitics in Romanian

Romanian disallows referential null objects in transitive contexts (1)² and even arbitrary null objects in secondary predicates (Dobrovie-Sorin 1994):³

(1) **Am luat carte-a și am pus _ pe masă.*
have.I taken book-the and have.I put _ on table
'I have taken the book and put it on the table.'

(2) **Muzic-a asta face _ fericiți.*
music-the this makes _ happy
Intended: 'This music makes people happy.'

² There are, of course, certain well-defined contexts in which object drop is possible: prototypical and indefinite objects, the "deixis object drop" context, the recipe context (Massam and Roberge 1989), other instructions in the imperative and, marginally, with the infinitive.

³ The following abbreviations are used in the glosses: AC = Accusative clitic; DC = dative clitic; SG = singular, PL = plural, M = masculine, F = feminine, SUBJ = subjunctive marker; GER= gerund; IMP = imperative; INF= infinitive; PE = the preposition which differentially marks direct objects; DEF = definite agreement object marker, INDEF = indefinite agreement object marker, ACC = Accusative case marker, PERF = perfective particle. For the Romanian examples: subject agreement on the verb is glossed by the corresponding English pronoun preceded by a dot; the definite article in post-nominal position is glossed by the corresponding English article preceded by a dash.

Whenever the complement position of the verb which has a referential object is phonologically empty, the use of a pronominal clitic is obligatory (3):

(3) A.: *Ai luat cartea?* ‘Have you taken the book?’

B: *Nu am luat *(-o).*
not have.I taken AC.3SG.F
‘I have not taken it.’

Romanian ACs spell-out the Person feature of a null object in the complement position of V, which is referentially anchored to one particular antecedent (Avram and Coene 2009). The null object has individuated denotation, which involves a positive Person feature (Longobardi 2006). As in Romanian the Person feature is strong, when it has a positive value, it has to be overt. The AC is used as a last resort to spell out the Person feature of the referential null object in post-verbal position, from where it moves to a position in the left periphery of the clause, possibly FP, for referentiality reasons (as proposed, e.g. in Uriagereka 1995, for clitics in Western Romance).

The inventory of the structures in which ACs are obligatory includes verb phrases whose complement position is not occupied by an overt DP. This may be the result of DP displacement, as in clitic left dislocation structures (4), d-linked *wh*-questions (5) or direct object relatives (6). In other cases, the DP object, previously mentioned in discourse, is not overt, as in single clitic constructions (7):

(4) *Carte-a asta am citit *(-o).*

book-the this have.I read AC3SG.F

‘This book, I have read.’

(5) *Pe care ai citit *(-o)?*

PE which have.you read AC3SG.F

‘Which one have you read?’

(6) *Carte-a pe care am citit *(-o).*

book-the PE which have.I read AC3SG.F

‘The book which I have read.’

(7) A: *Ce-ai făcut cu cartea?* ‘What did you do with the book?’

B: *Am pus *(-o) pe raft.*

have.I put AC3SG.F on shelf

‘I have put it on the shelf.’

These examples show that ACs are obligatory in the absence – in the complement position of the verb – of an overt DP object which has individuated reference, i.e. which is [+Person]. In (7), the null object has a d-linked antecedent, i.e. one which should, in principle, be easily retrievable from the context (as is the case in languages like Mandarin Chinese or Japanese). But in Romanian the derivation does not converge without a clitic, which indicates that the use of ACs is syntactically determined.

Gender specification has also been argued to determine clitic use. When the null object has a value for the gender feature, the presence of the AC is obligatory (Giurgea 2009). This can explain the difference between (8a) and (8b) below (taken from Giurgea 2009: 235). The null object in (8a) corresponds to a bare index with unvalued gender, and hence the AC is missing. But in (8b) the null object has a valued gender feature and the AC is obligatory:

(8) a. *N -atinge nimic fără să strice.*
 not touch.he nothing without SUBJ break.he
 ‘(S)he does not touch anything without breaking it.’

b. *N -atinge nicio jucărie fără să *(o) strice.*
 not touch.he any toy without SUBJ AC3SG.F break.he
 ‘(S)he does not touch any toy without breaking it.’

ACs in Romanian, like in other Romance languages, occur in pre-verbal position when the verb is finite (9) and in post-verbal position when the verb is non-finite (10):

(9) a. *Le vede.*
 AC3F.PL see.he
 ‘(S)he sees them.’

b. *Le -a desenat.*
 AC3F.PL has drawn
 ‘(S)he has drawn them.’

- (10) *desen-îndu -le*
 draw-GER AC3F.PL
 ‘drawing them’

The feminine singular AC, however, differs from all the other ACs: it occurs in pre-verbal position with most finite temporal-aspectual forms but in post-verbal position with two periphrastic forms, which are finite (see Reinheimer Rîpeanu et al. 2013 for details). With the *perfect compus* (the equivalent of the *passé composé* in French) this is the only possible position in which it can occur (11). With the periphrastic forms with *vrea* ‘will’, the clitic can occur in both positions, with a preference for the pre-verbal one in (12):

- (11) a. **O** *vede.*
 AC3F.SG see.he
 ‘(S)he sees her.’
- b. **A** *desenat- o.*
 has drawn AC3F.SG
 ‘(S)he has drawn her.’

- (12) a. **O** *vei vede.*
 AC3F.SG will.you see
 ‘You will see her.’
- b. **Vei vede -o.**
 will.you see AC3F.SG

‘You will see her.’

(13) a. *Vei fi iubind -o tu...*

will.you be love-GER AC3F.SG you

‘You might love her.’

b. *O vei fi iubind tu...*

AC3F.SG will.you be love-GER you

‘You might love her.’

Summing up, Romanian disallows referential null objects in the complement position of transitive verbs. It has ACs which license referential null objects whose Person feature they spell out.

3.2 Null objects in Hungarian

Hungarian allows both definite and indefinite null objects (Bárány 2012; É.Kiss 2012). This property has been discussed in relation to the two verb conjugations available in the language: the subjective one, used when the direct object is indefinite, and the objective one, used when the direct object is definite. The objective/definite conjugation (with an overt agreement object marker) is illustrated in (14), in the presence of a definite object (14a) and with an anaphorically recoverable null object (14b):

(14) a. *Olvass -a -0 a könyv-et.* b. *Olvass -a -0.*

read DEF 3SG the book-ACC read DEF 3SG
 ‘(S)he is reading the book.’ ‘(S)he is reading it.’

The subjective/indefinite conjugation (with a null agreement object marker) is illustrated in the presence of an indefinite object in (15a) and with a null object in (15b):

(15) a. *Olvás -0 -0 egy könyv-et.* b. *Olvás -0 -0.*
 read INDEF 3SG a book-ACC read INDEF 3SG
 ‘(S)he is reading a book.’ ‘(S)he is reading.’

One important difference between 1st/2nd vs. 3rd person objects is that only the latter require definiteness marking on the verb. With 1st and 2nd person objects the verb is in the indefinite conjugation:

(16) *Lát-ott engem/ téged/ minket/ titeket.*
 see-PAST.INDEF3SG me/ you-SG / us/ you-PL
 ‘(S)he saw me/you/us.’

If an indefinite object is dropped there is a null indefinite agreement marker on the verb:

(17) A: *Főz galuskát/egy galuskát?* ‘Is (s)he boiling noodles/a noodle?’

B: *Főz -0 -0.*

boil INDEF 3SG

‘(S)he is boiling some/one.’

Person and number interfere with object drop, which is accepted by all speakers with singular objects, irrespective of the person feature (Farkas 1987). Plural pronominal objects however can only be null if the plural feature is present elsewhere (in answers to *yes/no* questions or if their antecedent is an object in the previous clause) (É.Kiss 2012; Keresztes 2012):

- (18) *A könyvek-et keresem de nem talál-om.*
the books-ACC seek.I but not find-DEF1SG
‘I’m looking for the books but I do not find [them].’

It is, however, important to point out that the so-called object agreement marker on the verb encodes only definiteness. É.Kiss (2012) argues that though in Hungarian historical linguistics this marker is generally analysed as the element which licenses null objects, it cannot be treated as a genuine null object licenser.⁴

3.3 Summary

⁴ In Sigurðsson and Maling (2010), for example, Hungarian is defined as having externally-linked object drop.

Summing up, Romanian differs from Hungarian in that it disallows referential null objects and has ACs. Hungarian lacks ACs but it allows partial object drop: objects can be freely dropped in the singular, irrespective of person, but not in the plural. Plural pronouns can be dropped only if the plural feature can be “recovered” from elsewhere in the sentence (Keresztes 2012). When a definite object is dropped, there is overt definiteness marking on the verb.

The comparison with the Romanian constructions in which the clitic obligatorily occurs in post-verbal position reveals a superficial similarity with the Hungarian definite null object construction. This can be seen in (19) and (20) below. In (19), in the absence of an overt referential object, the AC *o* ‘her’ occurs in post-verbal position. In (20), in the same context, instead of an AC, there is agreement/definiteness marking on the verb. Superficially, the post-verbal clitic in Romanian resembles the agreement/definiteness marker in Hungarian:

(19) A: *A scris cartea asta?* ‘Has (s)he written this book?’

