

Differential Object Marking in Spanish ditransitive constructions. An empirical approach

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1. Introduction*

In Spanish, a human definite direct object in a transitive construction must generally be marked by the differential object marker (DOM) *a*, as illustrated in (1). The DOM-marked definite direct object can cooccur with a prepositional object marked by *a*, as in (2). However, Spanish DOM-marking may be blocked or disfavored by the occurrence of an indirect object marked with *a* in a ditransitive construction, as in (3a), and it is still controversial whether DOM-marking is better or even obligatory if the indirect object is doubled by a dative clitic pronoun (i.e. *les* in (3b)).

- (1) (a) Busco al médico.
seek-1SG DOM-the doctor
(b) *Busco el médico.
seek.1SG the doctor
'I am seeking the doctor.'
- (2) Envié a mi hermana a Caracas.
sent-1SG DOM my sister to Caracas
'I sent my sister to Caracas.'
- (3) (a) El maestro presentó (a)/*a su mujer a los alumnos.
the teacher presented-3SG DOM his wife to the students
(b) El maestro les presentó ^{ok/??/*}(a) su mujer a los alumnos.
the teacher CLIT.DAT.3PL presented-3SG DOM his wife to the students
'The teacher presented his wife to the students.'

These observations raise the following two main questions: 1. Is DOM-dropping a stylistic or a categorical variation? and 2. if it is categorical, what are the underlying parameters? In the literature there are different suggestions for relevant parameters, including the following: a) animacy and referentiality, which are the essential DOM parameters in transitive constructions; b) word order, c) clitic doubling of the indirect object and d) the extent to which the direct object is modified (no modification, short or long modification). The article is structured as follows: Section 2 provides a short overview on DOM in transitive sentences. Section 3 discusses the conditions for DOM in ditransitive sentences. Here we focus on two conditions discussed in the literature: (i) clitic doubling of the indirect object and (ii) word order. Section 4 describes different ditransitive verb classes that we used for our experiment. Section 5 describes the design of a grammaticality judgment in a 2x2 design (clitic doubling x word order) in 16 different contexts. Section 6 presents and discusses the results of the

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questionnaire and provides a short summary.

2. DOM in transitive constructions

Differential Object Marking (DOM) in Spanish is expressed by the marker *a*, which is a homophone of the preposition *a* ‘to’ and of the dative marker *a* of the indirect object. We will confine the investigation to European Spanish throughout this paper, but see Company Company (2002), von Heusinger & Kaiser (2005) and Montrul (2013) for American Spanish. DOM-marking in Spanish transitive clauses is determined by two main parameters: (i) properties of the direct object, and (ii) transitivity properties of the verb, including the lexical semantics of the verb. It is commonly assumed that the main factors for DOM in the languages of the world is the referential status of the direct object, i.e. the combination of semantic and (discourse) pragmatic features such as animacy, referentiality (definiteness and specificity), and topicality (see Comrie 1975, Bossong 1985, Aissen 2003, Butt 2006, de Swart 2007). In Spanish, a direct object is DOM-marked if it is human on the Animacy Scale (4) and at least indefinite non-specific on the Referentiality Scale (5). The definite human direct object in (6) must be marked, while the non-specific human direct object in (7) is optionally marked. Note that the non-specificity of the direct object is determined by the subjunctive mood of the predicate *sepa* (‘might know’) in the relative clause that is headed by the direct object *un ayudante* (‘an assistant’).

- (4) Animacy Scale:
human > animate > inanimate
- (5) Referentiality Scale:
personal pronoun > proper noun > definite NP > indefinite specific NP
> indefinite non-specific NP > non-argumental
- (6) Vi *(*a*) la mujer.
saw-1SG DOM the woman
‘I saw the woman.’
- (7) Necesitan (*a*) un ayudante que sepa inglés.
need-3PL DOM an assistant that know-SUBJ.3SG English
‘They need an assistant who knows English.’

DOM in transitive constructions also depends on word order or topicalization of the direct object. Leonetti (2004: 86) illustrates this by clitic left dislocation, as in (8a) where DOM is obligatory, while the non-topicalized counterpart optionally takes DOM (8b):

- (8) (a) *(A) muchos estudiantes, ya los conocía.
 DOM many students, already CLIT.ACC.3PL knew-1SG
 ‘Many students I already knew.’
 (b) Ya conocía (a) muchos estudiantes.
 already knew-1SG DOM many students
 ‘I already knew many students.’

A second trigger for DOM is a long modification of the direct object. While (9a) is well-formed without DOM, the modified direct object in (9b) must take DOM (see Leonetti 2004: 87 for a similar argument with bare nouns in direct object position):

- (9) (a) Necesitan un trabajador.
Need-3PL one worker
'They need a worker.'
- (b) Necesitan *(a) un trabajador cualificado para el puesto.
Need-3PL DOM one worker qualified for the job
'They need a qualified worker for the job.'

3. DOM in ditransitive constructions

In ditransitive constructions, the situation for DOM-marking is much more complex. In general, Spanish grammarians emphasize the fact that there is a blocking effect for DOM when an *a*-marked indirect object is present. It is assumed that in this case DOM can or even has to be omitted in order to disambiguate the direct object from the indirect one (Bello 1847: §900, Real Academia Española 1973: 3.4.6, see also Campos 1999: 1554), see (3a), repeated here as (10):

- (10) El maestro presentó (a)/*a su mujer a los alumnos.
the teacher presented-3SG DOM his wife to the students
'The teacher presented his wife to the students.'

This assumption is supported by the observation that DOM-omission is not allowed when the indirect object is a clitic pronoun and hence not *a*-marked (Rodríguez-Mondoñedo 2007: 212, Fábregas 2013: 31):

- (11) El maestro les presentó *(a) su mujer.
the teacher CLIT.ACC.3PL presented-3SG DOM his wife
'The teacher presented them his wife.'

