

Verb class and Differential Object Marking in Spanish ditransitive constructions

KLAUS VON HEUSINGER & MARCO GARCÍA GARCÍA & DIEGO ROMERO HEREDERO
UNIVERSITY OF COLOGNE

Ditransitives across languages and frameworks Workshop at the 43rd Annual Conference of the DGfS, 2021

1. Introduction

In Spanish, a human definite direct object in a transitive construction must be marked by the differential object marker (DOM) *a* (which merges with the definite article to become *al*); see (1) (Pensado 1995; Fábregas 2013). However, for ditransitive sentences, the literature (Comrie 2013; Real Academia Española 2009) assumes that *a*-marking is generally blocked or disfavored by the concurrence of an indirect object noun phrase; see (2). It is controversial whether clitic doubling strengthens the blocking effect for DOM (Rodríguez-Mondoñedo 2007; Fábregas 2013) or mitigates it (Company Company 2001); see (3).

- (1) *Busc-o* **el /a-l* *médico*.
look_for-PRS.1SG *the /DOM-the doctor
'I am looking for the doctor.'
- (2) *El profesor envi-ó* *el /a-l* *chico a-l* *jefe de estudios*.
The teacher send-PST.3SG the /DOM-the boy to-the head of studies
'The teacher sent the boy to the head of studies.'
- (3) *El profesor le_i* *envi-ó* *el /(a-l)* *chico a-l* *jefe de estudios*.
The teacher CL.DAT.3SG send-PST.3SG the /(DOM-the) boy to-the head of studies
'The teacher sent the boy to the head of studies.'

We put the following hypotheses

- H1 DOM alternations are not a “stylistic variation”, but a grammatical effect depending on different grammatical parameters, including clitic doubling and verb class.
H2 Clitic doubling of the indirect object has a clear blocking effect on DOM.
H3 There is an effect of verb class: verbs of caused motion show a higher rate of DOM than other verb classes.

2. DOM in Spanish transitive sentences

Differential Object Marking (DOM) in Spanish is expressed by the marker *a*, which is homonymous of the preposition *a* ‘to’ and of the dative marker *a* of the indirect object. All three types merge with the masculine definite article *el* to *al*. DOM-marking in transitive sentences in Spanish is determined by three main parameters: (i) properties of the direct object, (ii) verb class, and (iii) information structure (see inter alia Pensado 1995; Fábregas 2013).

2.1 Properties of the direct object

Only human direct objects can be marked, while non-human (animate) and inanimate direct objects are generally unmarked. However, there is small class of verbs, such as verbs of substitution that allow DOM for inanimate direct objects (see García García 2014, 2018 for an extensive discussion).

- (4) *Conozc-o *(a) este actor.*
know-PRS.1SG *(DOM) this actor
'I know this actor.'
- (5) *Conozc-o *(a) esta película.*
know-PRS.1SG *(DOM) this film
'I know this film.'
- (6) *En esta receta la leche pued-e sustituir *el /a-l huevo.*
in this recipe the milk can-PRS.3SG substitute *the /DOM-the egg
'In this recipe the milk can substitute the egg.'

Specific indefinite human direct objects and all direct objects that are higher on the Referentiality Scale must be *a*-marked, cf. (7). Even non-specific indefinites can optionally be *a*-marked, cf. (8), where the subjunctive of the relative clause indicates that the head noun *un ayudante* ('an assistant') is non-specific.

- (7) *Vi *(a) la / una mujer.*
see.PST.3SG *(DOM) the/ a woman
'I saw the / a woman.'
- (8) *Necesit-an (a) un ayudante que sepa inglés.*
need-PRS.3PL (DOM) an assistant that speak.PRS.SBJV.3SG English
'They need an assistant who knows English.'

2.2 Information structure

Like in many other DOM languages, left dislocated direct objects require *a*-marking, cf. (9), while non-dislocated direct objects allow for optional marking, cf. (10) (see Leonetti 2004: 86).

