

Continual exposure to limited input: DOM in Heritage Romanian

Larisa Avram

Universitatea din București
larisa.avram@lils.unibuc.ro

Alexandru Mardale

INALCO, Paris – SeDyL UMR8202 IRD CNRS
alexandru.mardale@inalco.fr

Elena Soare

Université Paris 8 – SFL UMR7023 CNRS
elena.soare@univ-paris8.fr

Pentru a cita acest articol: Avram, L., A. Mardale & E. Soare, 2024, “Continual exposure to limited input: DOM in Heritage Romanian”. *Romanian Studies Today*. VIII, p. 8-25.

Abstract: This paper explores whether there is evidence for reduced input effects on differential object marking in heritage Romanian. The 50 participants (age range 5;07 – 25;07) are all Romanian-French bilinguals born to Romanian families living in France. The analysis of DOM use in their narratives identified three developmental stages. Until age 7, DOM use is monolingual-like, but during the first school years, there is a significant decrease in DOM use followed, in adulthood, by a reversion to monolingual-like use. The adult heritage speakers use DOM similarly to Romanian-speaking adults living in the homeland. The paper discusses these findings in relation to reduced input effects in heritage languages. The claim is that these effects reach their peak after onset of schooling which coincides with a decrease in input amount in the heritage language and a shift in language dominance. The effects of reduced input can, however, be overcome in adulthood, as long as there is continual exposure to the heritage language over time.

Keywords: differential object marking; heritage Romanian; reduced input; incomplete acquisition; continual exposure

1. Introduction

Heritage speakers are (simultaneous or successive) bilinguals who are exposed to a language in the family, the heritage language, and to a different societal language. In the vast majority of cases, the latter becomes the dominant one (Montrul 2008, 2016, 2023a,b, Benmamoun, Montrul, Polinsky, 2013, Polinsky 2018). The heritage language is typically acquired under conditions of limited input. According to the Incomplete Language Acquisition Hypothesis (Montrul 2008, 2016, Polinsky 2006), knowledge of the heritage language may remain incomplete as a result of lack of “optimal input conditions during the age of primary linguistic development (birth – 4 years) and/or the period of later language development that takes place during the pre-school and school years (4 – 13 years)” (Montrul 2008: 241).

This view predicts, in principle, language deterioration, language divergence or “interrupted” acquisition especially after onset of schooling. It is expected that the heritage language undergoes structural changes over the lifespan. Testing such a prediction would require the investigation of one particular language structure or language property, in the same language contact setting, across different age groups. Studies on school-age children are, however, relatively rare in the heritage language literature and studies which investigate the same language property across age groups are even rarer. One exception is the study in Polinsky (2008), which investigated subject and object relative clause comprehension in heritage Russian in contact with English. The 7-year-old speakers of heritage Russian in the study did not differ from age-matched monolinguals living in the homeland. The adult heritage speakers (mean age 22;08), on the other hand, had problems comprehending object relatives and, to a certain extent, even subject relatives. Such a developmental pattern suggests that monolingual-like acquisition in childhood does not exclude structural changes in time, due to quantitative and qualitative changes in language input, a shift in language dominance, etc.

This, however, cannot be the only available developmental pattern. Firstly, because not all language properties are (equally) affected by reduced input. Narrow syntax, for example, is indifferent to input amount and quality. Secondly, some properties can be acquired faster by simultaneous bilinguals than by monolingual children (Meisel 2011). Structures which are acquired early, well before onset of schooling, may be less likely to undergo structural reanalysis in time as a result of limited amount of input (Tsimpli 2014). Linguistic proximity can favour language interference effects which may be reflected in the developmental pattern. In order to identify possible patterns of development in a heritage language setting one needs to examine the acquisition of as many language properties as possible across different age groups.

The aim of the present study is to contribute to the identification of such patterns. This paper documents the acquisition of differential object marking

(DOM) in heritage Romanian by 7-year-olds, 10-year-olds and young adults living in France. The choice of DOM is not accidental. In Romanian, there are contexts in which DOM is obligatory and contexts in which it is syntactically optional. Optional DOM is an interface phenomenon, which requires the integration of syntax with discourse pragmatics, i.e. it should be, in principle, affected by reduced input. The results of the investigation can be informative with respect to the (possible) effects of limited exposure on the acquisition of interface phenomena. Additionally, the few available studies focused either on DOM in adult heritage Romanian (in contact with English) (Montrul 2023b and references therein) or on DOM in child heritage Romanian (in contact with French, Spanish and Italian) (Avram, Mardale, and Soare 2022, 2023 a, b, d, Popa 2022, Babei-Popa 2023). To the best of our knowledge, there is no study which investigated DOM in heritage Romanian across different age groups (child and adult heritage speakers) in the same language contact setting. The present study aims to fill in this gap.

