

Subject-Object binding dependencies in Romanian

Alina Tigău

University of Bucharest, Romania

Abstract

This paper dwells on an interesting contrast between Romance (Romanian, Spanish a.o.) and Germanic languages (English, German a.o.) with respect to the syntax and the interpretation of the direct object (DO). One structural difference between these two groups of languages amounts to the fact that the former clitic double (CD) and differentially object mark (DOM) their direct objects while the latter do not. This leads to important interpretive consequences when it comes to phenomena such as Subject-Object binding dependences: Non-CD languages rely on the c-command configuration and surface word order in resolving binding relations (the antecedent must c-command the element containing the bound pronoun. As a consequence, a natural way for the DO to bind into the Subject is to have it moved to the left, in a preceding, c-commanding position). As will be shown, in CD languages, the word order configuration is not decisive: the direct object may bind the subject without having to precede it at the same time. The paper draws a parametric difference between *configurational languages* (where binding is closely linked to the c-command configurations and is sensitive to surface word order) and *non-configurational languages*, where the same semantic properties can be derived from the internal structure of the direct object (through its featural specification).

Keywords: binding, c-command, clitic doubling, differential object marking, direct object

1. Introduction

This paper investigates an interesting contrast between Romance (Romanian a.o.) and Germanic languages (English, German a.o.) with respect to the syntax and the interpretation of the direct object (DO). In example (1a) the subject *any husband* will expectedly bind the possessive within the DO *his wife* both in the Romanian example and within its English corresponding translation. In (1b), on the other hand, the binding relation between the possessive now hosted within the subject DP and the DO may no longer be maintained in the English variant, but it is claimed to remain possible in the Romanian example (Cornilescu et al. 2017). The situation for English is straightforward and follows the principles of Binding Theory (Reinhart 1976,1983 and Chomsky 1980, 1981): the possessive in (1a) is bound by the c-commanding subject preceding it, while in (1b) the DO may not bind this possessive given that

it does not c-command it¹. What is interesting, however, is the Romanian variant in (1b), given that it seems possible for the possessive to be bound by the DO, even if the latter does not seem to c-command it. What makes the situation even more interesting, is that only clitic doubled and differentially marked DOs (CDed+DOMed DOs) give rise to this inverse binding dependency. An undoubled DO does not allow for such effects: in (2), the only possible interpretation is an unbound one, where the possessive may pick up an antecedent from the larger context but definitely not *any client*.

```
(1)
```

- a. Orice soţi responsabil o va ajuta pe soţia luii la treburile casnice. any husbandi responsible her.cl will help DOM wife.the hisi at chores.the household 'Any responsible husbandi will help hisi wife with the household chores.'
- b. Soțul ei, o va ajuta pe orice soție, la treburile casnice. husband.the her, her.cl will help DOM any wife, at chores.the household 'Lit. Her, husband will help any wife, with the household chores.'
- (2) Consilierul său, bancar va sfătui orice client, în așa fel încât councillor his, banking will advise any client, in such a way that investiția lui să aducă profit.
 investment his SUBJ bring profit
 'His, banking councilor will advise any client, in such a way that his investment will be profitable.'

Romanian also allows a third variety of direct objects, namely object DPs which have been differentially object marked (DOMed) but not clitic doubled (3a). This variety bears the functional preposition $pe\ (on)$, which obligatorily marks those object DPs that are high on the animacy and definiteness scales (Aissen 2003): thus, $pe\$ is obligatory with personal pronouns and proper names, optional with definite descriptions and indefinites and impossible with DOs denoting inanimate referents or bare nouns. Only differentially marked objects may be additionally clitic doubled (3b):

(3)

- a. Am auzit pe copii venind.
 have.I heard DOM children coming.
 'I heard the children coming.'
- b. (*I*)-am ajutat pe copii la teme. them.cl-have.I helped DOM children at homework. 'I helped the children with their homework.'

DOMed DOs bear the differential marker *pe*, a functional category notated K (from *case*), which is external to markers of definiteness and indefiniteness. In other words K selects a DP

theme-subject. The latter might be actually merged lower and function as a derived subject.

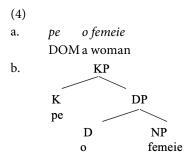
experiencer object may be a proper binder in example (1), given that it is a subject-like argument, competing with a

Reinhart (2001) notices that backward binding seems to be allowed with psych verbs in English (example 1). While these data are very interesting, given that they seem to challenge the c-command requirement for binding, we chose to discuss our experimental data on Romanian against the more general view that proper binding necessitates c-command and the English example employed in the paper patterns with (2) below. Note, nevertheless, that the

⁽¹⁾ His₁ health worries every patient_i.

^{(2) *} His₁ doctor visited every partient₁.

constituent, acting as a *phrasal affix* so DOMed DOs will be labelled as KPs and will exhibit the structure below:



K thus represents one more functional category present within the extended projection of the Noun. As a DOM language, Romanian distinguishes between the extended KPs (*pe*-DPs) and the smaller, unmarked DPs. Historically, as argued in Hill and Mardale (2019, 2021)², *pe* is the descendent of the former allative preposition (*s*)*pre* (*to*), which underlies modern Romanian *pe* (on). This P underwent a process of downward reanalysis. PE lost its prepositional role and instead of c-selecting a DP became a K head in the projection of the complement itself. It may be shown that in Modern Romanian K is a spell out of a syntactic [person] feature (Cornilescu 2000).