B: *Nu a scris -o.*

not has written AC3F.SG

‘(S)he has not written it.’

(20) A: *Megírta a könyvet?* ‘Has (s)he written the book?’

B: *Nem ír -t -a -0 meg.*

not write PAST DEF 3SG PERF

‘(S)he has not written it.’

This similarity seems to be reinforced by the fact that Romanian 3rd person ACs are D-elements, homophonous with the article. The agreement marker on the verb in Hungarian encodes definiteness. But in the history of Hungarian definiteness markers used to be pronouns which doubled a topic (É.Kiss 2012). Romanian clitics have also been analysed as undergoing a change from pronominal elements into agreement markers (Tigău 2007).

One more superficial similarity between the two languages is related to the availability of indefinite null objects. The Hungarian sentence in (17) is very similar to the Romanian sentence in B in (21), as one anonymous reviewer points out:

(21) A: *Gătește mâncare?*

cook.he food

‘Is (s)he cooking food?’

B: *Da, gătește.*

yes cook.he

‘Yes, (s)he is cooking.’

3.4 Predictions for the acquisition of ACs in a Romanian-Hungarian bilingual context

The previous studies presented in Section 2 offer evidence that the acquisition of object clitics in monolingual and in 2L1 bilingual settings proceeds in a parallel

fashion (the same acquisition order, error pattern, etc.). This finding was robust, regardless of language combination. We therefore predict a similar parallelism between the acquisition route of ACs for Romanian monolinguals and Romanian-Hungarian bilinguals. On the other hand, several studies reported higher clitic omission rates as well as longer clitic omission stages with bilinguals. This seemed to be the case especially when the non-clitic language allowed object drop. Hungarian is a partial object drop language. By analogy with what has been reported for other language combinations, it is plausible to predict some quantitative differences between clitic use by Romanian monolinguals and Romanian-Hungarian bilinguals.

4 The study

4.1 The longitudinal study

4.1.1 The corpus

The present analysis relies on two longitudinal corpora⁵ of naturalistic, non-structured conversation in a Romanian-Hungarian bilingual context between the child and various family members: mother, brother(s) and occasionally another family member. The two boys, Toma and Petru, come from a family with three children living in Bucharest. The mother is bilingual; her maternal language is Hungarian, the paternal language is Romanian. The father grew up in a Romanian monolingual family. The context of development is that of simultaneous bilingualism: both children received Hungarian and Romanian input since birth. The quantity of the input in the two

⁵ First described in Tomescu (2013).

languages differs in a significant way. At home, the input provided by the mother is (mainly) Hungarian. The eldest brother (also a simultaneous bilingual) usually speaks Romanian when addressing his two younger brothers, Toma and Petru, with many instances of code-mixing. Among other family members it is only the maternal grandmother who speaks Hungarian. The household language is Romanian and so is the language of the community.

The two children were audio-recorded approximately 3 hours/ month, between the ages 1;3 – 3;0 for Toma and 1;6 – 2;8 for Petru. The Toma corpus contains a total of 42 hours of audio-recorded conversations, the Petru corpus 18. Since the two brothers were constantly together, the two corpora overlap over a period of time. The recordings contain Hungarian and Romanian spontaneous unstructured conversations⁶ (see Annex 1 for a general description of the Romanian-Hungarian corpus).

Romanian is the dominant language with both children. The number of Romanian utterances is higher and so is the Romanian MLU (especially at the end of the period investigated; see Annex 1). But there is also a significant difference between the two children. Toma went to a Romanian kindergarten after 2;6. Petru (the youngest brother) went to kindergarten at 2;00, which significantly tipped the balance of the input in favour of Romanian in his case. In fact, his having two older Romanian speaking brothers at home from the onset, not just one (as in Toma's case), also

⁶ The mother usually speaks Hungarian to the children, and so does their maternal grandmother. When other family members are present, the father, the grandfather and the paternal grandmother, the language used is Romanian. There is also a third brother who speaks either Romanian or Hungarian or sometimes uses mixed utterances.

reduced the extent to which he heard Hungarian at home. This difference is also reflected in the quality of their Romanian. Petru spoke Romanian target-like in most respects very early (2;5). On the other hand, the final recordings in the Petru corpus contain practically no Hungarian utterances. The values of Hungarian MLU corresponding to Petru’s final recordings in particular are rather low. The number of Hungarian utterances is also drastically reduced (two, three or even no Hungarian utterances per recording).

We compared 3rd person AC use in the bilingual corpus to AC use by two Romanian monolingual boys of similar age range. The two monolingual children live in Romanian monolingual families in Bucharest.

The data used for the present analysis range from the age of 1;11 to 2;11 for Toma and from 2;0 to 2;8 for Petru (at 2;5 he uses AC 100% target-like). They include, for Toma, only some of the recordings. This allowed us to balance the number of Romanian utterances in the two types of setting. The corpus used in the analysis is presented in Table 1.

Table 1.

Longitudinal corpus used in the analysis

Setting	Child	Number of hours	Age	MLU	Total number of (Romanian) utterances
2L1	Toma	31	1;11 – 2;11	1.94 – 4.51	6587
	Petru	18	2;0 – 2;8	1.47 – 3.79	6645

	Total	49 ⁷	1;11 – 2;11	1.47 – 4.51	13232
L1	Iosif ⁸	15	1;10 – 2;11	1.41 – 3.63	7923
	Antonio	15	1;9 – 2;11	1.51 – 3.17	6917
	Total	30	1;9 – 2;11	1.41 – 3.63	14840

4.1.2 Method

Only spontaneous utterances with a verb were included in the analysis. Imitations, song lyrics, repetitions, poems, and formulaic chunks were excluded. Data analysis followed the methodology used in Avram and Coene (2006) and in Avram et al. (2015). We identified all the obligatory contexts for 3rd ACs in Romanian (Avram and Coene 2009). These included: (i) left dislocation structures with d-linked direct objects; (ii) (restrictive and non-restrictive) direct object relative clauses introduced by the relative pronoun *care* ‘who, which’; (iii) *wh*-questions with *care* ‘which’; (iv) right dislocation structures; (v) sentences where the post-verbal complement position is phonetically empty (single clitic constructions) and where the clitic has a salient discourse antecedent, i.e. when the antecedent was mentioned in the immediately preceding discourse; (vi) in clitic double constructions whose double in post-verbal

⁷ The recordings include both Hungarian and Romanian utterances; this is why the overall number of hours of examined recordings is higher for the 2L1 bilinguals.

⁸ The Iosif corpus was recorded and transcribed by Ioana Stoicescu, whom we thank for sharing her data with us.

position is a definite pronoun. The contribution of the AC is systematic across these constructions: it licenses a referential null object (see Section 3.1). We coded the object clitic produced in these obligatory contexts as: omission, clitic, lexical DP. The omission/production rate was calculated relative to the number of obligatory clitic contexts. Since in Romanian the feminine singular 3rd person AC occurs in post-verbal position with some finite temporal-aspectual forms and in pre-verbal position with others, we coded the early 3rd ACs for pre- and post-verbal position. We also coded the object clitics which the child used for whether they had the right form in terms of gender and number.

4.1.3 Results

The two Romanian-Hungarian bilinguals begin to use ACs very early: Toma at 1;11 (MLU 1.94) and Petru at 2;1 (MLU 2.41). This is similar to what we find with the monolinguals. The first freely used ACs are attested at 2;1 (MLU 1.76) in the Iosif corpus and at 1;9 (MLU 1.51) in the Antonio corpus. But by the age of 3;0 both the Romanian monolinguals and the Romanian-Hungarian bilinguals use ACs in a target-like manner (in over 90% of obligatory contexts). All the four children use 3rd person ACs target-like at least 90% by age 3;0: Toma at 2;6 (MLU 4.57), Petru at 2;5 (MLU 4.71), Iosif at 2;6 (MLU 2.63), and Antonio at 2;8 (MLU 3.09)⁹. The quantitative results are summarized in Table 2.

⁹ Differences in MLU may be due to differences in interaction between the children and the caretaker. In the monolingual corpus there is an impressive number of *yes/no*

Table 2.

3rd person AC production in Romanian in 2L1 and in L1

Romanian-Hungarian bilinguals		Romanian monolinguals	
Toma	Petru	Iosif	Antonio
75.94% (n=464)	54.72% (n=162)	86.67% (n=195)	59% (n=182)

There is significant individual variation between the two bilingual children and also between the two Romanian monolinguals with respect to overall clitic production rate. One of the bilinguals (Toma) produces a higher number of ACs, but for the other three children raw numbers are comparable. At first sight, there seems to be a slight advantage for the monolinguals. However, the individual variation within both groups significantly weakens this conclusion. A look at the data from a longitudinal perspective actually reveals that the bilinguals begin to produce ACs 100% slightly earlier than the monolinguals. The longitudinal picture of AC production is given in Figures 1-2 below.

questions which might have influenced the general MLU. Such questions are much less numerous (in some recordings they are absent) in the bilingual corpus.