The remainder of this paper is organized as follows: Section 2 offers a brief presentation of the most important properties of DOM in Romanian. Section 3 summarizes the main findings on the acquisition of DOM in Romanian reported in the literature, with a focus on heritage Romanian. The current study, which uses data from a corpus of “frog story” narratives, is presented in Section 4. Section 5 concludes.

2. DOM in Romanian

The Romanian DOM marker is *pe*, which derives from a locative preposition. It is placed in front of the marked direct object (see 1).

- (1) Crin a salutat *pe* vecin¹.
 Crin has greeted DOM neighbour
 ‘Crin greeted the neighbour.’

The use of *pe* is obligatory with definite pronouns and proper names (2) (Farkas and von Heusinger 2003, Tigău 2011, 2014). In this context, the *pe*-marked object must be doubled by an Accusative clitic, i.e. DOM is clitic doubling (clitic ...*pe* DP).

- (2) Crin *(l)- a salutat *(pe) el / Ion.
 Crin CL.3SG.M has greeted DOM him Ion
 ‘Crin greeted him/Ion.’

¹ The DP *vecin* ‘neighbour’ is interpreted as definite. In the absence of a modifier, the definite article must be omitted, a more general constraint on DPs preceded by a preposition (Mardale 2008b).

DOM is (syntactically) optional with descriptive DPs, definite and indefinite, but the latter are rare. A marked indefinite object (3) is usually interpreted as specific (Dobrovie-Sorin 1990, Tigău 2011, 2014). In this context, the use of the doubling clitic is optional, i.e. DOM may be either *pe* or clitic doubling.

- (3) Crin (I)- a salutată (pe) un vecin.
 Crin CL.3SG.M has greeted DOM a neighbour
 ‘Crin greeted a neighbour.’

Animacy constrains DOM (Farkas and von Heusinger 2003, Mardale 2007, 2008a, among many others). Generally, marking applies to animate objects (see example 3 above) but marked inanimate nominals are attested. There are syntactic contexts in which DOM can (see 4) or must apply (5) even when the DP is inanimate (Irimia 2020). DOM can also be used with inanimate objects with an upgrading effect (see 6) (Mardale 2008a, Pană Dindelegan 2013). When DOM is extended to inanimate DPs, DOM is clitic doubling.

- (4) L- am reparat și pe ăsta.
 CL.3SG.M have fixed also DOM this
 ‘I have fixed this one too.’

- (5) Dintre toate, *(I)- am reparat
 from all CL.3SG.M have fixed
 doar *(pe) acesta.
 Only DOM this
 ‘Among all of them, I have fixed only this one.’
 (from Avram, Mardale, and Soare 2023c)

- (6) Uitați cum o facem pe mămliguță.
 look how CL.3SG.F make DOM polenta-DIM
 ‘Look how we are making this little polenta.’ (from Mardale 2008a)

In (syntactically) optional DOM contexts, *pe* signals individuation, and prominence of the argument in event structure (Avram and Coene 2009, Hill and Mardale 2019, 2021). Clitic doubling is sensitive to discourse topicality (Farkas and von Heusinger 2003). The marked object is interpreted, in this case, as a discourse-linked topic (Avram and Coene 2009, Hill and Mardale 2019, 2021). Choosing one marker or the other is dependent on discourse pragmatics. There are, however, speakers who accept exclusively clitic doubling as DOM (as experimentally verified in Avram and Zafiu 2017, Avram 2019). The more conservative speakers use both *pe* and clitic doubling in optional contexts. This is in line with Bossong (1991, 1998), according to whom DOM in Romanian is clitic doubling.

3. On the acquisition of DOM: Previous studies

3.1. DOM in L1 and 2L1 Romanian

Studies on DOM in L1 Romanian offer conflicting results. Production studies report early acquisition, before age 3;00, whereas the results of comprehension tasks indicate delayed acquisition. Ticio and Avram (2015) investigated DOM production in the spontaneous speech of Romanian-acquiring children. Their results show early emergence and early target-like use. Avram, Mardale, and Soare (2023c), however, tested knowledge of the role of the animacy feature in the DOM system. Unexpectedly, the results of a preference judgement task revealed that Romanian monolinguals incorrectly extend DOM to inanimate objects, both proper names and common nouns, until age 9.