This paper has a twofold aim: a) to present the results of an experiment on Subject-Object dependecies in Romanian investigating the possibility of the inverse binding interpretation in (1b); b) to propose a syntactic account for the experimental results. We start by presenting some data from the literature suggesting that clitic doubled DOs undergo movement from their merge position (section 2); we then spell out our hypothesis in section 3: Romanian CDed+DOMed DOs may bind into the subject DP irrespective of surface word order; single DOMed DOs and unmarked counterparts are not likely to bind into the Subject when they do not precede it. In section 4 we present the experiment and in section 5 we propose a syntactic account: the pronominal clitic acts a movement trigger for marked DOs, which possibly reach a landing site wherefrom they may c-command the subject. Section 6 contains the conclusions.

2. Preliminaries: evidence for movement

The pronominal clitic has been argued to trigger movement of its double DP from inside the VP into a position within the T area (Dobrovie-Sorin 1994, Cornilescu 2002a, Tigău 2011) or to move by itself (Cornilescu 2002b, Cornilescu and Cosma 2014). In what follows, we will briefly review some of the arguments supporting movement out of VP:

Hill and Mardale (2019) posit a downward reanalysis of PE from a locative preposition (P) to case marker (K) and further to a marker of discourse agreement on the nominal determiner (D): P>K>D. The three stages of reanalysis are argued to trigger various ways of feature-checking mechanisms inside the marked DO: K-PE has a valued discourse feature that foregrounds the marked DP and disallows Clitic Doubling (CD); D-PE bears an underspecified discourse feature which needs CD for valuation. Hill and Mardale (2019) also notice that K-PE is productive in Old Romanian, while the D-PE is pervasive in Modern Romanian and claim that this diachronic shift from K-PE to D-PE is determined by the rise and spread of clitic constructions in the language.

2.1. Supine clauses

Cornilescu and Cosma (2014) discuss, for instance, the case of Romanian supine clauses and observe that in these configurations the verb may select unmarked and DOMed DOs but never CDed+DOMed DOs. The supine clause in example (5) *de vizitat pe cineva* contains the indefinite bare quantifier *cineva* 'somebody' as a DO. This DO ranges over [+human] referents and needs to be differentially marked but is never clitic doubled. As such, it represents a perfect candidate for the verbal supine. If we were to replace the bare quantifier with a DO expressed by means of a personal pronoun, as in (6), the result is infelicitous: the DO *pe ei* needs to be both differentially marked and clitic doubled but the supine clause does not have sufficient structure to accommodate the pronominal clitic.

- (5) Nu ne putem vedea mâine pentru că am de vizitat pe cineva. not we.refl. can.we see tomorrow because have.I of visited DOM somebody 'We cannot meet tomorrow because I have to visit somebody.'
- (6) *Nu ne putem vedea mâine pentru că am de vizitat pe ei. not we.refl. can.we see tomorrow because have.I of visited DOM them 'We cannot meet tomorrow because I have to visit somebody.'

Consider the examples in (7) and (8): from (a) we notice that a DO expressed by means of a personal pronoun is necessarily clitic doubled – lack of doubling leads to ungrammaticality (b). In (8a) an attempt is made to include the same DO within a supine clause: the result is ungrammatical given that clitic doubling in not possible. Example (8b) is, on the other hand, felicitous, given that an undoubled DO has been used.

```
(7)
                     ajutat pe
                                    ei
                                          să
                                                  ajungă la facultate.
      them.cl-have.I helped DOM them SUBJ. reach
                                                         at faculty
      'I helped them get to college.'
Ъ.
             ajutat pe
                             ei
                                   să
                                          ajungă la facultate.
      have.I helped DOM them SUBJ. reach
                                                  at faculty
      'I helped them get to college.'
(8)
```

a. *E greu de ajutat pe ei.
is hard of helped DOM them
'It is hard to help them.'

b. E greu de ajutat copiii încăpăţânaţi.
 is hard of helped children.the stubborn
 'It is hard to help stubborn children.'

Thus, the prepositional supine appears to reject those internal arguments which need to be clitic doubled (i.e. DOs expressed by means of personal pronouns) and to accept those DOs which do not require doubling or which disallow it (bare quantifiers such as *cineva* 'somebody'). Starting from these observations, Cornilescu and Cosma (2014) posit that the prepositional supine is a reduced clause which lacks the Agreement projection. The pronominal clitic is not allowed in the prepositional dative precisely because it needs to leave the VP and reach a projection, which is not

part of the reduced clause put forth by the prepositional supine; if the pronominal clitic were to remain inside the VP, we would be able to have clitic doubled DOs within this configuration.