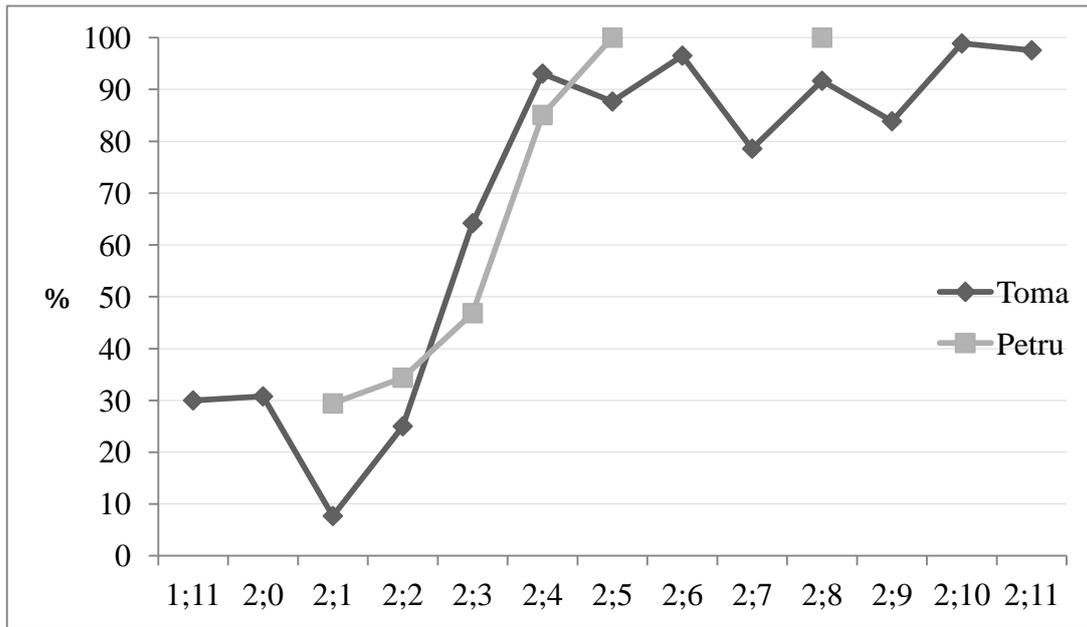


Figure 1. 2L1 Romanian-Hungarian: 3rd AC production

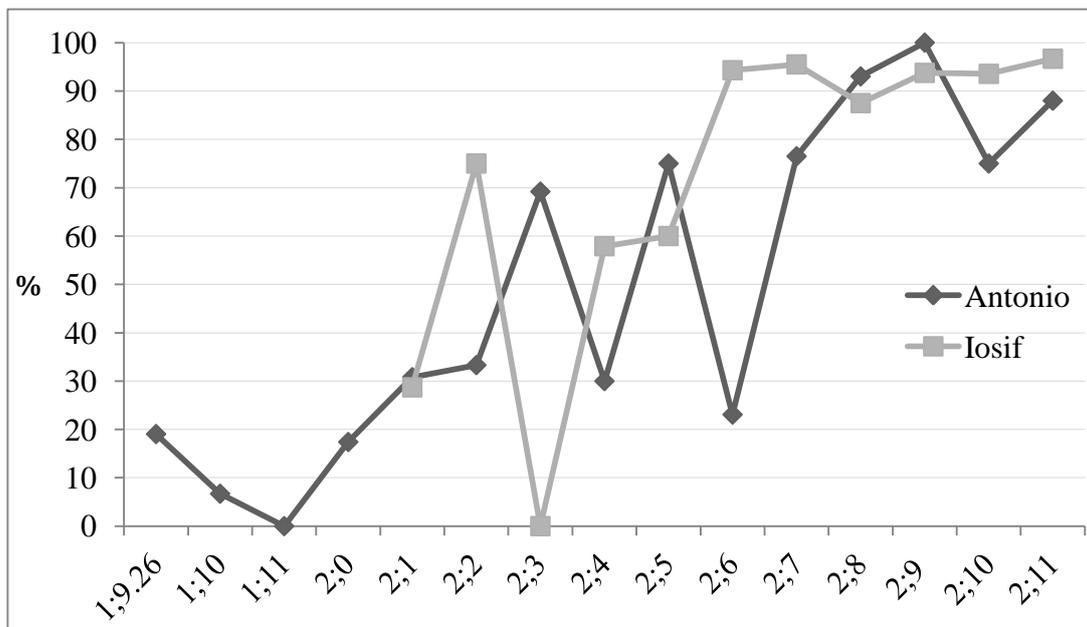


Figure 2. L1 Romanian: 3rd AC production

The Romanian monolinguals produce fewer pre-verbal than post-verbal 3rd ACs during the early recordings. The analysis of early 3rd ACs in the Romanian-Hungarian corpus reveals a similar asymmetry. The production rate is higher with post-verbal clitics during the early recordings (until 2;4 – 2;5).