Note, furthermore, that the presence of other *a*-marked elements does not necessarily evoke the omission of DOM. As already illustrated in (2), repeated here as (12), in clauses with a prepositional phrase marked by *a* 'to', the direct object is generally marked with DOM (Comrie 2013: 42):

- (12) Envié a mi hermana a Caracas.
sent-1SG DOM my sister to Caracas
'I am sending my sister to Caracas.'

Yet, there is a number of controversial issues with respect to DOM marking in ditransitive constructions. In what follows, we will focus on two issues. The first is the question of whether or not clitic doubling of the indirect object has an impact on DOM marking, the second concerns the claim that the omission of DOM is linked to the position of the direct object with respect to the indirect object.

3.1 DOM and clitic doubling of indirect objects

Company Company (1998, 2003) predicts a correlation between the co-occurrence of DOM and dative case marking with clitic doubling. According to her observations, DOM marking "improves noticeably when the I[ndirect] O[bject] is duplicated with a coreferential clitic" (Company Company 2003: 235f), as shown in (13):

- (13) (a) ^{??}/*El maestro presentó a su mujer a los alumnos.
 the teacher presented-3SG DOM his wife to the students
 (b) El maestro les_i presentó a su mujer a los alumnos_i.
 the teacher CLIT.DAT.3PL presented-3SG DOM his wife to the students
 ‘The teacher presented his wife to the students.’

Other researchers, however, do not agree with these judgements. Campos (1999: 1554, fn.79), for instances, notes that many speakers do not accept utterances like (13b) by reporting the following examples:

- (14) (a) *Les_i presentaron a la hija a los invitados_i.
 CLIT.DAT.3PL presented-3PL DOM the daughter to the invited
 ‘They presented her daughter to the invited people.’
 (b) *Le_i dieron a la niña a una madre adoptiva_i.
 CLIT.DAT.3SG gave-3PL DOM the girl to a mother adoptive
 ‘They gave the girl to an adoptive mother.’

Fábregas (2013: 31) reports that “some speakers consider [(15a)] more acceptable than [(15b)], and this is the case with sequences where the direct object is a pronoun, a proper name or is headed by a universal quantifier.”

- (15) (a) Enviaron a todos los heridos a la doctora.
 sent-3PL DOM all the injured people to the doctor
 (b) *Le_i enviaron a todos los heridos a la doctora_i.
 CLIT.DAT.3SG sent-3PL DOM all the injured people to the doctor.
 ‘They sent all the injured people to the doctor.’

A similar observation is provided by Rodríguez-Mondoñedo (2007: 16) who claims that “[...] clitic-doubled I[ndirect] O[bject]s seem to allow the dropping more easily than their non-doubled counterparts, at least for some speakers.” (See also Demonte 1994: 460-461, Torrego 1999: 131-147).

The contrast between a ditransitive construction with clitic doubling and one without clitic doubling in Spanish is also discussed under the heading of “dative alternation” in English (Demonte 1995, Blears 2003). Demonte (1995: 12) argues that in “Spanish ditransitive sentences alternating a [NP PP] and a [Cl *a* + NP NP] structure for the double complement, the dative – when present – is interpreted as *affected*, in the sense that it is taken to be either the possessor or an intrinsic part of the Theme argument”. She argues that the examples with clitics in (16) are marginal or ungrammatical when the Goal or Location cannot be classified as a possessor.

- (16) (a) Le puse el mantel a la mesa.
 CLIT.3SG put-1SG the tablecloth to the table
 ‘I put the tablecloth on the table.’
- (a’) *Le puse los platos a la mesa.
 CLIT.3SG put-1SG the dishes to the table
 ‘I put the dishes on the table.’
- (b) Le regalé un libro a cada uno de los asistentes.
 CLIT.3SG gave-away-1SG a book to each one of the attendants
 ‘I gave a book away to each one of the attendants.’
- (b’) (^{??}Le) regalé/doné un libro a la biblioteca.
 CLIT.3SG gave-away-/donated-1SG a book to the library
 ‘I gave a book away to the library / I donated a book to the library.’

The main question here is whether these sentences have one or two underlying structures. In the case of English, Krifka (2004: 1) summarizes the discussion by concluding that the English dative alternation relates to two constructions: The direct object (DO) construction and the prepositional object (PO) construction as in (17):

- (17) (a) DO construction: Ann gave Beth the car
 NP₀ V NP₁ NP₂
- (b) PO construction: Ann gave the car to Beth
 NP₀ V NP₁ to NP₂

In both constructions, NP₀ denotes the agent of an action or event, NP₁ is the theme or patient of the action, i.e. the object that is moved, and NP₂ is the recipient or goal of an action. German has only one constructions and consistently uses the dative for NP₁, i.e. for the recipient or goal role.

- (18) Der Mann gab der Frau das Auto.
 the-NOM man gave-3SG the-DAT woman the-ACC car
 ‘The man gave the woman the car / The man gave the car to the woman.’

The question is whether Spanish is more like English in that it expresses the goal role with a prepositional phrase and the recipient with an indirect object, though both marked with the same marker *a* but differing in the use of the clitic, assigning both roles to the indirect object. We cannot do justice to this extensive discussion, but see Demonte (1995) or Bleam (2003) for a view that aligns the clitic doubling in Spanish to the dative alternation in English. Furthermore, for the contrast we are interested in we examine a very specialized subclass of ditransitive construction, namely a construction with a human direct object, that is, a construction which is rarely used and rarely discussed.

3.2 DOM and word order

Rodríguez-Mondoñedo (2007: 215) observes that if the DOM-marker is omitted, the direct object must precede the indirect object, or it must be adjacent to the verb:

- (19) (a) El jefe le presentó [DO el empleado] [IO a Pedro].
 the boss CLIT-DAT-3SG introduced-3SG the employee a Peter
- (b) *El jefe le presentó [DO al empleado] [IO a Pedro].
 the boss CLIT-DAT-3SG introduced-3SG DOM-the employee a Peter
 ‘The boss introduced Peter to the employee.’