2.2. Parasitic gaps

Cornilescu (2002b) notices an interesting difference between configurations featuring clitic doubled DOs and configurations lacking doubling when these DOs undergo Heavy NP Shift (HNPS): while unmarked and DOMed DOs may license parasitic gaps when shifted to the right, CDed+DOMed DOs do not. The sentences in (9) exemplify this:

```
(9)
                                   a întrerupe [] fiecare concurent separat.
a.
      Am
             examinat t fără
      have.I examined t without to interrupt [] each
                                                           contestant separately.
      'Lit. I examined without interrupting each contestant separately.'
              examinat t fără
                                    a întrerupe [] pe
                                                           fiecare concurent
      have.I examined t without to interrupt [] DOM each
                                                                   contestant separately.
      'Lit. I examined without interrupting each contestant separately.'
                    examinat t fără
                                         a întrerupe [] pe
                                                                fiecare concurent separat.
C.,
      him.cl-have.I examined t without to interrupt [] DOM each
                                                                        contestant separately.
      'Lit. I examined without interrupting each contestant separately.'
                                                                                 Cornilescu (2002b: 6, p.2)
```

Parasitic gaps are empty categories inside an island for extraction (an adjunct), which are rendered acceptable by another gap outside this island. The latter gap is known as the *licensing gap*. Both gaps are bound by the same constituent labelled as *the antecedent*. In (9), the binder is *fiecare concurent separat* (*each competitor separately*) which has undergone HNPS an A'-movement by means of which the licensing gap has been created.

Note that if HNPS does not apply, i.e. if the licensing gap does not exist, the examples (9a) and (9b) above are ungrammatical because there is nothing to license the parasitic gap:

```
(10)
a. *Am examinat fiecare concurrent separat fără a întrerupe [].
have.I examined every contestant separately without to interrupt []
'I have examined every contestant separately without interrupting.'
b. *Am examinat pe fiecare concurrent separat fără a întrerupe [].
have.I examined DOM every contestant separately without to interrupt []
'I have examined every contestant separately without interrupting.'
```

Interestingly, the counterpart of (9c), where HNPS has not applied, is felicitous (probably because the pronominal clitic saturates the argument structure of the verb and there is not gap to speak of):

```
(11) Am examinat pe fiecare concurent separat fără a-l întrerupe []. have. I examined DOM every contestant separately without to-him.cl interrupt [] 'I have examined every contestant separately without interrupting.'
```

HNPS is an instance of A'-movement, whereby a constituent from within the ν P is moved out of the ν P and right-adjoined to this ν P. The moved constituent leaves behind a gap, which may license a(nother), parasitic, gap. In examples (9a) and (9b), the direct objects *fiecare*

concurent and pe fiecare concurent respectively have been moved from within their position inside the vP hence their traces may license a parasitic gap and the examples are well-formed. In example (9c), on the other hand, the clitic doubled DO which undergoes HNPS is not to be found inside the vP and, consequently, when HNPS applies, the trace of the DO may no longer license the parasitic gap. For a more formal account on PG licensing see Cornilescu (2002b).

2.3. Focus projection

Gierling (1997) shows that, from a phonological point of view, clitic doubled DOs do not behave as arguments of the verb with respect to focus projection. They are shown to actually pattern with adjuncts, which do not permit the projection of focus onto the verb. Examples (12) and (13) below capture this difference: as pointed out by Gierling (1997) (12b), containing an unmarked DO, may be used as an answer to both questions listed under (12a); on the other hand, (13b), which contains a clitic doubled DO may only function as an answer to the first question inquiring about the argument. The broad focus question is argued not to be suitable in this situation unless (13b) contains an additional stress on the verb as in (13c):

```
(12)
       Ce cauți?
                                   Ce faci?
       'What are you looking for? What are you doing?'
b.
       Caut
              o carte.
       search.I a book
       'I am searching for a book.'
(13)
       Pe cine cauți?
                                  *Ce faci?
       Who are you looking for? *What are you doing?
b.
       Îl
              caut
                      рe
                             Ion.
      him.cl search.IDOM John
       'I am searching for John.'
       [_{\rm F} \hat{I} l]
              CAUT pe ION]
       him.cl search.I DOM John
       'I am searching for John.'
```

The explanation provided in Gierling (1997) for this state of affairs runs as follows: focus may not project from a DP which has been doubled by means of a clitic to a higher consituent like the VP (as it usually does with an undoubled DO) because this clitic doubled DO has left the VP.

3. An experiment on Subject-Object dependencies in Romanian

3.1. Experimental hypotheses

The insights presented above support a movement hypothesis for CDed+DOMed DOs: Cornilescu (2002b) and Cornilescu and Cosma (2014) posit movement of the pronominal clitic out of the VP, presumably from a BigDP-like DO hosted in the complement position of the V (as in Uriagereka 1995, for instance). Gierling's (1997) argument seems to indicate that the

doubled DO itself leaves its merge position from within the VP. Some other linguists (Dobrovie-Sorin 1994, Cornilescu 2002a, Tigău 2011, 2016) hint that a clitic doubled DO may bind into the Subject, which counts as evidence that the DO leaves the VP reaching a landing site wherefrom it may c-command the subject, hence the binding dependency.