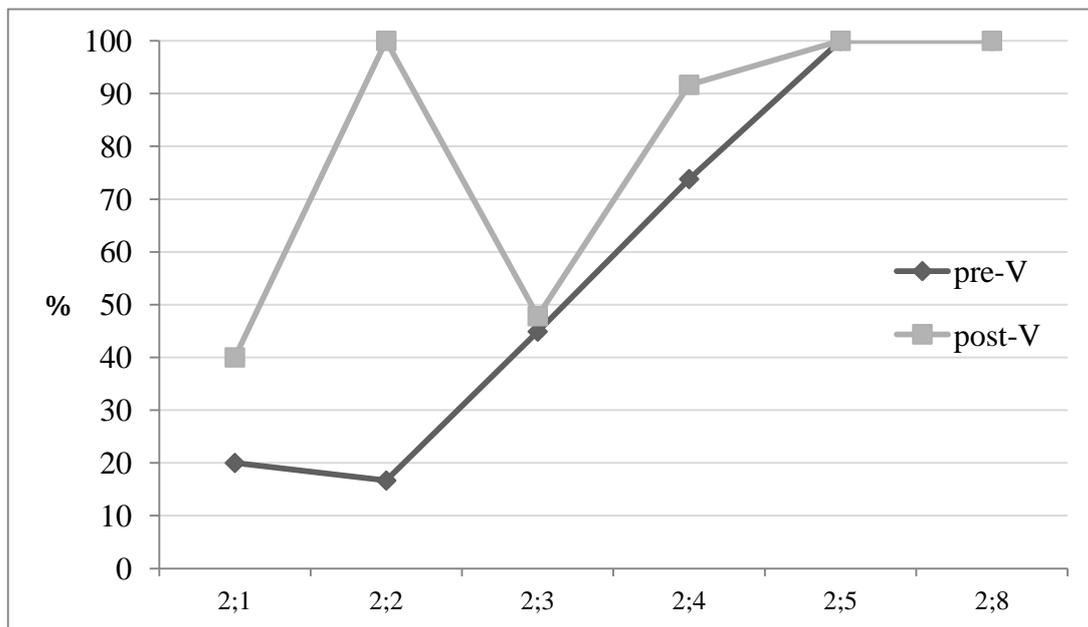


Figure 3. Pre- vs. post-verbal 3rd AC production in a 2L1 setting: Petru

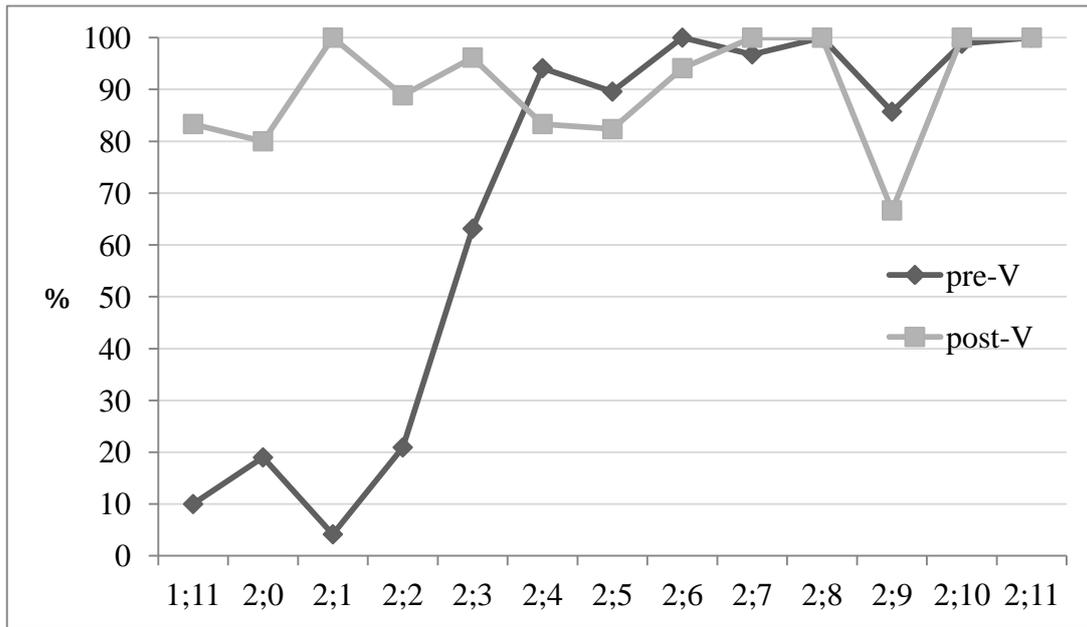


Figure 4. Pre- vs. post-verbal 3rd AC production in a 2L1 setting: Toma

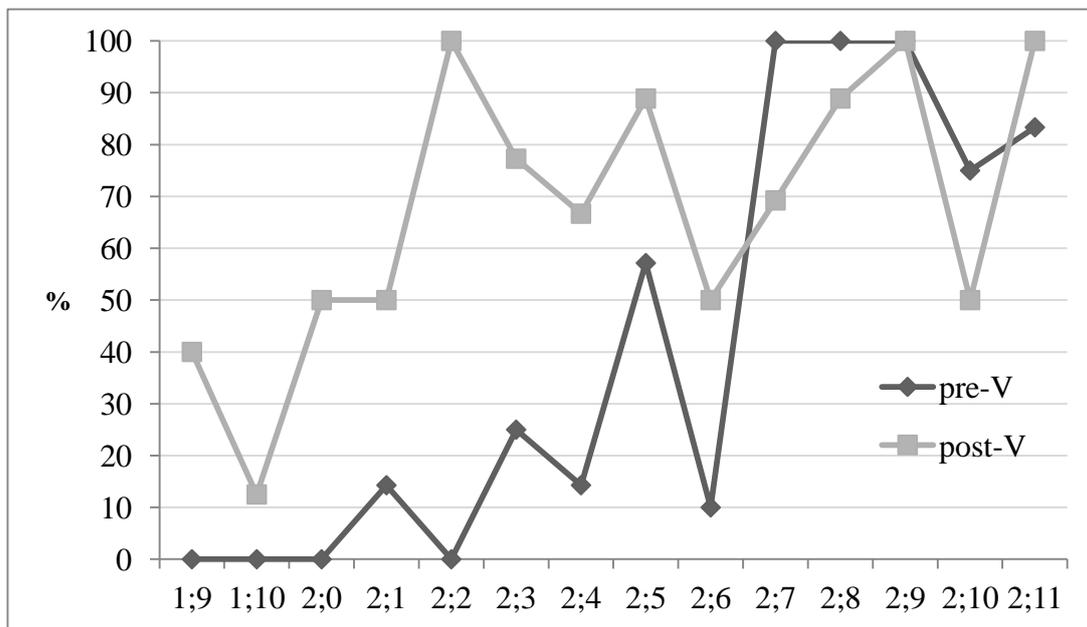


Figure 5. Pre- vs. post-verbal 3rd AC production in L1: Antonio

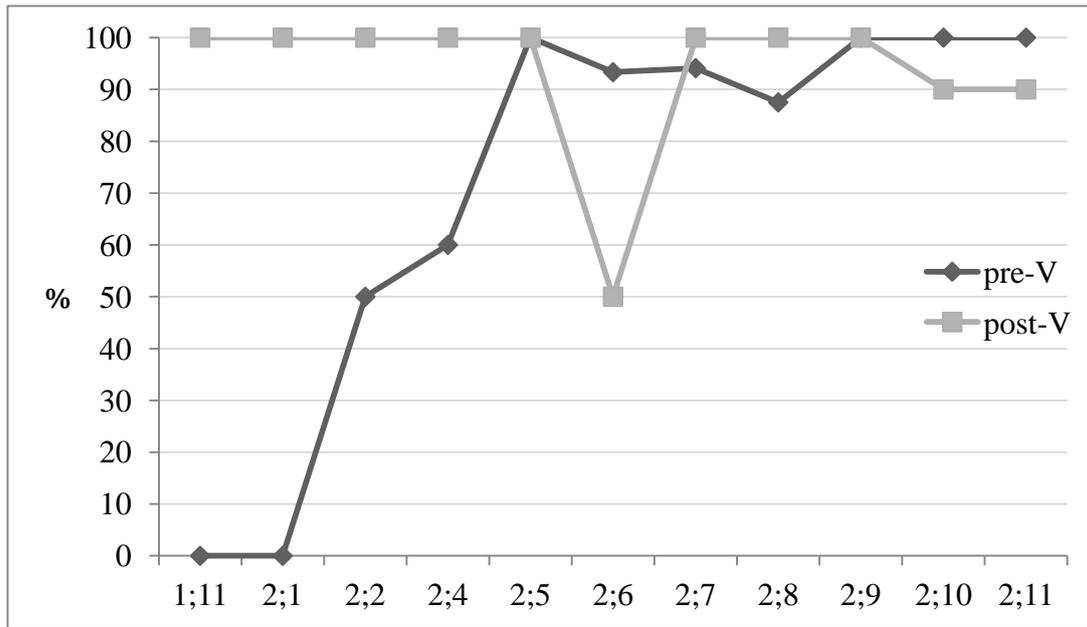


Figure 6. Pre- vs. post-verbal 3rd AC production in L1: Iosif

The rate of pre- and post-verbal ACs becomes comparable at approximately 2;5 in 2L1, and with some individual variation in the monolingual corpus: at 2;5 in the Iosif corpus and at 2;8 in the Antonio corpus. Importantly, this early bias does not result in erroneous use. Misplacement errors are practically inexistent, with the exception of the one in (22) for 2L1 and the one in (23) for L1:

(22) **Să desenezi -o pe Briana.*

SUBJ draw.you AC3F.SG PE Briana

‘(I want you to) draw Briana.’

(Toma 2;6)

(23) **Un prinț care dojenea -o pe fiic-a sa.*

a prince who scolded AC3F.SG PE daughter-the his

‘A prince who scolded his daughter.’

(Iosif 2;7)

With the bilinguals, the number of gender errors is significantly higher and they last longer. In Toma's files, out of 464 ACs 102 have the wrong gender (21.98 %). Gender errors are first found at 2;0 and they continue to be attested even at 3;7 with Toma (24a, in the Petru corpus), i.e. even at a time when ACs are produced 100%. In the Petru corpus, on the other hand, out of the total of 162 ACs produced only 14 have the wrong gender (8.6%). No gender errors are found after 2;5¹⁰.

- (24) a. **O vreau pe seismosaurus.*
 AC3F.SG want.I PE seismosaurus (M)
 'I want the seismosaurus.' (Toma 3;7)
- b. *nu mi -l dă (carte-a).*
 not DC1SG AC3M.SG give.he (book-the F)
 'He won't give it to me.' (Petru 2;3)

With respect to gender vulnerability, the simultaneous bilingual children in our study behave like L2 children (Schlyter et al. 2007).¹¹ But they differ from the two monolinguals, whose gender errors only amount to 4.4% (Antonio) and 4.6% (Iosif) from the total of ACs.

¹⁰ It is not implausible to assume that the acquisition of gender is influenced by degree of language dominance. Petru is a much less balanced bilingual than Toma.

¹¹ We thank an anonymous reviewer for pointing this out to us.

(25) **Îl* *mănîncă* [...] *pe* *prințesă*.
 AC3M.SG eat.he PE princess (F)

Intended: ‘It is eating her (the princess)’ (Iosif 2;11)

(26) *Moș Crăciun* *cu* *bradu(-l)* *și* **o* *pune* *acolo*.
 Santa Claus with Christmas.tree-the (M)and AC3F.SG put.he there

‘Santa Claus (will come) with the Christmas tree and put it there.’

(Antonio 1;10)

Interestingly, in the Toma corpus the highest error rate was found with ACs used in embedded clauses: 37.73% (n=20 gender errors out of a total of 53 contexts). The investigation of errors within the various contexts reveals that when the AC appears in an island (e.g. relative clause, adverbial clause), the rate is even higher: 43.33% (n=13 gender errors in a total of 30 island contexts):

(27) *Cuti-a* *aia de bile* *care* **l* *-a cumpărat* *Cosmina*
 box-the F that of balls which AC3M.SG has bought Cosmina

‘That box of balls that Cosmina bought.’ (Toma 2;9)

Petru uses a very low number of embedded clauses. We cannot therefore reach any conclusion with respect to a possible relationship between gender errors and clitic context type.

Gender errors may occasionally overlap with number errors, but the latter are less numerous. In the Toma corpus, there are 11 number errors (2.4%), in the Petru corpus only 1 (lower than 1%).