Campos (1999: 1554) makes a related observation. He argues that the order of constituents is generally direct object before indirect object as in (20a), while the reverse order is not very good, as in (20b). However, if the indirect object is doubled with a clitic, both orders are well-formed (20c-d):

- (20) (a) Juan dio el libro de inglés a María.
 Juan gave-3SG the book of English to Mary
- (b) ^{??}Juan dio a María el libro de inglés.
 Juan gave-3SG to Mary the book of English
- (c) Juan le dio el libro de inglés a María.
 Juan CLIT-DAT-3SG gave-3SG the book of English to Mary
- (d) Juan le dio a María el libro de inglés.
 Juan CLIT-DAT-3SG gave-3SG to Mary the book of English
 ‘John gave the English book to Mary / John gave Mary the English book.’

3.3 Further conditions

There are additional factors that influence DOM in ditransitive constructions. Campos (1999: 1554; fn 77) observes that in some cases the use of DOM is obligatory in such constructions. He mentions the two examples without providing additional discussion:

- (21) (a) Presentaron ^{*(a)} Juan al director.
 Presented-3PL DOM John to-the director
 ‘They present John to the director.’
- (b) Recomendé ^{*(a)} tu amigo a mi jefe.
 recommended-1SG DOM your friend to my chief
 ‘I recommended your friend to my chief.’

We interpret these examples as showing that the position of the referentiality scale (see (5)) also influences DOM. In other words, a proper name as direct object is obligatorily marked even if the full indirect object has the *a*-marker. Hence, the blocking effect of DOM does not apply to proper names (nor to possessives). There are probably similar effects of long modification of the direct object: the more the DO is modified the more probably it is marked, cf. (9) above.

3.4 Intermediate summary and relevant parameters

In summary, we have identified two main parameters discussed in the literature that might affect DOM in ditransitive constructions: clitic doubling and word order. With respect to clitic doubling there are two positions: (i) the enhancing position that assumes that clitic doubling triggers or enhances DOM (see Company Company 1998, 2003); (ii) the blocking position that assumes DOM is inhibited or blocked if the indirect object exhibits clitic doubling (see Campos 1999, Fábregas 2013, Rodríguez-Mondoñedo 2007). With respect to word order, Rodríguez-Mondoñedo (2007: 215) argues that if the DOM-marker is omitted, the DO must precede the IO, or in other words it must be adjacent to the verb. In our experiment described in section 5 we will focus on the effect of clitic doubling and word order such that we have 2x2 design.

4. Ditransitive constructions in Spanish

Ditransitive constructions generally contain an agent in subject position, an experiencer in the indirect object position and a theme or patient in the direct object position (see Haspelmath 2004 and Kittillä 2006 for a typological overview). Agent and experiencer are generally human, but patient or theme inanimate. Additionally, Spanish has a strong preference not to realize simultaneously the direct and indirect object by full descriptive noun phrases. Both conditions result in a very low rate of direct object constructions with both objects realized as full descriptive noun phrases. García-Miguel (2015: 237) observes that “in those rare cases where both T [= theme] and R [= recipient or experiencer] are animate [...], it is even rarer for both to be instantiated by NPs” and that in most of these cases, “R is instantiated only as a personal clitic index”. Ortiz Ciscomani (2011, 162) also notes that languages resist a construction with such characteristics, i.e. human direct and human indirect object.

Both conditions – the very rare human direct objects and the preference not to have both objects realized as human full noun phrases – lead to ‘scarce data’. In her diachronic corpus study from the 13th to the 20th century, Ortiz Ciscomani (2005) observes that (i) the percentage of this construction (with two full human noun phrases) with respect to all constructions decreases by approximately 10–35 % in the 13th and 14th century to about 2 % in the 19th and 20th century. In a diachronic corpus study of more than 12.000 sentences with ditransitive verbs, von Heusinger (to appear) found constructions with two human full noun phrases in only less than 1% of all sentences. Similarly, García-Miguel (2015: 237) reports from a search in ADESSE that provides less than 1% ditransitive constructions with two *a*-marked human full noun phrases. Therefore, a questionnaire is central for our understanding of the parameters that control DOM in ditransitive constructions.

We decided to use three classes of verbs for the questionnaire: (i) verbs of caused perception, where the indirect object realizes a secondary experiencer (*presentar* ‘to present’); (ii) verbs of caused possession, where the indirect object realizes a secondary possessor (*vender* ‘to sell’); (iii) verbs of caused motion, where the indirect object realizes the recipient or the goal (*mandar* ‘to send’). In a fourth group we used two verbs each from (i) and (ii) with a *para que* (‘so that’) final clause.

4.1 Group A: Verbs of caused perception

We have used four verbs of caused perception: *presentar*, *mostrar*, *proponer*, *enseñar* (‘to introduce’, ‘to show’, ‘to propose’, ‘to show’). They take the agent as subject, the theme as direct object (theme) and a secondary experiencer as the indirect object. After a comprehensive context the sentence was presented in four versions manipulating the order of objects and clitic doubling. In the final questionnaires (see section 5) we presented the particular sentences in such a way that participants had to choose between DOM (*a*-marker) or the lack of it. We will indicate that in the examples by “a/Ø”, but we provide just the gloss “DOM”. We further highlight the direct object and the clitic pronoun for the indirect object in bold.

- (22) Todo el mundo en la comisaría esperaba la llegada del nuevo policía. Cuando este por fin llegó, se dirigió al despacho del comisario. Pasado un rato, el comisario mandó llamar al agente López. Entonces ...

‘Everybody in the police station was awaiting the arrival of the new policeman. When he arrived, he went to the superintendent department. Afterwards, the superintendent ordered to call agent López. Then ...’