The experiment we propose in this article is meant to investigate whether the *DO into Su* binding dependency holds for CDed+DOMed Dos, irrespective of the surface word order of the two arguments, as it has been claimed in the literature but never actually shown. Given the discussion on evidence for movement of CDed+DOMed DOs presented above, we start from the hypothesis that such DOs may bind into the Subject DP, irrespective of the surface word order. We posit that in table 1 below all the four possible binding directions will hold for CDed+DOMed DOs, while for DOMed and unmarked DOs only the binding directions depicted in table 2 are possible:

Table 1: parameters – word order and binding (CDed+DOMed DOs)

Word order	Su before DO		DO before Su	
Binding direction	Su binds DO	DO binds Su	Su binds DO	DO binds Su

Table 2: parameters – word order and binding (DOMed DOs and unmarked DOs)

Word order	Su before DO		DO before Su	
Binding direction	Su binds DO	DO binds Su	(?) Su binds DO ³	DO binds Su

The situation *DO before* S

(1)

- a. ?Cărțile lui, le recitește orice autor, cu plăcere books.the his them.cl reads any author with pleasure. 'Intended reading: Any author reads his books with pleasure.'
- b. ?Cărțile LUI; recitește orice autor; cu plăcere. books.the HIS reads any author with pleasure. 'Intended reading: Any author reads his books with pleasure.'
- c. ??Pe doctorandul său, orice profesor, ajută cu sfaturi și bibliografie.

 DOM PhD student.the his any professor ajută with advice and bibliography 'Any professor helps his PhD student with advice and bibliography.'

In the experiment, we only used clitic left dislocated unmarked DOs similar to the one in (1a) for the situation *DO before Su*, *Su binds into DO*. We also leave the focused variant for further research.

The situation *DO before Su; Su binds into DO* should be possible given that the moved DO may still reconstruct to its merge position and thereby be bound by the subject DP. Note, however, that when the DO is unmarked, this binding interpretation is problematic: in this configuration, the DO may be either Clitic Left Dislocated, (1a), or contrastively focused, (1b). If Clitic Left Dislocated, the DO occupies a position wherefrom it precedes the subject DP but it needs to be resumed by means of a pronominal clitic. Given our experimental hypothesis according to which the pronominal clitic doubling of a DO influences binding, we might expect the clitic in the Clitic Left Dislocated configurations to also interfere with binding along the same lines. Note, however, that (1a) does not allow a bound interpretation between the Subject and the DO, nor does the focused variant in (1b) allow this bound interpretation. Regarding the configuration in (1a), we may posit (in line with Tigău 2018) that the left dislocated DO has been merged directly in the left periphery, as proposed by Cinque 1990, Iatridou 1991, 1994, Anagnastopoulou 1994, Zagona 2002, Suñer 2006, a.o. Hence there is no lower position where it could reconstruct. Note, on the other hand, that a single DOMed DO, which has been topicalised may be bound by the subject. The example is, however, at best marginal and the need for a doubling clitic is strongly felt.

The following hypotheses will be probed for in our experiment.

- H1. CDed+DOMed DOs bind into the Subject irrespective of word order
- H2. DOMed DOs bind into the Subject only when the DO precedes the Su
- H2. Unmarked DOs bind into the Subject only when the DO precedes the Su

3.2. Experiment design

When checking binding dependencies between the Subject and the direct object in Romanian, we have to bear in mind that objects may come in three flavours: unmarked, differentially marked by means of pe (on) (DOMed DOs) and clitic doubled and differentially marked (CDed+DOMed DOs). This variation naturally led to our designing three corresponding experiments, each featuring a different kind of DO. The experiments, however, were similar in design: they all contained experimental items featuring a subject and a direct object, where the order of the two arguments varied between Su before DO and DO before Su, along with the direction of binding, which varied between: Su binds into DO vs. DO binds into Su. We thus obtained four possible patterns, presented in table 3 below:

Table 3: Experimental items function of word order and binding

Word order	Su before DO		DO before Su	
Binding direction	Su binds DO	DO binds Su	Su binds DO	DO binds Su

Each experiment contained 12 sentences, which were varied according to the 4 patterns such that a total of 48 experimental items was obtained for each experiment. Example (14) contains one sample item featuring an unmarked DO, in all its variants:

(14)

Su before O, Su binds into O

a. Orice $pilot_i$ bun verifică personal avionul $său_i$ înainte de decolare. any $pilot_i$ good checks personally plane.the his_i before of take-off 'Any good $pilot_i$ checks his_i plane personally before take-off.'

Su before O, O binds into Su

b. Pilotul său_i verifică personal orice avion_i înainte de decolare.
pilot its_i checks personally any plane_i before of take-off
'Lit. Its_i pilot checks any plane_i personally before take-off.'

O before Su, Su binds into O

c. Avionul său_i îl verifică orice pilot_i înainte de decolare. plane.the his_i it.cl checks any pilot_i before of take-off 'Any good pilot_i checks his_i plane before take-off.'

O before Su, O binds into Su

d. Orice avion; îl verifică personal pilotul său; înainte de decolare. any plane; it.cl checks personally pilot.the its; before of take-off. 'Lit. Its; pilot checks any plane; personally before take-off.'

The examples in (15) contain an experimental item featuring a CDed+DOMed DO:

(15)

Su before O, Su binds into O

a. Orice sot_i responsabil o va ajuta pe sotia lui, la treburile casnice. any husband, responsible her.cl will help DOM wife the his, at chores the household 'Any responsible husband will help his wife with the household chores.'