- (28) a. **Am tăiat -o unghiile.*
 have.I cut AC3F.SG nails-the (F.PL)
 ‘I have cut my nails.’ (Petru 2;3)
- b. **Și îl duce la grădiniță (lumînărilor).*
 and AC3M.SG take.he at kindergarten (candles-the F.PL)
 ‘And he takes them to kindergarten.’ (Toma 2;8)

With respect to number, the ACs in the bilingual corpus do not differ from the ones attested with the monolinguals. Both Iosif and Antonio made only 2 number errors each (that amounts to 1.02% for Iosif and to 1.1% for Antonio).

Gender and number errors are not found exclusively with ACs in any of the corpora. They are found in several other structures, such as adjective noun agreement or article use. No delay has been attested with gender or number on ACs when compared to similar errors in other domains, i.e. these errors do not reflect vulnerability of ACs.

There is one single erroneous structure which is used only by the bilinguals: a “two clitic” construction, with one clitic in pre- and the second one in post-verbal position, i.e. a construction in which one clitic is redundant. These are attested only with Toma and for a very short period of time. At 2;3, 4 such two clitic constructions are found in the total of 49 ACs (8.16%). At 2;4 three such constructions are attested

who is a more balanced bilingual). But gender errors are attested in other areas, which shows that they do not reflect a vulnerability of ACs *per se*.

One single clitic related error was found exclusively in the bilingual corpus: two clitic constructions.

Longitudinal data have the merit of offering a picture of the very early stages of acquisition. However, our data should be taken with caution. There is always a problem of reliability in the analysis of clitic production/omission in spontaneous speech. Our monolingual and bilingual longitudinal data might not be directly comparable in terms of quantitative analysis, given the individual variation which we found in both groups. And our data in particular come from a low number of subjects. This is why we also investigated 3rd AC use by Romanian-Hungarian 2L1 bilinguals on the basis of experimental data. This further study allowed us to examine 3rd AC use with a larger number of bilingual subjects. It also allowed us to examine for how long the errors and the preferences identified in the longitudinal corpora persist in the speech of 2L1 bilinguals.

4.2 Experimental study 1

4.2.1 Task design and procedure

In order to test the production of 3rd ACs in obligatory clitic contexts we used an elicited production task, similar to the one in Schaeffer (2000), as a power point

presentation¹². The task included two warm up scenarios, 16 test sentences and 4 fillers. Eight of the test sentences targeted a present tense answer, i.e. a simple temporal-aspectual form. The other eight targeted a response with a periphrastic past tense form. This allowed us to examine to what extent clitic use might be affected by the type of verbal form (simple or periphrastic¹³). In each test scenario, the antecedent of the clitic was mentioned in the elicitation question in order to force the use of an AC in the answer. One scenario is illustrated in (30) below.

(30) Introductory part: In this picture, there are a fat frog and **a fly**. The frog is very hungry.

Elicitation question: *Ce-a făcut broasca cu musca?*

‘What did the frog do with the fly?’

Target answer: *A mîncat - o.*
has eaten AC3F.SG
‘She has eaten it.’

Notice that an answer including a lexical DP would also be fully grammatical but pragmatically infelicitous.¹⁴ Such answers were coded as “DP instead”.

¹² The task was designed within the “Crosslinguistic language diagnosis” (CLAD) project (Avram et al. 2013).

¹³ Hulk (1997, 2000), for example, reports clitic misplacement in French periphrastic temporal forms with a French-Dutch bilingual.

¹⁴ This response pattern has also been attested with adults, who occasionally use the lexical DP in this scenario.

- (31) A *mîncat musc-a*.
has eaten fly-the
'It has eaten the fly.'

The children were tested individually, in a quiet room at their kindergarten, by two experimenters. There was no time limit. The answers were recorded on specially designed answer sheets and also audio recorded for double-checking.

4.2.2 Participants

The bilingual children were selected so that their language history should match the profile of the children in the longitudinal study as much as possible. The children selected for the experimental study grow up in Romanian-Hungarian families in Bucharest, they speak Romanian to one parent and Hungarian to the other. The household language is Romanian. The language of the community is Romanian. But, unlike the children in the longitudinal study, they attend a Hungarian speaking kindergarten, i.e. Hungarian is the medium of instruction. Our selection also relied on teacher evaluation of child fluency in both languages.

The results were compared to those obtained in the same task with a group of age-matched Romanian monolinguals, also from Bucharest. The details are given in Table 3.

Table 3.

Elicited production task 1: Participants

Group	Age range	Mean age (SD)	Number
Romanian- Hungarian bilinguals	2;11 – 4;8	3;9 (7.0320)	16
Romanian monolinguals	3;3 – 4;11	3;8 (4.8917)	16

4.2.3 Results

The comparison of clitic use by the two groups reveals a slightly higher production rate for the monolinguals (see Table 4). But the difference does not reach significance (Mann-Whitney $U = 102$, $z = -.987$, $p = .324$).

Table 4.

Elicited production task 1: Results

Group	AC produced	AC omitted	Gender errors	Other
2L1	66.79%	17.96%	12.10%	12.10%
	(n=171)	(n=46)	(n=31)	(n=31)
L1	77.73%	12.89%	2.34%	9.37%
	(n=199)	(n=33)	(n=6)	(n=24)

A Wilcoxon signed-rank test was used to compare the monolinguals' production of ACs with a present tense form and with a periphrastic past tense form. There was no significant difference ($Z = -.04$, $p = .968$) in the scores for ACs used with a present tense form ($M = 6.25$; $SD = 2.2$) and with a past tense form ($M = 6.18$; $SD = 5.23$).

54.5% (n = 54) of the ACs used with the periphrastic past were post-verbal and 45.5% (n = 45) pre-verbal. The difference between pre-verbal (M = 3, SD = 1.87) and post-verbal ACs (M = 3.2; SD = 1.36) used in the responses with a periphrastic form does not reach significance (Wilcoxon signed-rank test: $Z = -.69$, $p = .49$). For the monolingual group no effect of verbal form was found. But the overall number of responses with an AC produced with a periphrastic past by the 2L1 children was higher than the number of responses with a present tense form (96 vs. 72). For this group, the difference between ACs used with simple (M = 4.5; SD = 7.73) and with periphrastic (M = 6; SD = 5.87) forms reaches significance (Wilcoxon signed-rank test: $Z = -.2246$, $p = .025$). 62.5% (n = 60) of the responses with a periphrastic form contain a post-verbal AC. Seven participants produced exclusively post-verbal ACs in the context of the periphrastic past tense form.¹⁵ However, a Wilcoxon signed-rank test reveals that within the responses with a periphrastic past tense form, the difference between the number of ACs in pre-verbal (M = 2.25, SD = 2.24) and in post-verbal (M = 3.75, SD = 1.61) position does not reach significance ($Z = -1.79$, $p = .07$).

The gender error rate was very low with the monolinguals: 2.34% (n = 6). But the number was higher with the bilingual group, where 12.10% (n = 31) of ACs had erroneous gender features.

(32) a. Adult: *Ce-i face mama fetiței?*

¹⁵ This group of 7 children includes participants whose age ranges in between 2;10-4;7.

‘What is the mother doing to the girl?’

Child: **îl* *periază*.

AC3M.SG brush.he

‘She is brushing him (the girl).’ (E. 4;8)

b. Adult: *Ce a făcut băiatul cu fluturașul?*

‘What has the boy done to the butterfly (M)?’

Child: **A prins -o*.

has caught AC3F.SG

‘He has caught her (the butterfly M).’ (R. 4;7)

The number of responses in which a full lexical noun phrase is used as a direct object in the response instead of a clitic (“DP instead”) is extremely low with both groups (n = 4 with the monolinguals and n = 6 with the bilinguals). Misplacement errors are not attested.

4.2.4 Summary

The findings in the first experimental study show that there is no significant quantitative difference with respect to overall AC production/omission between Romanian-Hungarian 2L1 bilinguals and Romanian monolinguals. AC use interferes with type of verbal form, simple vs. periphrastic, only with the bilinguals. Unexpectedly, clitic production rate was higher when the clitic occurred with the periphrastic past. This result is surprising when compared to data reported for other L1 and 2L1 contexts, which suggest that usually clitic use with periphrastic tenses is

the more vulnerable one. For L1 Italian, for example, Lorusso (2015) reports a higher clitic omission rate with the periphrastic past tense form. For 2L1 French, Hulk (1997, 2000) provides data which reveal clitic misplacement with the periphrastic past.

Gender errors were more numerous with the 2L1 bilinguals. But these errors reflect a more general problem with gender, not problems with AC production.