- (a) el comisario presentó **a/Ø su nuevo compañero** al agente.
 the superintendent introduced-3SG DOM his new colleague to-the agent
- (b) el comisario presentó al agente **a/Ø su nuevo compañero**.
 the superintendent introduced-3SG to-the agent DOM his new colleague
- (c) el comisario **le** presentó **a/Ø su nuevo compañero**.
 the superintendent CLIT-DAT-3SG introduced-3SG DOM his new colleague
 al agente.
 to-the agent
- (d) el comisario **le** presentó al agente **a/Ø su nuevo compañero**.
 the superintendent CLIT-DAT-3SG introduced-3SG to-the agent DOM his
nuevo compañero.
 new colleague
 ‘The superintendent introduced his new colleague to the agent.’

4.2 Group B: Verbs of caused possession

We have used four verbs of caused perception: *vender*, *encomendar*, *incorporar*, *devolver* (‘to sell’, ‘to entrust sth to sb’, ‘to incorporate’, ‘to return’). The semantics of these verbs is that the agent moves the theme (direct object) towards the recipient (indirect object) and in the end of the event the recipient possesses the theme. The indirect object of *devolver* (‘to return’) is also a secondary possessor, but the verb expresses a presupposition that this possessor must have been a possessor before – however, it is not the same as a primary possessor.

- (23) Manuel y Elena salen de viaje mañana hacia Estados Unidos. Tienen un niño de apenas un año y es muy pequeño aún para llevarlo de viaje con ellos. Por ello, mientras ellos están fuera, ...
 ‘Manuel and Elena are going to travel to the United States tomorrow. They have a child of just one year and he is still too young to take on the road with them. Therefore, while they are out, ...’
- (a) Manuel ha encomendado **al/Ø el niño** a su hermana.
 Manuel has trusted.3SG DOM-the child to his sister
- (b) Manuel ha encomendado a su hermana **al/Ø el niño**.
 Manuel has trusted. 3SG to his sister DOM-the child
- (c) Manuel **le** ha encomendado **al/Ø el niño** a su hermana.
 Manuel CLIT.DAT.3SG has trusted.3PL DOM-the child to his sister
- (d) Manuel **le** ha encomendado a su hermana **al/Ø el niño**.
 Manuel CLIT.DAT.3SG has trusted.3PL to his sister DOM-the child
 ‘Manuel has trusted his child to his sister.’

4.3 Group D: Verbs of caused motion

Group D covers verbs of caused motions such as, *llevar*, *mandar*, *enviar*, *acercar* (‘to carry’, ‘to send’, ‘to send’, ‘to come close’). The event described by these verbs contains an agent (subject), a theme (direct object) and a goal or recipient (indirect object) such that the agent causes the theme to move towards the recipient. The agent does not accompany that theme and the recipient does not become the possessor of the theme. Clitic doubling with these verbs were often quite marginal, but became much better, even full acceptable when we added a final clause with *para que* (‘so that’), with the subject of that clause being the recipient. We speculate that by making the indirect object to the subject of the final clause we force more agentive recipient reading, rather than just a goal reading (which need not be agentive). Often, such examples – without the continuation – can be read as having a goal as second argument (the use of the clitic is often not very good without the continuation).

- (24) Carlos se pasaba el día comiendo chucherías. Siempre que podía compraba chocolatinas o caramelos. De tanto comer dulces se le acabaron picando los dientes y, cuando se dio cuenta, ...

‘Carlos spent the whole day eating candies. He bought chocolate or sweets whenever he could. From eating so many sweets he got teeth decay, and when his mother noticed it, ...’

- (a) su madre llevó **al/Ø** el **niño** al dentista
 his mother took-3SG DOM-the child to-the dentist
 para que le hiciese una revisión.
 for that him make-3SG an examination
- (b) su madre llevó al dentista **al/Ø** el **niño** .
 his mother took-3SG to-the dentist DOM-the child
 para que le hiciese una revisión.
 for that him make-3SG an examination
- (c) su madre **le** llevó **al/Ø** el **niño** al dentista.
 his mother CLIT.DAT.3SG took-3SG DOM-the child to-the dentist
 para que le hiciese una revisión.
 for that him make-3SG an examination
- (d) su madre **le** llevó al dentista **al/Ø** el **niño**.
 his mother CLIT.DAT.3SG took-3SG to-the dentist DOM-the child
 para que le hiciese una revisión.
 for that him make-3SG an examination
 ‘his mother took the child to the dentist to make an examination.’

4.4 Group C: Verbs from A and B with *para que* final clauses

Since we used the final *para que* clauses in Group D, we created an additional Group C with two verbs from Group A (*mostrar* ‘to show’, *proponer* ‘to propose’) and two from Group B (*vender* ‘to sell’, *devolver* ‘to return’) in order to test whether the *para que* clause influences DOM. Again we speculate that the *para que* clause makes the second argument *al director* more agentive and therefore more likely to be a recipient.

- (25) Todo estaba ya preparado para el comienzo del rodaje de la película. Los productores habían conseguido reunir todo el equipo necesario, los escenarios estaban terminados y el casting había finalizado.

‘Everything was ready for beginning of the shooting of the film. Producers had collected all the necessary equipment, scenography was completed and the casting had finished.’

- (a) El jefe de casting finalmente mostró **al/Ø** el **candidato** al
 The chief of casting finally showed-3SG DOM-the candidate to-the
 director para que le diese el visto bueno.
 director for that him give the approval
- (b) El jefe de casting finalmente mostró al director **al/Ø** el
 The chief of casting finally showed-3SG to-the director DOM-the
candidato para que le diese el visto bueno.
 candidate for that him give the approval

- (c) El jefe de casting finalmente **le** mostró **al/Ø** el
 The chief of casting finally CLIT.DAT.3SG showed-3SG DOM-the
candidato al director para que le diese el visto bueno.
 candidate to-the director for that him give the approval
- (d) El jefe de casting finalmente **le** mostró **al**
 The chief of casting finally CLIT.DAT.3SG showed-3SG to-the
 director **al/Ø** el **candidato** para que le diese el visto bueno.
 director DOM-the candidate for that him give the approval
 ‘Finally, the casting chief showed the candidate to the director to give him the approval.’