Su before O, O binds into Su

b. Soţul ei, o va ajuta pe orice soţie, la treburile casnice. husband.the her, her.cl will help DOM any wife, at chores.the household 'Lit. Her, husband will help any wife, with the household chores.'

O before Su, Su binds into O

c. Pe soția lui_i o va ajuta orice soț_i responsabil la treburile în casă.

DOM wife.the his_i her.cl will help any husband_i responsible at chores.the household 'Any responsible husband_i will help his_i wife with the household chores.'

O before Su, O binds into Su

d. *Pe orice soției o va ajuta soțul eii la treburile în casă*.

DOM any wife her.cl will help husband.the her at chores in household 'Lit. Heri husband will help any wife with the household chores.'

The experiment on single DOMed DOs mirrored the one containing CDed+DOMed DOs, the only difference being that the pronominal clitic had been discarded from all experimental items previously used in the CDed+DOMed experiment.

Each experiment contained two tasks:

- 1. a **norming task** where the respondents were required to identify the binding dependency at stake by choosing from among three possibe readings: a) one which enclosed the binding dependency interpretation holding between Su and DO, b) one where the possessive pronoun would bind another antecendent, not present in the experimental item, and c) a third answer variant where both variants a) and b) could be ticked as possible.
- 2. an **acceptability task** where respondents had to assign a score ranging from 1 to 7 (1 being the lowest acceptability score and 7 being the highest).

Consider an example of the two tasks:

(16) Şeful său, îl mai verifică din când în când pe orice angajat_i.

boss.the his_i him.cl more checks from time to time DOM any employee_i.

'Lit. His_i boss checks on any employee_i from time to time.'

Norming task: The sentence below may be interpreted as follows:

- a. Any employee gets checked by his own boss from time to time.
- b. The boss of a certain person checks any employee.
- c. Both as a) and b).

Acceptability task: Assign an acceptability value from 1 to 7 to this sentence, where 1 stands for 'totally unacceptable' and 7 stands for 'fully acceptable'.

The 48 experimental items in each experiment were distributed into 4 lists using the Latin square method for an even distribution. To the 12 items in each list 12 fillers were added, grouped into: 4 completely unacceptable items (for the acceptability experiment)/with no possible answer (for the norming experiment), 4 completely acceptable items/all answers possible, and 4 expectedly average items/with one variant response. The fillers had been previously tested for acceptability in a smaller, informal experiment. In the end, each list contained 24 items and was assessed by at least 20 native speakers of Romanian, mostly students of the University of Bucharest, who took part in the experiment for one course credit. We thus had a total of 80 respondents per experiment, so 240 respondents in the three experiments altogether. Answers were afterwards verified and the outliers were removed (i.e. questionnaires where more than 6 fillers had been evaluated incorrectly).

3.3. Experimental results and discussion

3.3.1. Binding dependencies between the Subject and CDed+DOMed DOs

We repeat below one sentence from example (15) for convenience (see page 8 for all the tested variants of this item):

(17) Su before O, Su binds into O

a. Orice soți responsabil o va ajuta pe soția lui; la treburile casnice. any husbandi responsible her.cl will help DOM wife.the hisi at chores.the household 'Any responsible husband will help his wife with the household chores.'

As may be seen from table 4, the intended bound reading is accepted by most of the respondents, irrespective of the order of the two arguments or the direction of binding (over 80%). Surface word order seems to play a part, however, as those items where the order between the two arguments matches the direction of binding are more readily accepted by respodents on their intended bound reading. Consider the bolded lines of table 4.

Importantly for our analysis, CDed+DOMed objects may bind into the subject DP irrespective of whether they precede or follow it within the sentence. In the configuration *Su before DO*, *DO binds into Su* the desired bound interpretation was found possible by over 83% of the respondents.

Table 4: Intended bound readings in the norming task (CDed+DOMed DOs)

1.	Su before DO	Su binds into DO	96%
2.	Su before DO	DO binds into Su	83%
3.	DO before Su	Su binds into DO	89%
4.	DO before Su	DO binds into Su	96%

3.3.2. Binding dependencies between the Subject and single DOMed DOs

The tested items containing single DOMed DOs closely mirrored those featuring clitic doubled DOs, the only difference being that the pronominal clitic had been eliminated:

(18) Su before O, Su binds into O

 $Orice sot_i$ responsabil va ajuta pe sotia lui, la treburile casnice. any husband, responsible will help DOM wife the his, at chores the household 'Any responsible husband will help his wife with the household chores.'

Just as in the previous case, items containing single DOMed DOs fare better on their intended bound reading if the surface order of the two arguments matches the direction of binding (see lines 1 and 4 of table 5). Instances of inverse binding, are less readily accepted on their bound reading. Instances where a fronted object is bound by the subject are found acceptable on their bound interpretation by more than half of the respondents. This is not surprising: we might imagine that in these cases the fronted DO reconstructs in its initial merge position within the VP and below the position occupied by the subject.

What is surprising, however, is the relatively high score that items where a DO binds into a preceding subject get (line 2 of the table 5). According to our hypothesis H2, respondents should not accept a bound interpretation in this case. The score of 51%, even though significantly lower than the scores obtained for the other configurations, needs to be explained.