- (9) **(A) muchos estudiantes, ya los conoc-ía.*
*(DOM) many students, already them know-PST.1SG
'Many students I already knew.'
- (10) *Conoc-ía (a) muchos estudiantes.*
knew-PST.1SG (DOM) many students
'I knew many students.'

2.3 Verbal parameters

Verbal factors such as agentivity and affectedness are also decisive for DOM in Spanish, as illustrated here by affectedness. A verb like *golpear* 'to hit' strongly affects its direct object. In Spanish such direct objects are obligatorily DOM marked (Torrego 1999:1791).

- (11) *Golpe-aron *(a) un extranjero.*
beat-PST.3PL *(DOM) a stranger
'They beat a stranger.'

Romero Heredero (in press) shows that there are actually clear differences for DOM marking of indefinite direct objects depending on whether they are affected or not. This difference can be observed not only at a synchronic level, but also from a diachronic perspective:¹

¹ Data for the 14th, 16th and 20th centuries are the result of a corpus analysis. Data for the 21st century belong to a study based on a forced-choice questionnaire.

Table 1. Percentage of DOM with human indefinite direct objects depending on affectedness (CDH) (Romero Heredero, in press)

	non-affected objects	affected objects
14 th cent.	16% (13/80)	39% (31/80)
16 th cent.	26% (31/120)	45% (54/120)
20 th cent.	56% (112/200)	84% (167/200)
21 st cent.	75% (3925/5216)	88% (4579/5216)

3. DOM in ditransitive sentences

3.1 Blocking effect by disambiguation

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 1988: §900; Real Academia Española 1973: 3.4.6; see also Campos 1999: 1554), cf. (12):

- (12) *El maestro present-ó (a) /*a su mujer a los alumnos.*
the teacher introduce-PST.3SG (DOM) /*DOM his wife to the students
‘The teacher introduced his wife to the students.’

There are only a few studies that discuss this alternation in more detail (Company Company 1998, 2003; Rodríguez-Mondoñedo 2007; Fábregas 2013; Comrie 2013) and even less studies that are based on corpus data (see Ortiz Ciscomani 2005, 2011 and von Heusinger 2018). The parameters for DOM marking in ditransitive constructions follow those parameters valid for transitive sentences (nominal properties, information structure, verbal properties). There are additional parameters discussed in the literature: word order and clitic doubling. We will focus on clitic doubling and introduce verbal properties, a parameter that has so far not been discussed for ditransitive constructions.

3.2 DOM and clitic doubling of indirect objects

There is an ongoing controversy whether the clitic doubling of the indirect object enhances or blocks DOM marking of the direct object.

3.2.1 CLD enhances DOM

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: 234), as shown in (13):

- (13) (a) *??/*El maestro present-ó a su mujer a los alumnos.*
*??/*theteacher introduce- PST.3SG DOM his wife to the students*
‘The teacher introduced his wife to the students.’
(b) *El maestro les_i present-ó a su mujer a los alumnos_i.*
the teacher CL.DAT.3PL introduce-PST.3SG DOM his wife to the students
‘The teacher introduced his wife to the students.’

3.2.2 CLD blocks DOM

Other scholars assume that clitic doubling blocks DOM or reduces the frequency of DOM. Fábregas (2013: 31) reports that “some speakers consider [(14a)] more acceptable than [(14b)],

and this is the case with sequences where the direct object is a pronoun, a proper name or is headed by a universal quantifier.”

- (14) (a) *Envi-aron a todos los heridos a la doctora.*
 send- PST.3PL DOM all the injured_people to the doctor
 ‘They sent all the injured people to the doctor.’
- (b) **Le_i envi-aron a todos los heridos a la doctora_i.*
 CL.DAT.3SG send-PST.3SG 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 seems 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; Campos 1999: 1554, fn.79). However, there is no broad empirical evidence for one or the other position.