4.3 Experimental study 2

4.3.1 Task design and procedure

The aim of this second experimental study was to investigate 3rd AC production in embedded clauses by Romanian-Hungarian 2L1 bilinguals. In our analysis of the longitudinal data, we found that with Toma the gender error rate was more significant when the AC occurred in an embedded clause. But these results were not replicated by the data in the Petru corpus. Consequently we could not reach any conclusion with respect to whether the higher error rate in embedded clauses (especially in islands) in the Toma corpus was merely accidental or whether it reflected a vulnerability of ACs in islands. This is why we investigated 3rd ACs production in islands with a higher number of 2L1 bilinguals. In order to do that we used an elicited production task¹⁶, as a power point presentation, similar to the one described in Section 4.2. This included two warm up scenarios, 12 test sentences balanced for gender (6 targeted an AC with a simple present tense form, and 6 an AC with a periphrastic past tense form) and 5

¹⁶ This test was designed within the project COST A33 and adjusted to Romanian. For a detailed presentation of the task see Varlokosta et al. (2016).

fillers. The fillers targeted sentences with no pronominal clitic. In each test scenario, the antecedent of the clitic was salient enough to trigger the obligatory use of the AC in the response. The elicitation question required a reply with a *because* clause containing an obligatory AC. One scenario is illustrated in (33) below.

(33) Experimenter: *De ce nu mai poate sări greierele? Greierele nu mai poate sări...*

‘Why can’t the cricket jump anymore? The cricket can no longer jump ...’

Target answer:*pentru că albin-a l -a legat.*

for that bee-the AC3M.SG has tied

‘ because the bee has tied him up.’

Just like in the first study, the only answer which was coded as correct was the one containing the obligatory AC. An answer including a lexical DP in complement position would also be fully grammatical but pragmatically infelicitous. Such answers were coded as “DP instead”.

The children were tested individually, at their kindergarten, by two experimenters. The answers were recorded on answer sheets and also audio recorded for double-checking.

4.3.2 Participants

The bilingual children who participated in this study were selected in accordance with the same criteria as the participants in the first study. The details are given in Table 5.

Table 5.

Elicited production task 2: Participants

Group	Age range	Mean age (SD)	Number
Romanian-Hungarian 2L1 bilinguals	2;8 – 4;9	46.86 (7.405)	15

4.3.3 Results

The overall quantitative results are summarized in Table 6.

Table 6.

Elicited production task 2: Results

Group	Number	Single AC produced	AC omitted	Gender errors	Double clitics
Romanian-Hungarian 2L1 bilinguals	15	68.89% (n=128)	16.67% (n=30)	12.22% (n=22)	2.22% (n=4)

The data in Table 4 and in Table 6 show that clitic production rate is comparable, across the two clitic contexts targeted in the two tasks: root clause vs. embedded clause. The number of ACs produced with a periphrastic past form is slightly higher (72) than with a simple verbal form (56). But the difference in the scores for ACs used with a present tense form ($M = 3.7$; $SD = 7.35$) and with a past tense form ($M = 4.8$; $SD = 3.6$) does not reach significance ($t(14) = -1.168$, $p = .26$). There was no

difference between clitic production in pre- (n = 36) and in post-verbal position (n = 36) with the periphrastic past.

Gender error rate was comparable to the one in task 1, i.e. we did not find a higher number of gender errors in embedded clauses in our experimental data. No age effect was found. Actually, two of the oldest children, aged 4;8 and 4;9, made the highest number of gender errors (4 and 5, respectively). Some of the youngest participants made no gender error.

Two of the children gave erroneous responses which contained two clitics, identical to the ones found in the longitudinal corpus:

- (34) a. **L* *-a mâncat -o.*
AC3M.SG has eaten AC3F.SG
Intended: ‘She has eaten her.’ (A. 4;3)
- b. **L-* *a spălat -o.*
AC3M.SG has washed AC3F.SG
Intended: ‘She has washed her.’ (A. 4;3)
- c. **L* *-a trezit -o.*
AC3M.SG has woken AC3F.SG
Intended: ‘He has woken him up.’ (R. 4;8)
- d. **îl* *zgîriat -o.*
AC3M.SG scratched AC3F.SG
Intended: ‘He has scratched him.’ (R. 4;8)

The overall error rate is very low. But just like in the longitudinal data, there is significant individual variation: only some 2L1 bilinguals used this two clitic construction. If we analyse individual rates, they amount to 20% of the ACs produced by A. (2 out of 10) and 16.7% of the ACs produced by R. (2 out of 12). R. also used a two clitic construction in his responses in the warm up part. The children who produce them in an experimental setting are almost 5;0.

These two clitic structures are not predicted by either core grammar or transfer, since they are unavailable in any of the two languages involved.

4.3.4 Summary

In the second task, the quantitative results are comparable to those obtained in the first elicited production task. The error pattern is similar: (i) clitic omission is the most important error; (ii) no clitic misplacement is attested; (iii) the gender error rate is similar to the one in task 1. AC production is not affected by clitic context. There is no significant difference between gender errors in root and in embedded clauses.

Two differences have been noticed between the responses obtained in task 1 and those in task 2. In task 2, (i) AC use is not affected by the type of verbal form (simple vs. periphrastic); and (ii) the error inventory included two clitic constructions, identical to the ones found in the longitudinal data.

5 Discussion

Building on the findings reported in previous studies on object clitics in 2L1, we predicted a parallelism between the acquisition route of ACs by Romanian monolinguals and by Romanian-Hungarian bilinguals. Given the difference between the two languages with respect to clitics and the availability of referential null objects, we also predicted some quantitative differences between clitic use by Romanian monolinguals and by Romanian-Hungarian bilinguals. This second prediction was not borne out by the data. No significant quantitative differences were found between the two groups of participants. Clitic production/omission rate was comparable across learner groups. In this respect our findings differ from what was reported for other language combinations. Clitic use in a 2L1 Romanian-Hungarian context is quantitatively similar to L1.

Our longitudinal and experimental data revealed a similar acquisition route, as predicted. ACs emerge early and are used target-like by age 3;00 by both Romanian-Hungarian 2L1 bilinguals and by Romanian monolinguals. There was an early bias for post-verbal ACs in both L1 and 2L1 in the longitudinal data. No clitic misplacement was attested. Clitic omission was the most important error identified with both learner groups.

At first sight, there seems to be one difference with respect to gender error pattern. In the longitudinal data, we found more gender errors in embedded clauses, especially in islands. But our task 2 results showed that gender on ACs is not context sensitive (root vs. embedded clause). The overall higher number of gender errors made by the 2L1 bilinguals in our study does not reflect a competence deficit with AC use. They are just a side effect of a more general gender problem.

Another possible difference between the two groups targets clitic production in simple and in periphrastic forms. In task 1, the number of ACs used in periphrastic forms was significantly higher than the number of ACs used in combination with simple verbal forms. This difference, however, was not found in task 2. Correlated with results reported for other languages (Hulk 1997, 2000; Lorusso 2015), which show that clitic production is actually higher with simple verbal forms, the lack of the asymmetry in task 2 might indicate that the result in task 1 was accidental.

The only clear difference between the two groups is related to the use of erroneous double clitic constructions, which was attested only with the bilinguals, both in the longitudinal and in the experimental data.

There are two main issues which need accounting for: (i) the lack of a quantitative difference between AC use by Romanian-Hungarian bilinguals and by Romanian monolinguals; and (ii) the availability of double clitic constructions only in the bilingual corpus. We argue that they can be explained building on the availability of some superficial similarity between the two languages: the one between the agreement/definiteness marker on the verb in Hungarian and the post-verbal clitic in Romanian. They both occur in post-verbal position. The marker on the verb in Hungarian encodes definiteness. In Romanian, 3rd person ACs are D-elements, homophonous with the article, which have definite/specific antecedents. It is important to mention that agreement/definiteness marking on the verb emerges very early in Hungarian (Toma 1;10 and Petru 2;1). And it is used target-like from the very beginning, i.e. earlier than ACs. The early acquisition of this agreement/definiteness marker (which obligatorily appears on the verb both in the presence of an overt direct object and when the object is omitted) could actually speed up the acquisition of ACs

in Romanian. This similarity between ACs and the agreement/definiteness marker in Hungarian may boost the Romanian-Hungarian bilingual child into using the post-verbal clitic at a high rate from a very early stage. Gawlitzek-Maiwald and Tracy (1996) argue that a pattern may be activated in language A (the slow one) by a superficially similar and frequent pattern in language B (the faster one). In the case investigated in the present study, it is not the dominant language (Romanian) which activates a pattern in the slower language. It is the superficially similar structure acquired earlier in the non-dominant language which boosts the acquisition of ACs in Romanian. This can explain the lack of overall quantitative differences in our study. Since the tacit identification and the use of this superficial similarity is based on comparison and analogy, we do not expect all the bilinguals to make use of it. This explains the individual variation with respect to clitic production.

The availability of the same superficial similar structure can also explain the use of double clitics exclusively by the bilinguals. These structures do not reflect erroneous parameter setting. Their non-target-like nature cannot be accounted for in terms of deviation from one particular property of the core system or in terms of language transfer. They are the result of analogy and comparison between the post-verbal clitic in Romanian and the definiteness marker on the verb in Hungarian. Creating this kind of structure seems different from whatever is involved in parameter setting. It is a “peripheral invention”. We borrow and freely adapt this term from Uriagereka (2007), where it is used in the more general context of a typology of variation forms which are relevant to the architecture of the language faculty. It refers to a form created, possibly via analogy, in the process of language acquisition, “under peripheral conditions, presumably involving such things as peer or adult pressure, and

similar, as of now, unclear mechanisms.” (Uriagereka 2007: 105). Importantly, peripheral inventions are “not predicted by the core grammar” (Uriagereka 2007: 105). They provide evidence that, besides parameter settings, each “language will incorporate a periphery of borrowings, historical residues, inventions, and so on [...]” (Chomsky 1981: 7–8, cited in Uriagereka 2007).