Table 5: Intended bound readings in the norming task (single DOMed DOs)

1.	Su before DO	Su binds into DO	99%	
2.	Su before DO	DO binds into Su	51%	
3.	DO before Su	Su binds into DO	67%	
4.	DO before Su	DO binds into Su	96%	

3.3.3. Binding dependencies between the Subject and unmarked DOs

An example featuring a binding dependency with an unmarked DO has been provided below for convenience. In order to see all the tested variants of this item, see example (15) above:

(19) Su before O, Su binds into O

Orice pilot_i bun verifică personal avionul său, înainte de decolare. any pilot_i good checks personally plane.the his_i before of take-off 'Any good pilot_i checks his_i plane personally before take-off.'

The results in this experiment put forth a different pattern: the most readily accepted configuration is the one where the subject precedes and binds the DO, which is expected considering the previous two experiments. Unexpectedly, the configuration where the DO precedes and binds into the subject fares less well than its counterparts from the preceding experiments. The only explanation we may think of is that in these patterns we used a fronted inanimate object which was also resumed by a pronominal clitic (Clitic Left Dislocation), given that a simple fronting configuration did work. The binding dependencies might be problematic in such configurations but further research is needed to find out why.

Items featuring inverse binding fare even worse on their intended bound interpretation. We expect a low score for *Su before DO* and *DO binds into Su*, given that unmarked objects are not expected to move out of their merge position and bind into the subject (López 2012). We also expect a low score for the pattern in line 3 of table 6 for the reasons extended upon in fn. 4.

Table 6: Intended bound readings in the norming task (unmarked DOs)

1.	Su before DO	Su binds into DO	91%
2.	Su before DO	DO binds into Su	56%
3.	DO before Su	Su binds into DO	40%
4.	DO before Su	DO binds into Su	71%

The participants thus seemed to pattern alike and to consider that a CDed+DOMed DO would more likely bind a preceding subject.

Even if we see a clear difference between the way in which items featuring CDed+DOMed DOs are understood in their intended bound reading and the way in which items containing DOMed or unmarked DOs fare in this respect, we cannot but notice that the overall precentages are quite high, surpassing 50% even in those cases where we would not expect a bound interpretation (e.g., an unmarked DO binding into a preceding Su, 56%). A possible answer might come from the tested items themselves – on checking them individually, we observed that some of the items received very high scores on the relevant binding interpretation, irrespective of word order and DO type. Consider example (20) below, which got 100% on the binding reading, as opposed to example (21) with the same configuration, which only got 30% on the binding reading:

```
(20) Pe copilul ei aflat în primejdie nici o mamă adevărată

DOM child.the her found in danger no mother true

nu-l va putea abandona.

not-him.cl will can abandon.

'No true mother will be able to abandon her child found in a dangerous situation.'
```

```
(21) Gazda lui îl pune pe fiecare oaspete la masă,
host.the his him.cl put DOM every guest at table
indiferent de cât de săracă este.
irrespective of how poor is
'His<sub>i</sub> hostess will invite to dinner every guest, irrespective of how poor she is.'
```

We assume that this has to do with the fact that the situations described by those items were such that the non-binding interpretation would be less likely. The pragmatic context seemed to be important in this respect. Other items, where a bound reading was not contextually obvious, fared significantly worse, with scores of 40% and less. When taking some of the problematic items out, the differences between CDed+DOMed DO and DOMed DOs with respect to their binding abilities in the *Su before DO*, *DO binds into Su* case increased dramatically. Given that the results regarding unmarked DOs are inconclusive at this point, we will focus on providing a syntactic account for the clear-cut case of CDed+DOMed DOs.

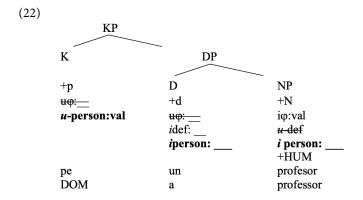
4. Sketching an account for CDed+DOMed DOs

In the beginning of this paper we drew a difference between languages such as English, which are configurational in the sense that they rely on c-command mirrored by surface word order in order to resolve binding relations and non-configurational languages such as Romanian, where surface word order does not seem to be crucial and where CDed+DOMed DOs seem to diregard c-command when it comes to binding into a preceding subject.

In this section, we would like to argue that, in fact, this lack of regard for c-command requirements is only apparent with CDed+DOMed DOs: due to their internal featural makeup, CDed+DOMed DOs are forced to leave their merge position inside the VP in search for suitable projection(s) up the tree, against which they might check their features.

One important ingredient to understanding the syntax of marked DOs (whether simply DOMed or CDed+DOMed) is the fact that they are sensitive to the animacy and definiteness scales (Aissen 2003). In previous work, Cornilescu and Tigău (2018, 2021), Tigău (2020) we posited that this sensitivity be syntactically captured through a [Person] feature, i.e. marked DOs incorporate a [Person] feature.