5. Questionnaire

We designed a questionnaire in order to test the dependence of DOM in ditransitive sentences from (i) word order, (ii) clitic doubling and (iii) verb class. We wanted to test four Hypotheses. Note that H2a and H2b contradict each other – only one can be correct.

H1: non-*a*-marked DO must precede IO (Rodríguez-Mondoñedo 2007: 215)

H2a: Clitic doubling triggers or enhances DOM (Company Company 1998, 2003)

H2b: Clitic doubling inhibits or blocks DOM (see Campos 1999, Fábregas 2013, Rodríguez-Mondoñedo 2007)

H3: Verb class is an additional parameter for DOM (von Heusinger 2008, von Heusinger & Kaiser 2011)

5.1 Design

Forty students of the University of Alcalá in Spain (situated in Alcalá de Henares, near Madrid) volunteered to fill in a questionnaire (for no money). All participants were monolingual speakers of Spanish and university students. We constructed 16 critical items with four conditions each and added 36 filler items. We distributed the critical items according to a Latin Square on four questionnaires such that each participant saw each context once and each condition 4 times. Each questionnaire had 16 critical items and 36 filler items, in total 52 times. We pseudo randomized critical and filler items and produced printed versions. Participants had to decide (‘forced choice’) whether the direct object is *a*-marked or unmarked. The order of $a > \emptyset$ vs. $\emptyset > a$ were randomized.

Each questionnaire came with an introductory page that asked for age, sex, level of education, place of origin, mother language and further languages. We then provided a short introduction and three examples of how to answer the question (see the Appendix 1 for the introductory page and the first of last examples of one of the questionnaires. Appendix 2 provides all critical items). All items were constructed with an extensive context of two to three sentences introducing all the relevant characters. For the critical items, the critical sentence had a subject, direct object and indirect objects, all human definite male full noun phrases. We collected the answers of 10 participants for each of the four questionnaires. In total we had 640 judgments to the 4x2x2 design, i.e. for each condition 40 judgments, 10 for each context / verb.

The 16 test items consisted of four verbs of each of the groups discussed above - see Table 1. Note that Group C consists of two verbs from Group A and two from Group B with a *para que* clause.

Table 1: Four verb classes with four verbs each

No	Type	verb type	<i>para que</i>	verb
1	A	verb of caused perception	–	<i>presentar</i> ‘to introduce’
2	A	verb of caused perception	–	<i>mostrar</i> ‘to show’
3	A	verb of caused perception	–	<i>proponer</i> ‘to propose’
4	A	verb of caused perception	–	<i>enseñar</i> ‘to show’
5	B	verb of caused possession	–	<i>encomendar</i> ‘to entrust sth to sb’
6	B	verb of caused possession	–	<i>incorporar</i> ‘to incorporate’
7	B	verb of caused possession	–	<i>vender</i> ‘to sell’
8	B	verb of caused possession	–	<i>devolver</i> ‘to return’
9	C = A	verb of caused perception	+	<i>mostrar</i> ‘to show’
10	C = A	verb of caused perception	+	<i>proponer</i> ‘to propose’
11	C = B	verb of caused possession	+	<i>vender</i> ‘to sell’
12	C = B	verb of caused possession	+	<i>devolver</i> ‘to return’
13	D	verb of caused motion	+	<i>llevar</i> ‘to carry’
14	D	verb of caused motion	+	<i>mandar</i> ‘to send’
15	D	verb of caused motion	+	<i>enviar</i> ‘to send’
16	D	verb of caused motion	+	<i>acercar</i> ‘to come close’

Each of the critical items was manipulated according to (i) word order (DO > IO vs. IO > DO) and (ii) clitic doubling (non clitic vs. clitic), yielding four conditions:

Table 2: Four conditions for each context

a:	SUBJECT > Ø VERB > DO > IO
b:	SUBJECT > Ø VERB > IO > DO
c:	SUBJECT > CL VERB > DO > IO
d:	SUBJECT > CL VERB > IO > DO

5.2 Results

The overall results show that there are overall more *a*-marked direct objects than unmarked once. About 60% are marked and 40% are unmarked. This is quite a surprising result, since the literature suggests a much higher rate of blocking DOM.

Table 3: Overall result of DOM vs. Ø

	DOM	Ø	total
sum absolut	369	271	640
percentage	58%	42%	100%

Table 4 lists the results for each participants and each questionnaire. There is a high variation between participants and even for the questionnaire we find a certain amount of variation. Detailed studies of the place of origin of the participants did not reveal any further insight.

Table 4: Participants and questionnaires

participant	DOM	Ø	total
Q1	72	88	160
1	4	12	16
2	11	5	16
3	3	13	16
4	7	9	16
5	3	13	16
6	10	6	16
7	6	10	16
8	9	7	16
9	7	9	16
10	12	4	16
Q2	95	65	160
11	13	3	16
12	5	11	16
13	7	9	16
14	10	6	16
15	12	4	16
16	11	5	16
17	7	9	16
18	8	8	16
19	12	4	16
20	10	6	16
Q3	96	64	160
21	10	6	16
22	12	4	16
23	14	2	16
24	9	7	16
25	9	7	16
26	10	6	16
27	8	8	16
28	8	8	16
29	8	8	16
30	8	8	16
Q4	106	54	160
31	7	9	16
32	10	6	16
33	7	9	16
34	16		16
35	13	3	16
36	13	3	16
37	8	8	16
38	12	4	16
39	9	7	16
40	11	5	16
total	369	271	640

We could not find any evidence for H1 *non-a-marked DO must precede IO*: We see as many cases for DOM-realization in DO > IO as in IO > DO sentences.

Table 5: Word order

word order	DOM	Ø	sum
DO > IO	180	140	320
IO > DO	189	131	320
total	369	271	640

We find evidence for H2b *Clitic doubling inhibits or blocks DOM* and against H2a *Clitic doubling triggers or enhances DOM*. If the indirect object exhibits clitic doubling, we find as many marked direct objects as unmarked (50% / 50%). However, if the indirect object does not exhibit clitic doubling we find 65% marked direct objects and 35 unmarked ones. This result clearly supports H2b that says that clitic doubling inhibits DOM. There is only a very slight interaction for word order X clitic doubling for items that exhibit clitic doubling, see Table 7.