3.3 Verbal properties and DOM

For transitive constructions, verbal properties clearly determine DOM (see 2.3). However, there is no research so far on the verbal properties for ditransitive constructions.

Ditransitive constructions generally contain an agent in subject position, a theme or patient in the direct object position, and a recipient or experiencer in the indirect object position and (see Haspelmath 2004 and Kittilä 2006 for a typological overview). Agent and experiencer are generally human, but patient or theme inanimate. However, for our study we collected verbs that allow for human patients, since DOM marking is only possible with human direct objects. A second condition was that the ditransitive construction would optionally allow the clitic doubling of the indirect object. The verbs we found were classified according to more general verb class criteria in i) verbs of caused motion, ii) verbs of caused perception and iii) verbs of caused possession.

3.3.1 Verbs of caused motion

This class covers verbs of caused motion such as, *llevar*, *mandar*, *enviar*, *acercar* (‘to take’, ‘to send’, ‘to send’, ‘to bring’). The event described by these verbs contains an agent (subject), a patient (direct object) and a goal or recipient (indirect object) such that the agent causes the patient to move towards the recipient. The agent does not need to accompany the motion event of the patient and the recipient does not necessarily 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 subordinated final clause with *para que* (‘so that’), with the subject of that clause being coreferential with the recipient. We assume that such a subordinated clause clearly disambiguates the indirect object of the matrix clause towards a recipient (rather than only a goal).

- (15) *el médico (le) mand-ó (a)-l enfermo a-l neurólogo*
 the doctor (CL) send-PST.3SG (DOM)-the patient to-the neurologist
para que realiz-ase las pruebas necesarias.
 so that carry_out- PST.SBJV.3SG the tests necessary
 ‘the doctor sent the patient to the neurologist so that he could carry out the necessary tests.’

3.3.2 Verbs of caused perception

We have grouped four verbs into the class “caused perception”: *presentar*, *mostrar*, *proponer*, *enseñar* (‘to introduce’, ‘to show’, ‘to propose’, ‘to show’). They take an agent as subject, a patient as direct object and a secondary experiencer as indirect object. (We will see later that

this clustering is probably not adequate. It seems that *proponer* and *presentar* rather pattern with the class of caused motion verbs, while *mostrar* and *enseñar* are more prototypical instances of this class.)

- (16) *el jefe de casting le mostr-ó (a)-l aspirante a-l director*
 the director of casting (CL) show-PST.3SG (DOM)-the candidate to-the director
para que le diese el visto bueno.
 so that him give-PST.SBJV.3SG the approval
 ‘the casting director showed the candidate to the director so that he could give his approval.’

3.3.3 Verbs of caused possession

We clustered the verbs *vender*, *encomendar*, *incorporar*, *devolver* (‘to sell’, ‘to entrust sth. to sb.’, ‘to incorporate’, ‘to return’) to the class “caused possession”. The semantics of these verbs is that the agent moves the patient (direct object) towards the recipient (indirect object) and in the end of the event the recipient possesses the patient. We think that these verbs are different from caused motion predicates, since in the latter the recipient (goal) is not necessarily the possessor of the patient. We are not sure about *incorporar*: this verb might also qualify for a verb of caused motion.

- (17) *el atracador le devolvió (a)-l rehén a-l agente*
 the robber (CL) return-PST.3SG (DOM)-the hostage to-the officer
para que este llevase a cabo lo que había prometido.
 so that he carry_out-PST.SBJV.3SG what promise- PST.PRF.3SG
 ‘the robber returned the hostage to the officer so that he could carry out what he had promised.’

4. Experiments

4.1. Hypotheses

- H1 DOM alternations are not a “stylistic variation”, but a grammatical effect depending on different grammatical parameters, including clitic doubling and verb class.
 H2 Clitic doubling of the indirect object has a clear blocking effect on DOM.
 H3 There is an effect of verb class: verbs of caused motion show a higher rate of DOM than other verb classes.