Avram and Tomescu (2016, 2020) examined the acquisition of DOM in Romanian by Hungarian-Romanian bilinguals living in Romania. Their longitudinal data show that both *pe* and clitic doubling emerge early and are used target-like by age 3. The comparison with age-matched monolinguals revealed that, in optional contexts, the bilingual children marked fewer objects. This difference, however, gets reversed at around age 5. Hungarian-Romanian bilinguals marked a higher number of common nouns in DOM optional contexts than age-matched monolinguals (69% vs. 48%) in “frog story” narratives. Their rate of marked objects is also higher than the one found with a group of Hutsul Ukrainian-Romanian and one of Lipovan Russian-Romanian bilinguals. These bilinguals marked significantly fewer common nouns than age-matched monolinguals and Hungarian-Romanian bilinguals. Hungarian lacks DOM (Bárány 2012) whereas Russian and Ukrainian have morphological DOM, constrained by animacy. The results reported in Avram and Tomescu (2016, 2020) suggest that the presence/absence of DOM in the “other” language does not facilitate or hinder the acquisition process. This, however, does not mean that the process cannot be affected by crosslinguistic interference. Hungarian does not have DOM, but the conjugation of verbs is constrained by definiteness. The authors take this property of Hungarian as the booster of the acquisition of DOM in 2L1 Romanian. The results in Avram and Tomescu (2020) also show that DOM is not equally difficult/easy across 2L1 contexts.

3.2. DOM in heritage Romanian

There has been a growing number of recent studies which investigated DOM in heritage Romanian. Montrul and colleagues examined DOM use by adult heritage speakers (simultaneous and sequential bilinguals) in an English dominant language

setting (Montrul, Bhatt and Gîrju 2015, Montrul and Bateman 2020a,b, Montrul 2023a,b). Their results revealed that the first-generation immigrants did not differ from the native speakers of Romanian living in the homeland. With the heritage speakers, however, the authors report omission of *pe* in all tasks and an even more significant omission of clitic doubling, both in obligatory and in optional contexts. These results are taken to indicate that DOM is vulnerable to omission in heritage Romanian.

DOM in child heritage Romanian has been investigated in several language settings: Romanian-French, Romanian-Italian, and Romanian-Spanish (Avram, Mardale, and Soare 2021, 2023a,b, Popa 2022, Avram *et al.* 2023, Babei-Popa 2023). All these studies report similar results with respect to DOM use by first generation immigrants: it is similar to the use of DOM by speakers living in the homeland and the preferred marker is clitic doubling.

Avram, Mardale, and Soare (2021, 2023a) examined the acquisition of DOM by simultaneous bilinguals living in France, age range 5;07 – 11;09. The analysis relied on a corpus of “frog story” narratives. Their results provide evidence that DOM in optional contexts is not prone to erosion from the onset of acquisition; it decreases in time, especially during the first school years. Since DOM is used correctly, the results are argued to indicate that DOM in heritage Romanian is not subject to attrition or loss. It is only underused in optional contexts.

Popa (2022) used the same method to investigate DOM in heritage Romanian in contact with Italian. Overall, the 31 simultaneous bilinguals (age range 6;00- 14;01) in her study used clitic doubling as a marker significantly less often than age-matched monolingual children and than first generation immigrants. One important finding in her study was the effect of language dominance. The Italian-dominant children in the group used DOM in optional contexts to a lesser extent than age-matched monolinguals, similarly to the results reported in Avram, Mardale, and Soare (2023a). No such difference was found with the group of balanced bilinguals.

In all the studies presented in this section heritage Romanian was acquired in contact with a language which does not have morphologically marked DOM². At first sight, this might be taken to be one of the factors which yielded the acquisition of DOM in heritage Romanian problematic. An experimental study on the role of the animacy feature in the DOM system of Romanian revealed, however, no significant difference between heritage Romanian-French bilinguals and heritage Romanian-Spanish bilinguals (Avram, Mardale, and Soare 2023b, Avram *et al.* 2023). All the children who participated in the study (age range 5;00 – 12;04) incorrectly accepted DOM with inanimate objects irrespective of whether the “other” language had or did not have morphological DOM.

² According to Rodriguez-Mondoñedo (2008) every language has DOM. What differs is the way in which languages mark objects. We agree with this point of view and consider that, for example, Romanian differs from English and French with respect to how object marking is implemented.

Summing up, available studies converge on the vulnerability of DOM in bilingual acquisition in general and in heritage Romanian in particular. Clitic doubling is singled out as being more vulnerable to omission than *pe*.