Table 6: Clitic doubling

clitic doubling	DOM	Ø	sum
cl	161	159	320
no	208	112	320
sum	369	271	640
cl	50%	50%	100%
no	65%	35%	100%

Table 7: Interaction of word order and clitic

word order x clitic	DOM	Ø	sum
cl	50,31%	49,69%	100,00%
DO > IO	46,88%	53,13%	100,00%
IO > DO	53,75%	46,25%	100,00%
no	65,00%	35,00%	100,00%
DO > IO	65,63%	34,38%	100,00%
IO > DO	64,38%	35,63%	100,00%
total	57,66%	42,34%	100,00%

Interestingly, we do find furthermore a highly significant effect of modification – a parameter that we had not controlled for. Prenominal adjective modification (*nuevo trabajador* ‘new worker’) and postnominal adjective modification (*jugador suplente* ‘additional player’) behaves very similar to the case of no modification (*el niño* ‘child’). However, a modification by a possessive adjective (*su nuevo compañero* ‘his new colleague’) clearly enhances DOM from an average of about 45% to 87%. This observation can be accounted by the assumption that possessive noun phrases are higher on the referentiality scales – see discussion above in section 3.5, where it was noted that proper names and possessive noun phrases are obligatorily marked.

Table 8: Modification of the direct object

modification	DOM	Ø	sum
Adj	42,50%	57,50%	100,00%
no	43,44%	56,56%	100,00%
poss Adj	86,88%	13,13%	100,00%
poss Adj Adj	70,00%	30,00%	100,00%
postN Adj	57,50%	42,50%	100,00%
total	57,66%	42,34%	100,00%

Verb classes are also relevant for DOM marking, as we can in the following table:

Table 9: Verb group and modification

verb class, modification, verb	DOM	Ø	sum
A	50,63%	49,38%	100,00%
Adj	42,50%	57,50%	100,00%
<i>proponer</i>	42,50%	57,50%	100,00%
no	12,50%	87,50%	100,00%
<i>mostrar</i>	12,50%	87,50%	100,00%
poss Adj	77,50%	22,50%	100,00%
<i>enseñar</i>	77,50%	22,50%	100,00%
poss Adj Adj	70,00%	30,00%	100,00%
<i>presentar</i>	70,00%	30,00%	100,00%
B	53,75%	46,25%	100,00%
no	27,50%	72,50%	100,00%
<i>devolver</i>	32,50%	67,50%	100,00%
<i>encomendar</i>	22,50%	77,50%	100,00%
poss Adj	85,00%	15,00%	100,00%
<i>vender</i>	85,00%	15,00%	100,00%
postN Adj	75,00%	25,00%	100,00%
<i>incorporar</i>	75,00%	25,00%	100,00%
C	46,88%	53,13%	100,00%
no	30,00%	70,00%	100,00%
<i>devolver</i>	40,00%	60,00%	100,00%
<i>mostrar</i>	20,00%	80,00%	100,00%
poss Adj	87,50%	12,50%	100,00%
<i>vender</i>	87,50%	12,50%	100,00%
postN Adj	40,00%	60,00%	100,00%
<i>proponer</i>	40,00%	60,00%	100,00%
D	79,38%	20,63%	100,00%
no	73,33%	26,67%	100,00%
<i>enviar</i>	75,00%	25,00%	100,00%
<i>llevar</i>	80,00%	20,00%	100,00%
<i>mandar</i>	65,00%	35,00%	100,00%
poss Adj	97,50%	2,50%	100,00%
<i>acercar</i>	97,50%	2,50%	100,00%
total	57,66%	42,34%	100,00%

There is a contrast between Group A and Group D: For Group A *verbs of caused perception*, marked and unmarked direct objects are balanced, while for Group D *verbs of caused motion* there are about 80% marked direct objects. Note that modification clearly influences this result. As we can see from Table 9, the possessive modification yields the highest results for

DOM in each group. However, it seems that the effect between Group A and Group D would be even larger if we had controlled for modification. Group A has two possessive NPs and Group D has only one. Still Group D has a much higher rate of DOM

There is an overall effect of the *para que* final clause, as shown in Table 10. However, this effect is mainly driven by the fact that most *para que* contexts are in Group D, which is much more likely to have DOM than not. If we compare the verbs in Group C with their versions without a *para que* clause in Group A and B, we see that there is only a minor advantage.

Table 10: *para que* final clause

<i>para que</i>	DOM	Ø	sum
no	167	153	320
<i>para que</i>	202	118	320
total	369	271	640

5.3 Discussion

The questionnaire has provided new evidence for the parameters that influence DOM in ditransitive constructions. We started with four hypotheses H1 to H3:

- H1: Unmarked DO must precede IO (Rodríguez-Mondoñedo 2007: 215)
- H2a: Clitic doubling triggers or enhances DOM (Company Company 1998, 2003)
- H2b: Clitic doubling inhibits or blocks DOM (see Campos 1999, Fábregas 2013, Rodríguez-Mondoñedo 2007)
- H3: Verb class is an additional parameter for DOM (von Heusinger 2008, von Heusinger & Kaiser 2011)

The data does not confirm H1: We found as many DOM instances for DO > IO as in IO > DO. The data clearly support H2b and thus contradicts H2a. DOM occurs less if an indirect object exhibits clitic doubling, than when it does not. H3 is also supported: Here we find that verbs of caused motion trigger more DOM than verbs of caused perception. We find, however, a very high variation in the participants' judgments (see Table 4) and we have the strongest effect for possessive noun phrases (see Table 8). As we did not control for modification in our test items, we cannot clearly say how this parameter also influences the results of the other parameters. However, in a follow up we did control for modification and found very similar results (see von Heusinger submitted).