The two clitic constructions in our data are not predicted by the parameter settings of either Romanian or Hungarian. They are peripheral to narrow syntax, being the result of data analysis, comparison and analogy in a bilingual context. It has been argued in the acquisition literature that simultaneous bilingual development might favour earlier and higher awareness of language (Sorace 2007). The bilingual child seems to have an early and higher ability to analyse and compare language structures. Our data show that bilingual children have this ability as early as 2;3. Since the mechanisms behind these peripheral inventions are not domain specific, we predict that one would not find them with every bilingual speaker. Also, the number of such constructions, the age of onset and the length of the stage when they occur will be subject to individual variation. These predictions are borne out by the data. In the longitudinal corpus, such constructions are attested only with one child and for a very short period of time: 2;3 – 2;4. They are also attested in the responses of some of the participants in the second experimental study but not in task 1.

Interestingly, these two clitic structures are attested in earlier stages of Romanian (17th – 18th c) (Frâncu 1997; Uşurelu 2011):

- (35) *Scrisoare-a o au dat -o lui Staico.*
 letter-the AC3F.SG have.they given AC3F.SG to Staico

‘They gave the letter to Staico.’

(Uşurelu 2011: 119)

There is an important similarity between the two clitic constructions in the bilingual corpus and the ones attested in earlier stages of Romanian. This similarity targets the conditions under which they were created. In the history of Romanian, they are attested only in the 17th and the 18th centuries, the period following an important change: weak pronominal clitics were no longer banned from pre-verbal position (Frâncu 1997). The situation is, actually, one of bilingualism. The old system used to place the weak pronominal object exclusively in post-verbal position. The new system allowed it to be placed in pre-verbal position as well. And some speakers occasionally “combined” the two systems, placing one clitic in pre- and another one in post-verbal position in the same sentence.

There is, however, a difference between the two clitic constructions in earlier stages of Romanian and the ones attested in the bilingual corpus. In the latter, the post-verbal clitic is exclusively the feminine clitic *o* ‘her’, irrespective of the gender feature of the antecedent, i.e. the only AC which can appear in finite post-verbal constructions in the contemporary language. The gender feature of the two clitics does not always coincide. In the constructions attested in the 17th – 18th centuries the *phi*-features of the pre- and post-verbal clitics are identical, i.e. the post-verbal clitic is not exclusively the 3rd person feminine singular:

- (36) a. *Care-le le -au primitu -le.*
which-the AC3F.PL have.they received AC3F.PL

‘Which they have received.’

(Uşurelu 2011: 119)

b. *După ce l- au slobodzitu -l turc-i-i.*

after AC3M.SG have.they freed AC3M.SG Turk-s-the

‘After the Turks set him free.’

(Uşurelu 2011: 120)

This difference, we believe, provides further support in favour of the analysis of the peripheral inventions in the bilingual corpus as the result of data analysis and comparison between the agreement/definiteness marker in Hungarian and the post-verbal clitic *o* ‘her’.

Two clitic structures have also been attested in the Northern dialect of Carmignano di Brenta (Penello 2007), reinforcing the evidence that such constructions are allowed by Universal Grammar:

(37) *I a ga -a fata, a torta?*

they it.F have it.F made the cake

‘Have they made the cake?’

(Penello 2007, example 9b)

The bilingual child creates a UG-constrained structure in spite of the fact that the mechanism involved is one of non-domain-specific analysis.

Summing up, the errors attested with Romanian-Hungarian bilinguals are structures created under bilingual conditions, which do not reflect a competence

deficit. They involve some “problem-solving” form of learning which draws on morpho-syntactic knowledge. Their analysis reveals that cross-linguistic influence may also be of the peripheral type, i.e. it may favour, as a result of language analysis, the invention of forms not predicted by the core grammar of any of the two languages. Such structures have been attested in other languages, i.e. they are allowed by Universal Grammar.

6 Conclusions

In this paper we investigated the acquisition route of ACs in Romanian by simultaneous Romanian-Hungarian bilingual children. Our data provide evidence that this route is similar to the one of monolinguals. Clitic production/omission rate is comparable in the two settings. This perfect bilingual scenario was accounted for in terms of some superficial similarity between two structures in Romanian and Hungarian. This similarity, reinforced by the early acquisition of the agreement/definiteness marker in Hungarian, was interpreted as a possible booster of the acquisition of ACs in Romanian, in particular of post-verbal clitics. More generally this suggests that some special bilingual cross-linguistic interference effects can result from the availability of two structures which are superficially similar in the two languages. They create the context for early language analysis, rooted in the child’s morpho-syntactic knowledge. This can speed the clitic acquisition process. And it can also result in what we called peripheral inventions, created under bilingual input conditions. Their creation involves mechanisms which are not I-language-specific. Their analysis reveals that the variation space within language learning

contexts is narrower than expected. Even structures which are the result of non-language-specific mechanisms, such as data analysis, when drawing on morpho-syntactic knowledge, can fall within the range of constructions made available by Universal Grammar.

References

Avram, Larisa & Martine Coene. 2006. Object clitics as Last Resort. Implications for language acquisition. In Sergio Baauw, Jacqueline van Kampen & Manuela Pinto (eds.), *The acquisition of Romance languages. Selected papers from the Romance Turn II 2006*, 7–26. Utrecht: LOT.

Avram, Larisa & Martine Coene. 2009. Null objects and Accusative clitics in Romanian. *Bucharest Working Papers in Linguistics* XI (1). 233–252.

Avram, Larisa, Martine Coene & Anca Sevcenco. 2015. Theoretical implications of children's early production of Romanian Accusative clitics. *Lingua* 161. 48–66.

Avram, Larisa, Anca Sevcenco & Ioana Stoicescu. 2013. Clinical markers of specific language impairment and developmental dyslexia in Romanian: The case of Accusative clitics. In Larisa Avram & Anca Sevcenco (eds.), *Topics in language acquisition and language learning in a Romanian context*, 129–159. Bucharest: Editura Universității din București.

Bárány, András. 2012. Hungarian conjugations and DOM. In Balázs Surányi & Diána Varga (eds.), *Proceedings of the First Central European Conference in Linguistics for Postgraduate Students*, 3–15. Budapest: Pázmány Péter Catholic University.

Bialystock, Ellen. 2001. *Bilingualism in development. Language, literacy, and cognition*. Cambridge: Cambridge University Press.

- Chomsky, Noam. 2005. Three factors in language design. *Linguistic Inquiry* 36(1). 1–22.
- De Houwer, Annick. 1990. *The acquisition of two languages from birth: A case study*. Cambridge: Cambridge University Press.
- Dobrovie-Sorin, Carmen. 1994. *The syntax of Romanian: Comparative studies in Romance*. Berlin: Mouton de Gruyter.
- É.Kiss, Katalin. 2012. Null pronominal objects in Hungarian. *Acta Linguistica Hafniensia: International Journal of Linguistics* 44 (2). 192–206.
- Farkas, Donka. 1987. DO pro in Hungarian. In Istvan Kenesei (ed.), *Approaches to Hungarian. Volume 2: Theories and analyses*, 191–211. Szeged: JATE.
- Ferrari, Ida. 2006. Acquisition of object clitics by two Italian/German bilingual children. In Adriana Belletti, Elisa Bennati, Cristiano Chesi, Elisa di Domenico & Ida Ferrari (eds.), *Language acquisition and development. Proceedings of GALA2005*, 173–183. Newcastle, UK: Cambridge Scholars Press.
- Frâncu, Constantin. 1997. Sintaxa [Syntax]. In Ion Gheție (coord.), *Istoria limbii române literare*, 147–174, 347–375. Bucharest: Editura Științifică și Enciclopedică.
- Gawlitzek-Maiwald, I. & R. Tracy. 1996. Bilingual Bootstrapping. *Linguistics* 34. 901–936.
- Giurgea, Ion. 2009. Romanian genderless pronouns and parasitic gaps. In Sonia Colina, Antxon Olarrea & Ana Maria Carvalho (eds.), *Romance linguistics 2009: Selected papers from the 39th Linguistic Symposium on Romance Languages (LSRL) Tucson, Arizona, March 2009*, 231–248. Amsterdam: John Benjamins.
- Grandfeldt, Jonas & Suzanne Schlyter. 2004. Cliticization in the acquisition of French as L1 and L2. In Philippe Prévost & Johanne Catherine Paradis (eds.), *The acquisition*

of French in different contexts: Focus on functional categories, 333–370. Amsterdam: John Benjamins.