4. The Study

4.1. Aim and predictions

The present study examines data on the acquisition of DOM in heritage Romanian by simultaneous Romanian – French bilinguals, from school-age to adulthood. The focus is on the developmental pattern with a view to identifying to what extent DOM use in the heritage language is affected by limited input, especially after onset of schooling in the societal language. Unlike previous studies, which focused either on adult or on child heritage speakers, in the current study we examine data coming from both children and adults.

The Incomplete Language Acquisition Hypothesis (Montrul 2006, 2018) predicts that, given the reduced amount of exposure to the heritage language, heritage speakers should not be able to fully acquire the DOM system. Vulnerability of DOM in heritage Romanian is also predicted by the Interface Hypothesis (Tsimplici and Sorace 2006, Sorace and Filiaci 2006, Sorace 2011). Optional DOM in Romanian is an interface phenomenon. Language properties at the syntax-pragmatics interface have been shown to be problematic in bilingual settings (Tsimplici and Sorace 2006, Sorace and Filiaci 2006, Sorace 2011, a.m.o.). Their acquisition can be affected by amount and quality of input and it is more likely to be subject to L1 transfer effects. Additionally, more recent experimental studies revealed that DOM is acquired late in L1 Romanian, this is why it is expected to be (even more) vulnerable in the heritage language.

4.2. Participants and procedures

The data come from the narratives of 50 speakers of heritage Romanian (age range 5;07 – 25;04) and of 11 first generation immigrants living in France³. The heritage speakers were divided into three age groups: 7-year-olds, 10-year-olds, and young adults. The use of DOM in their narratives was compared to DOM use

³ DOM use in some of these narratives was presented in Avram, Mardale, and Soare (2023a). We include those data in the present study in order to offer a complete picture, from school-age children to young adults.

in the narratives of Romanian-speaking children and adults living in the homeland. Corpus details are given in Table 1.

The heritage speakers are all simultaneous bilinguals born to Romanian families living in France. The language of the community is French. The children speak Romanian in the family with both parents and with siblings (and, in some cases with other family members who happen to also live in France). They speak French, the societal language, at kindergarten or at school and they all attend optional classes of Romanian language and civilization, 2 hours per week. At data collection time, they had been attending these classes for approximately 2 months but they had not been taught DOM explicitly. The responses of their parents to a sociolinguistic questionnaire indicated that the younger children are relatively balanced bilinguals. Their parents occasionally read to them in Romanian. The older children, who spend 6 hours per day at school, have French-speaking friends, watch French television, are all French dominant. They read and write in French on a number of diverse topics but only occasionally and on a limited number of topics in Romanian. According to the parents' responses to the questionnaire, the older children find it easier to speak French than Romanian. All children visit their family in the homeland every year. The difference with respect to language dominance between the two age groups revealed by the questionnaire was further checked by comparing the length of the narratives in the two languages and the speaking rate per one minute (randomly selected) while telling the story in the two languages (following the methodology used in Polinsky 2008).

The young adults are all simultaneous bilinguals and French-dominant, as revealed by their responses to a sociolinguistic questionnaire. They have continually spoken Romanian at home, with both parents (some of them were still living with their parents at data collection time). They visit their family in the homeland on a regular basis; all of them once a year but some of them as often as three times a year. They are relatively fluent in Romanian but their writing abilities lag behind. They read in Romanian, but much less than in French. They are interested in maintaining the heritage language; they enrolled at INALCO because they want to improve their writing skills and to widen their knowledge of Romanian history, culture and civilization. At data collection time, they had not received any explicit instruction with respect to the DOM system.

The first-generation immigrants are all native speakers of Romanian who had been living in France, at data collection time, for at least 10 years.

Table 1

Corpus details		
Group	Age range (Mean)	No of narratives
Child heritage speakers		
7-year-olds	5;07 - 8;05 (7;05)	17
Child heritage speakers		
10-year-olds	8;10 - 11;09 (10;05)	17
Adult heritage speakers	18;04 - 25;04	16
First-generation immigrants	30 - 49 (39;06)	11
Romanian monolinguals		
6-year-olds ⁴	5;02 - 7;06 (5;07)	17
Romanian monolinguals		
10-year-olds	9;01 - 11;09 (10;01)	17
Adult speakers of Romanian in the homeland ⁵	19 - 45 (25;02)	10

The narratives are based on Mercer Mayer's (1969) picture storybook *Frog, where are you?* and data were collected in accordance with the methodology in Berman and Slobin (1994). The child heritage speakers narrated the story both in Romanian and in French. The adult heritage speakers and the first-generation immigrants told the story only in Romanian. The audio recorded narratives were transcribed⁶ in Word.