6. Conclusion

DOM for definite human direct objects in ditransitive constructions can be blocked if the indirect object is a full noun phrase and therefore *a*-marked. This is surprising given that DOM in transitive sentences is obligatory for definite human direct objects. This observation is discussed in the literature, but there are only very few studies on the parameters that can influence the blocking of DOM. Our questionnaire tested (i) word order, (ii) clitic doubling, and (iii) verb class. On the one hand, we could show (against Rodríguez-Mondoñedo 2007) that there is no effect by word order. On the other hand, our data provide evidence that there is a blocking effect of clitic doubling (against Company Company 1998, 2003 and supporting Campos 1999, Fábregas 2013, Rodríguez-Mondoñedo 2007) and of verb class (supporting von Heusinger 2008, von Heusinger & Kaiser 2011). If we take a closer look at the interaction of clitic doubling and verb class (and leaving the interference for the possessive noun phrase out) we can describe the following scenario, summarized in Table 12.

Table 11: Verb class and clitic doubling

verb class and CD	DOM	Ø	sum
A	50,63%	49,38%	100,00%
cl	42,50%	57,50%	100,00%
no	58,75%	41,25%	100,00%
B	53,75%	46,25%	100,00%
cl	51,25%	48,75%	100,00%
no	56,25%	43,75%	100,00%
C	46,88%	53,13%	100,00%
cl	41,25%	58,75%	100,00%
no	52,50%	47,50%	100,00%
D	79,38%	20,63%	100,00%
cl	66,25%	33,75%	100,00%
no	92,50%	7,50%	100,00%
total	57,66%	42,34%	100,00%

For Group A *verbs of caused perception* and Group B *verbs of caused possession* DOM is distributed closely to chance and there is no effect of clitic doubling. However, for Group D *verbs of caused motion* we see two effects: First, the whole group clearly favors DOM with and without clitic doubling (80% DOM and 20% Ø). Second, clitic doubling has a very strong effect: with clitic doubling we find 66% DOM vs. 34% Ø, which is 2:1. But without clitic doubling we have 92% DOM vs. 8% Ø, which is a relation of 11:1. We can now speculate, that for verbs of caused motion clitic doubling is not just an additional way to mark the indirect object, but rather it shows us that we have two different constructions. In one construction with the clitic doubling we have a recipient that competes with the human theme with respect to *a*-marking. In the construction without clitic doubling, the *a*-marked noun phrase is a goal, which like other prepositional phrases does not block DOM of definite human noun phrases. If we are on the right track then this would mean that clitic doubling itself does not enhance or block DOM, but that the underlying construction of verbs of caused motion provide two very different argument structures, and that these argument structure are providing the relevant properties to enhance or block DOM. Needless to say that more research is necessary.

Appendix 1 - Questionnaire

In the following we present the first page of one questionnaire and the first and last items.

DATOS PERSONALES

Edad:

Sexo:

Nivel de estudios:

En caso de estudios universitarios, titulación:

Lugar de procedencia (país, provincia):

Lengua(s) materna(s):

Segunda(s) lengua(s):

INTRODUCCIÓN

Este cuestionario busca aportar algunas ideas acerca de cómo las personas utilizamos nuestra lengua normalmente, no sobre la gramática que se aprende en la escuela. Es importante señalar entonces que no se trata de un examen de nuestros conocimientos gramaticales y, por tanto, **no hay respuestas correctas ni incorrectas**.

El cuestionario consta de un total de 52 preguntas que usted habrá de responder en un tiempo aproximado de 20-25 minutos. Dichas preguntas no tienen ningún tipo de relación entre ellas. Su cometido será leerlas y contestar lo más rápido posible, sin detenerse a reflexionar mucho sobre las respuestas.

Cada pregunta incluye un breve fragmento de texto que, en algún momento, presenta dos opciones. Usted simplemente **tendrá que decidir cuál de ellas le resulta más familiar o considera que suena mejor y marcar la casilla correspondiente con un tic**, tal y como se muestra en los ejemplos. Es importante seleccionar solamente una opción, en ningún caso se pueden marcar ambas.

1. *María regaló a su hermano pequeño un perro por su cumpleaños, pero él no se ocupaba nunca de su mascota. Por ello, María tenía sacar de paseo el / al perro a la calle cada mañana.*

2. *Mañana es el aniversario de Andrés y Ana, y él sabe que debería regalarle algo a su novia, pues llevan cinco años juntos. Por ello, Andrés le comprará _____ / a un gato para sorprenderla.*

En caso de haber señalado una casilla por error y querer desecharla, por favor, hágalo utilizando la doble barra (//) junto a la opción que no es válida y marque nuevamente con un tic bajo la casilla de la opción que considere más adecuada, tal y como se muestra en el ejemplo. Las respuestas se pueden cambiar únicamente una vez.

3. *Juanma y Aitor son hermanos y siempre estudian juntos en casa. A Juanma se le ha olvidado un libro en clase y lo necesita para hacer sus deberes. Aitor deja al / el libro a su hermano para que pueda hacerlos.* //
✓

¡GRACIAS DE ANTEMANO POR SU TIEMPO Y SU COLABORACIÓN!

1. El investigador estaba entusiasmado con su nuevo descubrimiento. Por ello, no tardó mucho en anotar los resultados y llevar al / la cura al hospital para que el

resto de médicos comprobase si estaba en lo cierto.
2. Todo el mundo en la comisaría esperaba la llegada del nuevo policía. Cuando este por fin llegó, se dirigió al despacho del comisario. Pasado un rato, el comisario mandó llamar a al agente López. Entonces el comisario presentó _ / a su nuevo compañero al agente.
3. Juan estaba de vacaciones y María estuvo, mientras tanto, cuidando de su mascota. Cuando Juan volvió, María entregó el / al perro a su amigo.
4. La niña no dejaba de llorar. Había salido corriendo de casa con sus muñecas en la mano y una de ellas se le cayó en por la calle. Su madre, al verla, le cogió _ / a la muñeca al pensar que quizá se le hubiese roto.