The tree in (22) shows this at work: the DO *un profesor* (a profesor) denotes a human referent and this is captured through the unvalued interpretable feature [*i*Person:___], which has been added in its feature specification. Given their sensitivity to the animacy hierarchy discussed above, this DP triggers the use of the differential marker *pe*, which is posited to enter the derivation carrying a valued uninterpretable feature [*u*Person:val]. The [*i*Person:___] feature of the NP is further transfered to D and gets checked against the K head, carrying [*u*Person:val]. After feature checking, DOMed DOs will thus end up carrying [*i*Person:val] and will not need to further check this feature by movement. Consider:

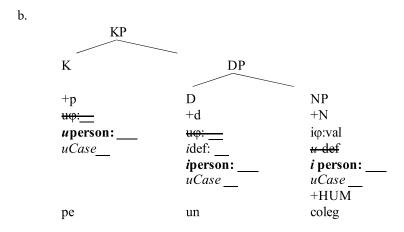


Following Tigău (2020), we posit that CDed+DOMed DOs also start out as KPs, but that their K has been semantically bleached in that its syntactic [Person]⁴ feature is unvalued and uninterpretable this time i.e., [*u*Person: ___]. The DO *un coleg (a colleague)* carries an unvalued interpretable person feature [*i*Person: ___], just like the DO in (22), but this time, due to the slightly different specification of K regarding its person feature, the result of feature checking between K° and D° is an interpretable **unvalued** [*i*Person:___]⁵, as may be seen in (23b).

(23)
a. Îl văd pe un coleg.
him see.I DOM a colleague.
'I see a colleague.'

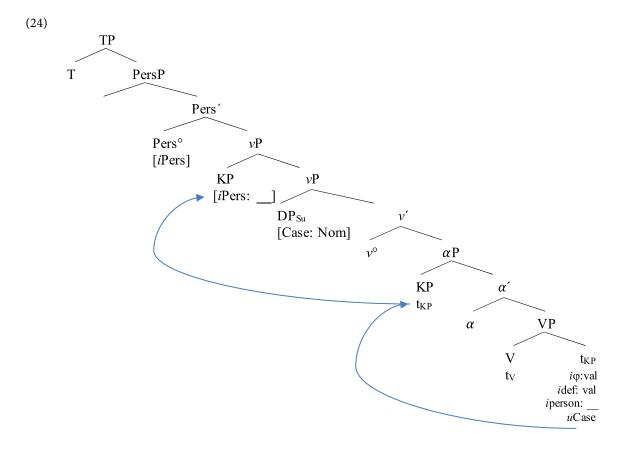
⁴ See Tigău (2020), Cornilescu and Tigău (2018) for a more extensive discussion on why DOMed DOs carry a [Person] feature.

⁵ We follow Pesetsky and Torrego (2007) in distinguishing between valued/unvalued and interpretable/ uninterpretable features.



The [*i*Person__] feature of the KP in (22b) thus needs to be valued against an appropriate head, and the KP will have to scramble all the way into the vicinity of a PersonP to have this feature checked (Săvescu 2009). Consequently, the process of feature checking, which a CDed+DOMed DO needs to go through enables it to reach a position wherefrom it may bind into the subject, which explains the binding dependencies captured in our experiment.

The tree in (24) shows this at work: the DO KP is merged as a complement of the VP but it leaves its base position and moves first to Spec α P and then even further to a position at the left periphery of the ν P, where it will be able to enter an agreement relation with Pers°, which carries a valued interpretable [Person] feature. As a consequence of agreement, the [*i*Person__] feature of the DO will be valued. Having reached its final landing site at the periphery of ν P, the DO is now in a c-commanding position with respect to the position occupied by the DO Subject.



5. Conclusions

The experimental findings show that while CDed+DOMed DOs may bind into the subject irrespective of word order, DOMed and unmarked counterparts are not always inclined to do so. Clitic Doubling thus seems to lead to important interpretive consequences when it comes to phenomena such as Subject-Object binding dependencies and to differentiate Romanian from English (and other Germanic languages) in this respect: Non-CD languages rely on the c-command configuration and surface word order in resolving binding relations (the antecedent must c-command the element containing the bound pronoun. As a consequence, a natural way for the DO to bind into the Subject is to have it moved to the left, in a c-commanding position).

In CD languages such as Romanian, the word order configuration is not decisive: the DO may bind the subject without having to precede it. In the final section we put forth a tentative proposal according to which CDed+DOMed DOs are forced to leave the ν P reaching a landing site wherefrom they may c-command the Subject. Under this account, Romanian is shown to actually pattern with the other non-CD languages, which rely on c-command to resolve binding dependencies. The point of difference would only boil down to the internal make-up of the DO: CDed+DOMed DOs have a featural load which elicits movement out of their merge position. By way of movement, CDed+DOMed DOs end up in a c-commanding position with respect to the subject and they are able to bind into this subject by following the regular rules of binding.

References

Aissen, Judith. 2003. Differential Object Marking: Iconicity vs. Economy. *Natural Language and Linguistic Theory* 21: 435–483.

Anagnostopoulou, Elena. 1994. *Clitic Dependencies in Modern Greek*. Salzburg: Salzburg University dissertation. Chomsky, N. 1980. On Binding. *Linguistic Inquiry* 11: 1–46.

Chomsky, N. 1981. Lectures on Government and Binding. Foris: Dordrecht.

Cinque, Guglielmo.1990. Types of A'-Dependencies. Cambridge: MIT Press.