DOM contexts were extracted and coded as (i) obligatory and (ii) optional. DOM in optional contexts was coded as (i) marked and (ii) unmarked. Marked DOM was coded as (i) marked only with *pe*, and (ii) marked with clitic doubling (both *pe* and an Accusative clitic). Further coding involved animacy (+/- animate DP) and DP type (pronoun, quantifier, proper name, common noun).

4.3. Results⁷

The analysis revealed target-like DOM use in (the very few) obligatory contexts across groups. This is why we focused on DOM in optional contexts. The first-generation immigrants used DOM at a rate of 31.5% ($n = 23/73$), similarly to Romanian-speaking

⁴ The narratives of Romanian-speaking children and adults living in Romania come from various corpora: Buja (2008), Teodorescu (2017) as well as our own corpus.

⁵ The same picture book was used for other corpora of Romanian (Buja 2008, Miros 2017, Teodorescu 2017, Tomescu 2019). Using the same material for data collection enables the comparison of our data with data reported in previous studies.

⁶ The child heritage Romanian narratives and those of the first-generation immigrants were collected by Alexandru Mardale and transcribed by Elena Soare, Alexandru Mardale and Andra Vasilescu, as part of the project *Langues d'héritage* at University of Paris 8.

⁷ Some of the results reported in this section were also reported in Avram, Mardale, and Soare (2023a), but with a different focus.

adults living in the homeland. The latter used DOM in 41.4% of all optional contexts ($n = 12/29$), a slightly higher rate, but the difference between the two groups does not reach significance, as indicated by a chi-square test of independence: $\chi^2(1) = 0.89$ $p = .34$. Both groups used exclusively clitic doubling and marked only animate definite DPs.

We first examined the overall use of DOM in optional contexts, *pe* and clitic doubling together. The results for the three age groups of heritage speakers (HS) compared to Romanian-speaking adults in the homeland are summarized in Figure 1. The raw data reveal a U curve developmental pattern, with overall DOM use decreasing from age 7 to age 10 and then increasing again, in adulthood, to a rate similar to the one found with the group of adults living in Romania.

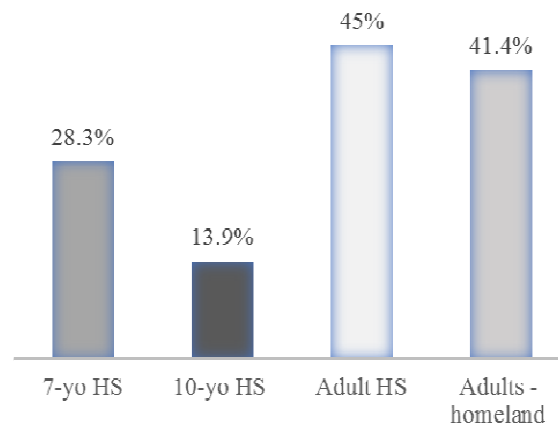


Figure 1. DOM use in optional contexts in the narratives of heritage speakers per age group

The younger group of heritage speakers used DOM at a level similar to the one found with first-generation immigrants⁸ (28.3% vs. 31.5%), i.e. similar to the one in the input. The 10-year-olds, however, whose dominant language is French, used DOM at a rate significantly lower than the one in the input, i.e. the one found with first-generation immigrants ($\chi^2(1) = 5.79$, $p < .05$), and also than the one found with the younger group of speakers of heritage Romanian ($\chi^2(1) = 6.50$, $p < .05$). The adult heritage speakers used DOM significantly more often than the 10-year-olds (45% vs. 13.9%).

The comparison of the child heritage speakers with age-matched Romanian-speaking children living in the homeland singles out the 10-year-old group as the one with whom DOM is underused. These children marked objects at a significantly lower rate than age-matched monolinguals ($\chi^2(1, N = 34) = 17.9$, $p < .001$). The comparison is summarized in Figure 2.

⁸ These are the parents of some of the children in the group of heritage speakers.

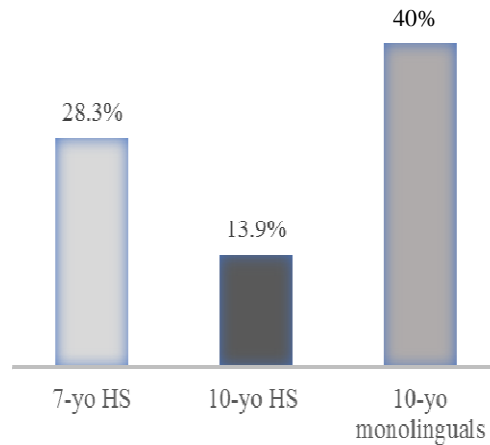


Figure 2. DOM use in optional contexts in the narratives of child heritage speakers and monolinguals

The qualitative analysis of the data revealed no divergent use with any of the three groups of speakers of heritage Romanian, i.e. no DOM omission in obligatory contexts (where such contexts are found) and no extension of DOM to inanimate objects. Marking was limited to definite DPs.