[...]

51. La profesora trataba de dar clase a sus alumnos, pero ellos no prestaban atención. Aquella mañana estaban muy distraídos y no dejaban de hablar. De repente, uno se levantó y empezó a hacer tonterías. Entonces la profesora le envió al / el chico al director del centro para que lo castigase.
52. Lucía tiene una hermana pequeña y, puesto que su madre hoy no está, es ella la encargada de prepararla para llevarla al colegio. La niña se viste y desayuna sola, pero Lucía cepilla el / al pelo a su hermana antes de salir hacia el colegio.

Finalmente, nos gustaría que respondiese a la siguiente pregunta y nos ayudase realizando más abajo todos los comentarios que considere oportunos acerca del test en conjunto o de cualquiera de los ejemplos:

- *Según su opinión, ¿qué considera que se persigue con el test que ha realizado?*

- Comentarios:

Appendix 2 - critical test items

In the following we list all the critical test items in their *a* version, i.e. with DO > IO and without clitic doubling. The *b-d* versions are only provided for the first example as illustration. Please note that the order of Ø and DOM was in the final questionnaires randomized.

1. Todo el mundo en la comisaría esperaba la llegada del nuevo policía. Cuando este por fin llegó, se dirigió al despacho del comisario. Pasado un rato, el comisario mandó llamar al agente López. Entonces,
 - a) el comisario presentó _ / **a su nuevo compañero** al agente.
 - b) el comisario presentó al agente _ / **a su nuevo compañero**.
 - c) el comisario **le** presentó _ / **a su nuevo compañero** al agente.
 - d) el comisario **le** presentó al agente _ / **a su nuevo compañero**.
2. Ha llegado el día del partido. Los jugadores han entrenado mucho y salen al campo a calentar. A última hora al delantero titular le ha dado un tirón y ha tenido que abandonar lesionado el campo. Por ello, el entrenador ha tenido que incorporar **al** / **el jugador suplente** al equipo.
3. El profesor había salido de clase un momento y Juan aprovechó para ponerle una chincheta en la silla. Cuando este entró y vio lo que los alumnos habían preparado, advirtió que a no ser que dijese quién había sido, nadie saldría al recreo. Andrea vendió **a** / _ **su compañero** al profesor para que este no los castigase.
4. Carmen y Luis están casados desde hace muchos años. Luis nunca había estado enfermo, pero hace una semana salió de casa sin abrigo y cogió una gripe terrible. Preocupada, Carmen acercó **a** / _ **su marido** al médico para que le recetase algún medicamento.
5. Ana acaba de tener un bebé. Su amigo Pablo, al enterarse, decide ir a verlo. Pero cuando él llega, Ana no está en casa. Antonia, su madre, lo recibe en la puerta. Ambos charlan un rato y después Antonia muestra **el** / **al bebé** de Ana al chico.
6. Ayer por la mañana dos hombres llevaron a cabo un gran asalto al mayor banco de la ciudad. Después del robo, los ladrones no se ponían de acuerdo a la hora de repartir el botín. Eduardo, por ser el más joven, recibió menos dinero y no estaba conforme. Y, por ello, este vendió _ / **a su compañero** al comisario de policía.
7. Hace unas semanas se produjo el secuestro de un periodista de guerra. Dicho periodista era hermano de un gran empresario. Pero en el periódico de ayer salió publicada la noticia de que los secuestradores devolvieron **el** / **al rehén** a su hermano para que este les pagase el rescate que habían pedido.
8. Carlos se pasaba el día comiendo chucherías. Siempre que podía compraba chokolinas o caramelos. De tanto comer dulces se le acabaron picando los dientes y, cuando se dio cuenta, su madre llevó **al** / **el niño** al dentista para que le hiciese una revisión.
9. El presidente de la empresa había muerto hace unos días. El Consejo se reunía aquella tarde para valorar las propuestas de sus miembros y nombrar a un nuevo presidente. Justo antes de terminar la reunión, el secretario propuso **el** / **al nuevo trabajador** al Consejo.

10. Los niños estaban jugando en el patio de la guardería, pero ya era casi la hora de comer y, por ello, la hora de volver a casa. Entonces, llegó el padre de Iván a recogerlo y la profesora devolvió **el / al niño** a su padre.
11. Todo estaba ya preparado para el comienzo del rodaje de la película. Los productores habían conseguido reunir todo el equipo necesario, los escenarios estaban terminados y el casting había finalizado. El jefe de casting finalmente mostró **el / al candidato** al director para que le diese el visto bueno.
12. Ignacio trabajaba descargando camiones en un supermercado. Llevaba varios días con un dolor muy fuerte en la espalda y decidió acudir a su médico de cabecera. Al no estar muy seguro de qué se trataba, el médico mandó **el / al paciente** al traumatólogo para que este le hiciera las pruebas necesarias.
13. Marcos ganó la semana pasada el premio al mejor investigador del año. Su foto ha salido en una de las revistas de divulgación científica más importantes. Su mujer, muy orgullosa, ha comprado la revista de camino al trabajo y, nada más llegar, ella ha enseñado **a / _ su marido** a su compañero de oficina.
14. Manuel y Elena salen de viaje mañana hacia Estados Unidos. Tienen un niño de apenas un año aún y es muy pequeño para llevarlo de viaje con ellos. Por ello, mientras ellos están fuera, Manuel ha encomendado **al / el niño** a su hermana.
15. Se acercan las elecciones. Los partidos están configurando sus equipos de gobierno, pero estas decisiones han de ser aprobadas por el secretario general de cada partido. Por ello, el delegado del partido ha propuesto **al / el candidato** más idóneo al secretario general para que él dé su consentimiento.
16. La profesora trataba de dar clase a sus alumnos, pero ellos no prestaban atención. Aquella mañana estaban muy distraídos y no dejaban de hablar. De repente, uno se levantó y empezó a hacer tonterías. Entonces la profesora envió **al / el chico** al director del centro para que lo castigase.

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