Hulk, Aafke. 1997. The acquisition of object pronouns by a Dutch/French bilingual child. In Antonella Sorace, Caroline Heycock & Richard C. Shillcock (eds.), *Proceedings of the GALA'97 Conference on language acquisition*, 521–526. HCRC, Edinburgh University.

Hulk, Aafke. 2000. L'acquisition des pronoms clitiques français par un enfant bilingue français- néerlandais. *Revue Canadienne de Linguistique* 45. 97–117.

Hulk, Aafke & Elizabeth van der Linden. 1996. Language mixing in a French-Dutch bilingual child. In Eric Kellerman, Bert Weltens & Theo Bongaerts (eds.), *Eurosla 6. A selection of papers*, 87–101. Amsterdam: VU Uitgeverij.

Hulk, Aafke & Natascha Müller. 2000. Bilingual first language acquisition at the interface between syntax and pragmatics. *Bilingualism: Language and Cognition* 3(3). 227–244.

Kaiser, Georg. 1994. More about INFL-lection and agreement: The acquisition of clitic pronouns in French. In Jürgen Meisel (ed.), *Bilingual first language acquisition French and German development*, 131–160. Amsterdam: John Benjamins.

Keresztes, Júlia 2012. Towards an account of object drop. In Balázs Surányi & Diána Varga (eds.), *Proceedings of the First Central European Conference in Linguistics for Postgraduate Students*, 165–173. Budapest: Pázmány Péter Catholic University.

Larrañaga, Pilar & Pedro Guijarro-Fuentes. 2012. Clitics in L1 bilingual acquisition. *First Language* 32(1–2). 151–175.

Longobardi, Giuseppe. 2006. Reference to individuals, person and the variety of mapping parameters. Ms. University of Trieste.

Lorusso, Paolo. 2015. Auxiliaries and verb classes. A longitudinal analysis of the auxiliary split in L1 Italian. Paper presented at 41st Incontro di Grammatica Generativa, Università per Stranieri di Perugia, 26 February 2015. <https://unifi.academia.edu/PaoloLorusso>.

MacWhinney, Brian. 2000. *The CHILDES project: Tools for analyzing talk*. Hillsdale, NJ: Lawrence Erlbaum.

Massam, Diane & Yves Roberge. 1989. Recipe context null objects in English. *Linguistic Inquiry* 20(1). 134–139.

Meisel, Jürgen. 1989. Early differentiation of languages in bilingual children. In K. Hyttenstam & L.K. Obler (eds.), *Bilingualism across the lifespan: Aspects of acquisition, maturity and loss*, 13–40. Cambridge: Cambridge University Press.

Meisel, Jürgen. 1994. Getting FAT: Finiteness, agreement and tense in early grammar. In Jürgen Meisel (ed.), *Bilingual first language acquisition: French and German grammatical development*, 89–130, Amsterdam: John Benjamins.

Meisel, Jürgen. 2001. The simultaneous acquisition of two first languages: Early differentiation and subsequent development of grammars. In Jasone Cenoz & Fred Genesee (eds.), *Trends in bilingual acquisition*, 11–41. Amsterdam: John Benjamins.

Meisel, Jürgen. 2004. The bilingual child. In T.K. Bhatia & W.C. Ritchie (eds.), *The handbook of bilingualism*, 91–113. Oxford, UK: Blackwell.

Meisel, Jürgen. 2011. *First and second language acquisition. Parallels and differences*. Cambridge: Cambridge University Press.

Müller, Natascha & Aafke Hulk. 2000. Cross-linguistic influence in bilingual children: object omissions and Root Infinitives. In S. Catherine Howell, Sarah A.

- Fish, Thea Keith-Lucas (eds.), *Proceedings of the 24th Annual Boston University Conference on Language Development*, 546–557. Somerville, MA: Cascadilla, Press.
- Müller, Natascha & Aafke Hulk. 2001. Cross-linguistic influence in bilingual language acquisition: Italian and French as recipient languages. *Bilingualism: Language and Cognition* 4(1). 1–21.
- Paradis, Johanne & Fred Genesee. 1996. Syntactic acquisition in bilingual children: Autonomous or interdependent? *Studies in Second Language Acquisition* 18. 1–25.
- Paradis, Johanne Catherine, M. Crago & Fred Genesee. 2005/2006. Domain-general versus domain specific accounts of specific language Impairment: evidence from bilingual children's acquisition of object pronouns. *Language Acquisition* 13: 33–62.
- Penello, N. 2007. On double clitics in interrogatives in a Northern Italian dialect. *Nordlyd* 34. 201–217.
- Pîrvulescu, Mihaela, Ana T. Pérez-Leroux & Yves Roberge. 2012. A bidirectional study of object omissions in French-English bilinguals. In K. Braunmüller, C. Gabriel, & B. Hänel-Faulhaber (eds.) *Multilingual individuals and multilingual societies*, 171–188. Amsterdam: John Benjamins.
- Reinheimer Rîpeanu, Sanda, Liliane Tasmowksi, Andra Vasilescu, Ion Giurgea & Rodica Zafiu. 2013. Pronouns. In Carmen Dobrovie-Sorin & Ion Giurgea (eds.), *A reference grammar of Romanian*. Volume 1: *The Noun Phrase*, 231–307. Amsterdam/Philadelphia: John Benjamins.
- Schaeffer, Jeanette. 2000. *The acquisition of direct object scrambling and clitic placement*. Amsterdam/Philadelphia: John Benjamins.

- Schlyter, Suzanne, Jonas Granfeldt & Maria Kihlstedt. 2007. French as cL2, 2L1 and L1 in pre-school children. *PERLES: petites études romanes de Lund. Extra series, commentaires & communications*, 21: 6–43.
- Schmitz, Katrin & Natasha Müller. 2008. Strong and clitic pronouns in monolingual and bilingual first language acquisition: comparing French and Italian. *Bilingualism: Language and Cognition* 11(1): 19–41.
- Serratrice, Ludovica. 2013. Cross-linguistic influence in bilingual development. Determinants and mechanisms. *Linguistic Approaches to Bilingualism* 3(1). 3–25.
- Sigurðsson, Halldór Ármann & Joan Maling. 2010. Argument drop and the empty left edge condition (ELEC). In Michael Putnam (ed.), *Exploring crash-proof grammars*, 59–86. Amsterdam: John Benjamins.
- Sorace, Antonella. 2007. The more the merrier: Facts and beliefs about the bilingual mind. In Sergio Della Sala (ed.), *Tall tales about the mind and brain. Separating fact from fiction*, 193–203. New York: Oxford University Press.
- Tigău, Alina. 2007. On the nature of Romanian pronominal clitics. *Bucharest Working Papers in Linguistics IX* (1). 109–123.
- Tomescu, Veronica. 2013. The acquisition of directional and locative particles in a Romanian-Hungarian bilingual context. In Larisa Avram, Anca Sevcenco (eds.), *Topics in language acquisition and language learning in a Romanian context*, 107–128. Bucharest: Editura Universității din București.
- Uriagereka, Juan. 1995. Aspects of the syntax of clitic placement in Western Romance. *Linguistic Inquiry* 26. 79–123.
- Uriagereka, Juan. 2007. Clarifying the notion ‘parameter’. *Biolinguistics* 1 (1). 99–113.

Uşurelu, Camelia. 2011. *De la sintaxă la semantică* [From syntax to semantics]. Bucharest: Editura Universităţii din Bucureşti.

Varlokosta, Spyridoula, Adriana Belletti, João Costa, Naama Friedmann, Anna Gavarró, Kleanthes K. Grohmann, Maria Teresa Guasti, Laurice Tuller, Maria Lobo, Darinka Anđelković, Núria Argemí, Larisa Avram, Sanne Berends, Valentina Brunetto, H  l  ne Delage, Mar  a-Jos   Ezeizabarrena, Iris Fattal, Ewa Haman, Angeli  k van Hout, Kristine Jensen de L  pez, Napoleon Katsos, Lana Kologranic, Nadezda Krstic  , Jelena Kuvac Kraljevic, Aneta Mi  kisz, Michaela Nerantzini, Clara Queralt  , Zeljana Radic, S  lvia Ruiz, Uli Sauerland, Anca Sevcenco, Magdalena Smoczyńska, Eleni Theodorou, Heather van der Lely, Alma Veenstra, John Weston, Maya Yachini, & Kazuko Yatsushiro. 2016. A cross-linguistic study of the acquisition of clitic and pronoun production. *Language Acquisition*. 23 (1). 1–26.

Annex 1.

The Romanian-Hungarian corpus

Child	Number of recordings	Age	MLU		TOTAL child utterances
Toma	81 (42h)	1;11 –	Romanian	Hungarian	Romanian: 9310
		2;11	2.50 – 4.51	2.46 – 2.81	Hungarian: 3073
					Total: 12383
Petru	37 (18h)	2;00 –	Romanian	Hungarian	Romanian: 6024
		2;05	1.47 – 3.79	1.22 – 1.31	Hungarian: 621
					Total: 6645

TOTAL 118 (60h)

Romanian: 15334

Hungarian: 3694

Total: 19028