We next examined the use of clitic doubling alone. Percentages of clitic doubling were calculated against the total number of DOM-ed objects. Both adults living in Romania and first-generation immigrants living in France used exclusively clitic doubling. The 7-year-old heritage speakers used clitic doubling more frequently than *pe* (75%, i.e. 21 objects out of the total of 28 were marked with clitic doubling) but the rate is lower than the one found with first-generation immigrants (100%).

- (7) [...] și pe broască a lăsat-o jos.
 and DOM frog has put CL.3SG.F down
 ‘and he put the frog down.’ (C. 5;07)
- (8) Bufnița a vrut să-l sperie pe frate.
 owl-the has wanted SBJV CL.3SG.M frighten DOM brother
 ‘The owl wanted to frighten the brother.’ (A. 8;05)

The comparison with a 5-year-old group of Romanian monolinguals revealed no significant difference: $\chi^2(1, N = 34) = 2.41, p > .05$. Given the fact that according to the raw data there is a slight advantage for the monolingual group, who are younger, it is possible that the 7-year-olds actually use clitic doubling less frequently than age-matched monolinguals.

With the 10-year-olds the results are clear: the DOM rate decreases significantly, to a low 20%. These children preferred *pe* to *pe* and an Accusative clitic.

- (9) *și vede pe broșcuța care-i căuta.*
and sees DOM frog-DIM who CL.3PL.M searched
'and sees the little frog who was looking for them.' (F. 13;0)
- (10) *Apoi bufnița a speriat pe copil.*
then owl-the has frightened DOM child
'then the owl frightened the child.' (C. 11;01)

Recall that this group undermarked objects in optional DOM contexts. Their narratives contained few DOM-ed objects ($n = 15$), and only 3 of them were marked with clitic doubling. The difference between this group and the younger one is significant: $\chi^2(1, N = 34) = 14.94, p < .001$. The older group used clitic doubling to a lesser extent than the younger one (20% vs. 75%). The comparison with age-matched monolinguals (who used clitic doubling with 90% of the marked objects) further confirms that, indeed, clitic doubling is vulnerable with the 10-year-old group of child heritage speakers. The difference between this group and age-matched monolinguals is significant: $\chi^2(1, N = 34) = 27.56, p < .001$. The picture in Figure 3 singles out the 10-year-old group of heritage speakers once again. Their use of clitic doubling is significantly lower than the one found with the 7-year-old heritage speakers and significantly lower than the one found with age-matched monolingual speakers (MS).

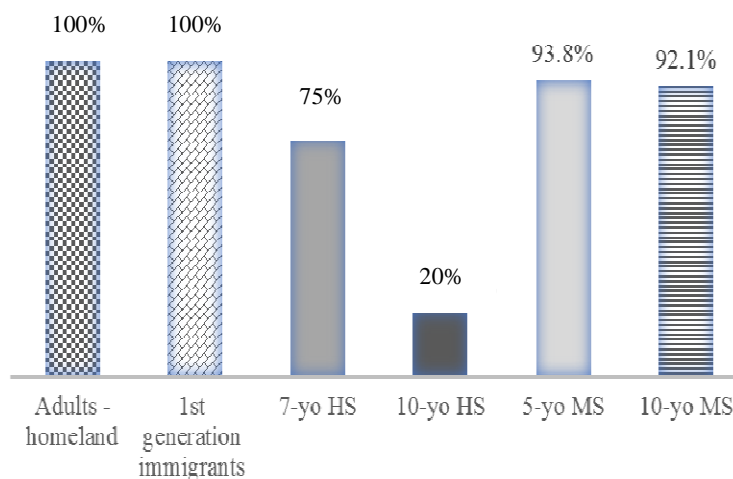


Figure 3. Clitic doubling in optional contexts in the narratives of child heritage speakers and monolinguals

The adult heritage speakers used clitic doubling more often than *pe*, and more often than the 10-year-olds. Just like with overall DOM, with clitic doubling the developmental pattern shows a significant decrease from age 7 to age 10 and then a significant increase from age 10 to adulthood. The rate of clitic doubling with the young adult heritage speakers is, however, lower than the 100% found with the adults in the homeland and with first generation immigrants. The data are summarized in Figure 4.