Cornilescu, Alexandra. 2000. Notes on the Interpretation of the Prepositional Accusative in Romanian. *Bucharest Working Papers in Linguistics*, 2 (1): 91.

Cornilescu, Alexandra. 2002a. Direct object at the left periphery. *Bucharest Working Papers in Linguistics* 4 (1): 1–15.

Cornilescu, Alexandra. 2002b. Clitic doubling and parasitic gaps in Romanian. Paper presented at Going Romance Groningen, November 2002.

Cornilescu, Alexandra and Cosma Ruxandra. 2014. On the Functional Structure of the Romanian *de* supine. In Ruxandra Cosma, Stefan Engelberg, Susan Schlotthauer,

Speranța Stănescu and Gisela Zifonun (eds.), Komplexe Argumentstrukturen. Kontrastive Untersuchungen zum Deutschen, Rumänischen und Englischen. (Konvergenz und Divergenz Series), 283–336. Berlin/Boston: de Gruyter.

Cornilescu, Alexandra, Dinu Anca and Tigău, Alina. 2017. Romanian Dative Configurations: Ditransitive Verbs, A Tentative Analysis, *Revue Roumaine de Linguistique*, special volume *Investigating Romanian Datives / Recherches autour du datif roumain*, LXII (2). 179–206.

Cornilescu, Alexandra, Alina Tigău. 2018. Towards a derivational account of Romanian binding ditransitive constructions. In Teresa Parodi (ed.), *Proceedings of the VIII Nereus International Workshop "Referential Properties of the Romance DP in the Context of Multilingualism. Arbeitspapier* 129, 121–140. Konstanz: Fachbereich Sprachwissenschaft, Universität Konstanz.

Cornilescu, Alexandra, Alina Tigău. 2021. Is there a dative alternation in Romanian? Remarks on the cross-categorial variation of datives in ditransitive construction. In Adina Dragomirescu, Alexandru Nicolae, (eds.), Romance Language and Linguistic Theory 2017. Selected papers from Going Romance 31, 91-109. Bucharest, Amsterdam: Benjamins.

Dobrovie-Sorin, Carmen. 1994. *The Syntax of Romanian. Studies in Generative Grammar, vol* 40, Berlin: Mouton de Gruyter.

Gierling, Diana. 1997. Clitic Doubling, Specificity and focus in Romanian. In Black, James. and Motapanyane, Virginia (eds.) *Clitic, pronouns and movement,* 63–85. Amsterdam: John Benjamins.

Hill, V. and A. Mardale. 2019. Patterns for Differential Object Marking in the history of Romanian. *Journal of Historical Syntax* 3 (5): 1–47.

Hill, V. and A. Mardale. 2021. *The diachrony of Differential Object Marking in Romanian*. Oxford: Oxford University Press.

Iatridou, Sabine. 1991. Clitics and island effects. ms. MIT, Cambridge

Iatridou, Sabine. 1994. Clitics and Island Effects. In Roumyana Izvorski and Victoria Tredinnick (eds.), *University of Pennsylvania Working Papers in Linguistics* 2 (1). 11–30. Philadelphia: University of Pennsylvania Linguistics Club.

López, Luis. 2012. Indefinite Objects. Scrambling, Choice Functions, and Differential Marking. Cambridge, Massachusetts: MIT

Pesetsky, David and Torrego, Esther. 2007. The Syntax of Valuation and the Interpretability of Features. In Simin Karimi, Vida Samiian, Wendy K. Wilkins (eds), *Phrasal and Clausal Architecture: Syntactic Derivation and Interpretation*, 262–194. Amsterdam: John Benjamins.

Reinhart, Tanya. 1976. The syntactic domain of anaphora. PhD Dissertation, MIT.

Reinhart, Tanya. 1983. Anaphora and semantic interpretation. London: Croom Helm.

Reinhart, Tanya. 2001. Experiencing derivations. In Rachel Hastings, Brendan Jackson and Zsofia Zvolenszky (eds.) *Proceedings of Semantics and Linguistic Theory* 11, 365–387. Ithaca, NY: CLC Publications.

Săvescu, Oana. 2009. A Syntactic Analysis of Pronominal Clitic Clusters in Romance: The View from Romanian. New York: New York University dissertation.

Suñer, Margarita. 2006. Left dislocation with or without epithets. Probus 18 (3): 127-158.

Tigău, Alina. 2011. Syntax and Interpretation of the Direct Object in Romance and Germanic

Languages with an Emphasis on Romanian, German, Dutch and English. Bucharest: Editura Universității București.

Tigău, Alina. 2016. A DRT analysis of Clitic Doubling. Bucharest: Editura Universității București.

Tigău, Alina. 2018. Linguistic creativity with Clitic Left Dislocated objects in Old Romanian. *Creativity* 1 (1): 107–122.

Tigău, Alina. 2020. Experimental insights into the syntax of Romanian ditransitives. Berlin: Mouton de Gruyter.

Uriagereka, Juan. 1995. Aspects of the syntax of clitic placement in Western Romance. *Linguistic Inquiry* 26 (1): 79–123.

Zagona, Karen. 2002. The Syntax of Spanish. Cambridge: Cambridge University Press.