4.2. Design

We conducted two forced-choice questionnaires. For their implementations we employed Google Forms and for their distributions we sent the link to potential participants.

In the first questionnaire (Exp1), we manipulated i) verb class, ii) clitic doubling and iii) internal argument order as independent variables or predictors, and the presence or absence of DOM as the dependent variable. We distinguished three verb classes (see last section): (i) verbs of caused motion, (ii) verbs of caused perception, and (iii) verbs of caused possession. We added a fourth group consisting of two verbs of class (ii) and (iii) each with a subordinate final clause in order to see whether this makes a difference to the subordinated temporal sentences in (ii) und (iii).

Table 2. Experimental items according to verb class and type of subordinated clause.

verb class	subordinated clause	verbs / lexical items
i) verbs of caused motion	final	<i>llevar, mandar, enviar, acercar</i> 'to take', 'to send', 'to send', 'to bring'
ii) verbs of caused perception	temporal	<i>presentar, mostrar, proponer, enseñar</i> 'to introduce', 'to show', 'to propose', 'to show'
iii) verbs of caused possession	temporal	<i>vender, encomendar, incorporar, devolver</i> 'to sell', 'to entrust sth. to sb.', 'to incorporate', 'to return'
iv) = ii) + iii)	final	<i>mostrar, proponer</i> 'to show', 'to propose', (from class ii) <i>vender, devolver</i> 'to sell', 'to return'. (from class iii)

For each of these verbs we created a ditransitive structure (test sentence) and before each structure we added an extensive context of 3-4 sentences, establishing a storyline. More importantly, the context introduced each of the three arguments of the ditransitive sentence. We also tried to create a certain “textual” distance between the antecedents and the three definite arguments in the test sentences, in order to make the use of full definite noun phrases felicitous. The test sentence contained often some connection to the context discourse. The ditransitive construction was always in the order of subject – verb – direct object – indirect object (in Exp 1 we manipulated the order of direct object and indirect object). The matrix clause was followed by a subordinated clause or a temporal adverbial modification. This was necessary as for verbs of caused motion clitic doubling of the indirect object was more natural with a subordinated final clause (*para que*). For the other verb classes, we used subordinated temporal clauses or temporal prepositions in order to have similar length and complexity of the test items. We tested four verbs with a temporal and final subordinated clause to see whether the type of clause influences to the choice of DOM. We provided the subject, the dative clitic (where applicable) and the verb of the test sentences, followed by two continuations, one with DOM and the other without DOM, see (19).

(18) Structure of test items

- 1) 3-4 sentences introducing all referents
- 2) critical sentence, consisting of
 - a) discourse linking
 - b) matrix clause with S – V – {DO, IO}
 - c) subordinated clause (final, temporal)

(19) *Luis ya era abuelo, pero acababa de tener un nuevo nieto. Se sentía muy orgulloso de él y siempre andaba hablando a sus vecinos y amigos del niño. Una mañana que el hombre se encontraba a cargo de su nieto, se encontró con un vecino. Entonces, aprovechando la ocasión, el abuelo le enseñó...*

(i) *el niño al vecino antes de entrar en el portal del edificio.*

(ii) *al niño al vecino antes de entrar en el portal del edificio.*

‘Luis was already grandfather, but he had just had a new grandson. He was very proud of him and was always telling his neighbors and friends about the child. One morning when the man was taking care of his grandson, he met a neighbor. Then, taking advantage of the occasion, the grandfather showed ...

(i) / (ii) the child to the neighbor before entering the front door of the building.’

We manipulated the critical sentences by i) alternating between clitic doubling (CLD; no-CLD) of the indirect object (in both experiments) and by ii) word order of DO and IO in Exp1. In Exp2 we changed the test items such that the number of the DO and IO were different. This allowed an unambiguous relation between clitic pronoun and direct object. (see Table 3).