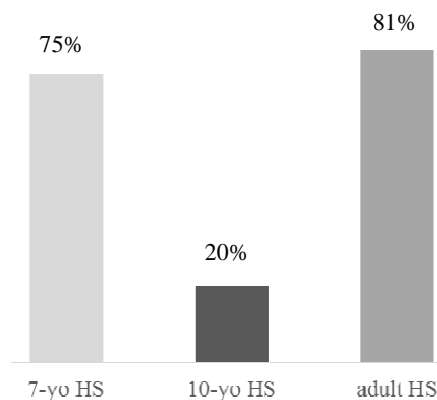


Figure 4. Clitic doubling in optional contexts in the narratives of heritage speakers across age groups

Clitic doubling was used correctly across age groups.

4.4. Discussion

The current study examined the use of DOM in heritage Romanian at three points in time (at age 7, age 10, and early adulthood) with a view to evaluating the effect of limited input.

The results indicate that the input, which child heritage speakers receive with respect to DOM, is comparable to the one which Romanian children get in the homeland. The first-generation immigrants in our study behaved similarly to Romanian adults living in the homeland. This is in line with what was reported in all other available studies on heritage Romanian (see section 3.2).

Following the Incomplete Language Acquisition Hypothesis (Montrul 2008, 2016) and the Interface Hypothesis (Tsimplici and Sorace 2006, Sorace and Filiaci 2006, Sorace 2011) it was predicted that heritage speakers would not be able to fully acquire the DOM system. The results show that heritage speakers go through a developmental stage when they undermark objects in optional DOM contexts.

This stage coincides with a decrease in input amount (following onset of schooling in the societal language and during the first school years) and with a change in language dominance. At first sight, these results are indicative of a vulnerable domain (possibly to erosion) in child heritage Romanian, in line with findings reported in Montrul, Bhatt, and Gîrju (2015), Montrul and Bateman (2020a, b). Our data enabled us to see that the system is not vulnerable from the onset of acquisition; it becomes weaker in time. At age 7, overall DOM use in optional contexts does not differ from the one attested with first-generation immigrants. Our data also identified a significant decrease in overall DOM use (both single *pe* and *pe* + Accusative clitic) from age 7 to age 10. During the first school years there is a significant change in the amount of DOM use in optional contexts. The fact that, whenever DOM is used, it is used correctly, even at age 10, suggests, however, that the system is not attrited or lost. At age 10, (optional) DOM is only underused. Child heritage speakers may find it difficult to access the acquired grammar of DOM but the linguistic representation of DOM is not divergent (Perez-Cortes, Putnam, and Sanchez 2019).

Underuse may, in principle, be a precursor of attrition. Our results, however, clearly show that this is not always the case. The most important finding was that underuse of DOM at around age 10 is temporary. In spite of the fact that the input which heritage speakers receive continues to be limited during and after school years, most probably even more limited than before the onset of schooling, in spite of the fact that the heritage language is used in a limited number of environments, full acquisition of DOM is possible. Adult heritage speakers use DOM in optional contexts correctly and at a rate similar to the one found with adults living in the homeland. DOM, a syntax-discourse phenomenon, is affected by limited exposure, as predicted, but only during a limited stage. Sudden decrease in input amount and change in language dominance results in DOM underuse but only temporarily. A weakening of the effect of reduced input in time has been noticed before in the literature on simultaneous bilingual development (see, for example, Oller and Eilers 2002, and the discussion in Unsworth 2012). The developmental pattern identified in heritage Romanian indicates that during the early stages, under conditions of balanced bilingualism, limited input is not reflected in either delayed or divergent acquisition. The effect becomes significant after onset of schooling, following two important related changes: increase in the input in the societal language to the detriment of the heritage language and a shift in language dominance. The fact that adult heritage speakers use DOM similarly to adults in the homeland indicates that continual exposure allows gradual weakening of the (negative) effect of limited input.

At least at first sight, vulnerability of DOM appears to be selective, with clitic doubling being more problematic than *pe*. This is in line with what was reported in previous studies on DOM in Romanian in a bilingual context (see Section 3.1)

as well as in heritage Romanian (see Section 3.2). The youngest group, the 7-year-olds, avoid using clitic doubling. With the 10-year-olds, clitic doubling becomes vulnerable to omission. This comes as no surprise since clitic doubling is subject to delayed acquisition in a monolingual setting as well (see, e.g. Vender *et al.* 2018). One possible account of this delay is in terms of the difficulty created by the dependency relation between the pronominal clitic and the associated DP. Dependency relations in general involve “third factors” (Chomsky 2005), such as processing abilities or working memory. Linguistic domains whose delay in acquisition is caused by such language external factors should finally be fully acquired. The adult heritage speakers in our study, however, differed from the adults in the homeland with respect to clitic doubling. The latter used exclusively clitic doubling to mark objects, whereas the adult heritage speakers, although showing a bias towards clitic doubling, also used *pe* without an Accusative clitic. As mentioned in Section 2, the use of clitic doubling is not obligatory when DOM is optional; marking objects with *pe* alone is fully acceptable in this context. The adult heritage speakers used DOM correctly but they opted for clitic doubling to a somewhat lesser extent than (some) adults in the homeland. Recall that according to some studies (Avram and Zafiu 2017, Avram 2019), there are two competing DOM grammars in contemporary Romanian. Some speakers, the innovators, use exclusively clitic doubling to differentially mark objects. The group of adults who took part in the current study may have included only such innovators. But there are speakers who still use both *pe* and clitic doubling in optional contexts, i.e. speakers who are more conservative. The adult heritage speakers in this study may belong to the latter. This suggests that when there is a language change in progress, if the change targets an interface property, it may not be advanced in language contact situations (see also the discussion in Avram, Mardale, and Soare 2023a).

Our results differ from those reported in Montrul, Bhatt, and Gîrju (2015) and Montrul and Bateman (2020a,b), according to which Romanian DOM (in contact with English) is “somewhat vulnerable to omission” in adult heritage speakers (Montrul 2023a), especially in simultaneous bilinguals. This difference is in need of an explanation. Since both English and French lack (morphologically marked) DOM, an account in terms of crosslinguistic interference effects is therefore excluded. Montrul, Bhatt, and Gîrju (2015) report data which show that DOM in Romanian is less vulnerable than DOM in Spanish and Hindi, in the same language contact setting. These data additionally exclude an account in terms of linguistic transfer. The difference between the heritage Romanian - English bilinguals in the US and the heritage Romanian - French bilinguals living in France suggests that an account in terms of the properties of the Romanian DOM system is also to be excluded. This is reinforced by the data reported in Avram and Tomescu (2016, 2020), which show that vulnerability of Romanian DOM differs across groups of bilingual children (acquiring Romanian and a different second language).

One difference between the groups of heritage speakers in Montrul and colleagues' studies and the current study could be related to "immigration type". Romanian immigration to France is a relatively recent phenomenon, which began at a time when preserving the heritage language is much easier (internet, online meetings with family and friends in the homeland, recent visits to Romania, etc.) and also encouraged. Successful integration in the new community is no longer perceived as excluding heritage language maintenance. The parents' responses to our sociolinguistic questionnaire showed that this is indeed their view. They speak exclusively Romanian at home, they read to their children in Romanian and they enroll them in optional classes of Romanian language and civilization. This possibly creates a context in which input in the heritage language is reduced (as in any bilingual setting) but it is continual, with the family encouraging children to use this language at home even after French has become their dominant language. The adult heritage speakers in this study have chosen to study Romanian at university, a fact which is indicative of a genuine interest in heritage language maintenance. We are aware of the speculative nature of this account. It is, nevertheless, in line with the results of the current study which suggest that continual exposure to the heritage language over time can overcome the effects of reduced input.

5. Conclusion

The current study examined DOM in heritage Romanian in a Romanian – French setting with a view to identifying the possible effects of reduced input on DOM production at different developmental stages. DOM use in obligatory and optional contexts in "frog story" narratives was analyzed. DOM in obligatory contexts was unproblematic. For DOM in optional contexts our data revealed a U curve pattern which included an early stage (of balanced bilingualism) when limited input did not affect DOM. This was taken to indicate that if DOM is vulnerable to omission it is not so from the onset of acquisition. During the first school years, when the heritage speakers became French dominant, a significant decrease in DOM use was attested. The period of time when DOM was vulnerable to omission coincided with a change in input amount and a shift in language dominance. The system, however, was not divergent; DOM was only underused. This stage was followed by a reversion to monolingual-like use. The 20-year-old adults marked objects in optional DOM contexts at a rate similar to the one attested with native speakers of Romanian living in the homeland.

We tentatively advanced the hypothesis that change in language dominance in conjunction with input reduction during the early school years can temporarily affect DOM production. But continual exposure, be it only in restrictive environments and in limited amounts, can have a cumulative effect which "repairs" the negative effect of limited input and facilitates, in time, full acquisition.

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