Table 3. Manipulation of CLD and word order in the experimental items in Exp1 and Exp2

	Exp1		Exp2
a	SUBJECT > Ø VERB > DO > IO	a	SUBJECT > Ø VERB > DO _[Num: α] -IO _[Num: β]
b	SUBJECT > Ø VERB > IO > DO		
c	SUBJECT > CL VERB > DO > IO	b	SUBJECT > CL _[Num: β] VERB > DO _[Num: α] -IO _[Num: β]
d	SUBJECT > CL VERB > IO > DO		

Together with the 16 verbs introduced above, this design generates a total of 64 possible critical test sentences in Exp1, which were divided in 4 lists, and a total of 32 items for Exp2, which were divided in 2 lists according to the Latin Square distribution. Participants saw each verb in only one condition. In addition to the 16 critical items, each list had 16 fillers, resulting in a total of 32 items in each list.

In Exp1 105 native speakers of Spanish (mainly from Spain and Mexico) participated. With regard to the revision of the control questions, we decided to exclude those participants who did not reach 80% of correct answers and, after analyzing the answers to this type of questions, nine participants who had filled out the questionnaire completely were excluded from the research. In Exp2 157 native speakers of Spanish, only of European varieties of Spanish participated. Regarding the revision of fillers, it was decided to exclude those participants who did not reach 80% of correct answers and, after analyzing the answers to this type of questions, none of the participants who had filled out the questionnaire completely were excluded from the research.

Table 4. Participants of Exp1 and Exp2

	Exp1	Exp2
participants from Spain	37	157
participants from America	68	-
excluded	9	-
sum	96	157
judgements for critical items in total	1536	2512

4.3. Results

4.3.1 Overall effects, disambiguation and word order

We found an overall effect of more than 40% of DOM in all conditions across verb classes and syntactic configuration. Exp2 shows slightly higher rates for DOM. Note that the difference between Exp1 and Exp2 is that in Exp2 the DO and IO had different numbers, such the clitic was unambiguously linked to the intended indirect object. However, the slightly higher rate of DOM cannot be attributed to this disambiguation configuration since the difference in DOM between Exp1 and Exp2 was most pronounced in the no-CLD condition. So, we do not have any explanation for the difference. For further parameters discussed below we merged the results of the two experiments.

Table 5. Overall rate of DOM

	DOM
Exp1	41% (633/1536)
Exp2	46% (1148/ 2512)
sum	44% (1781/4048)

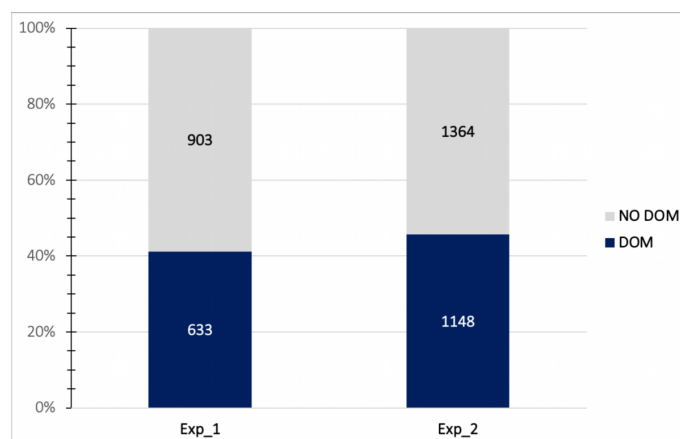


Figure 1. DOM frequency according to experiment.

In the following, we focus on a) word order (only Exp1), b) clitic doubling and c) verb class. For the statistical analysis of the results, we conducted a mixed-effects logistic regression model, including verbal class, clitic doubling and internal argument order as fixed effects and a random intercept for participants and questions.²

Word order

The order of the internal arguments was only tested in Exp1. It showed no effect (estimate: 0.03; $p = 0.78$), as can be observed in Figure 2. Participants chose the DOM-marked option in 40.63% of the DO>IO-sentences and in 41.80% of the IO>DO-sentences.

Table 6. DOM and word order of DO and IO (only Exp1)

Exp1	DOM
DO > IO	41% (312/768)
IO > DO	42% (321/768)

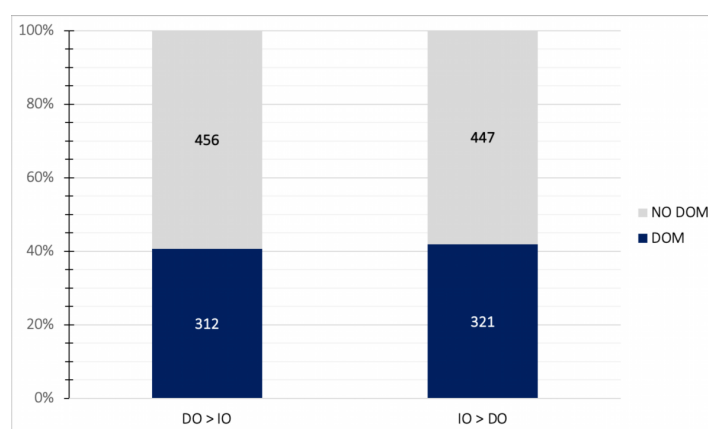


Figure 2. DOM frequency according to internal argument order in Exp1.

² We did not find any effect of the type of subordinated clause. However, the effect of adding a final clause to verbs of perception and possession cannot be appreciated, since this change did not produce a significant difference between the first two classes of verbs and the third one (estimate: 0.31; $p = 0.07$).

4.3.2 Clitic doubling of the indirect object

With clitic doubling of the indirect object, participants chose the DOM-marked option in only 32%, whereas without clitic doubling they opted for DOM in 52% of the cases. This important effect of about 20 percentage points was significant in the statistical analysis (estimate: 1.20; $p < 0.001$) (see Figure 3). This result confirms the observation of the presentation of Tigau and von Heusinger on Romanian.

Table 7. DOM and CLD (Exp1 and Exp2 together)

Exp1 and Exp2	DOM
CLD	32% (650/2024)
no-CLD	52% (1131/2024)

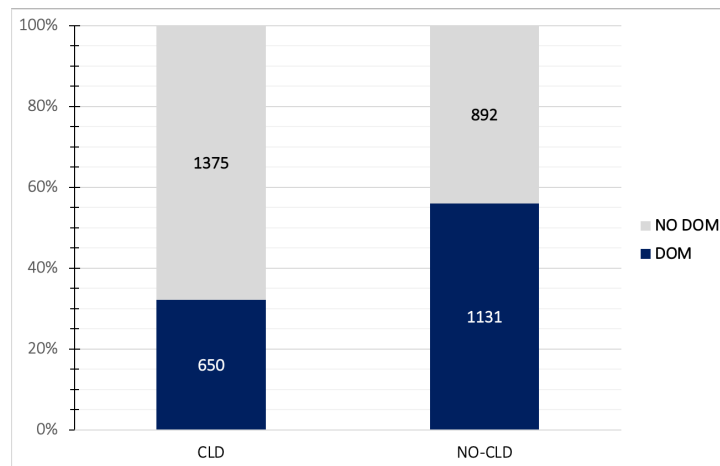


Figure 3. DOM frequency according to clitic doubling.(Exp1 and Exp2 together)

4.3.3 Verb class

There is clear difference in the DOM rate between the verb classes. Verbs of caused motion correlate with DOM in 61%, verbs of caused perception in 44% and verbs of caused possession in 35%, see Table 8 and the more fine-grained picture given in Figure 4.

Table 8. DOM depending on verb class (Exp1 and Exp2 together)

DOM	all
caused motion	61% (616/1012)
caused perception	44% (447/1012)
caused possession	35% (356/1012)

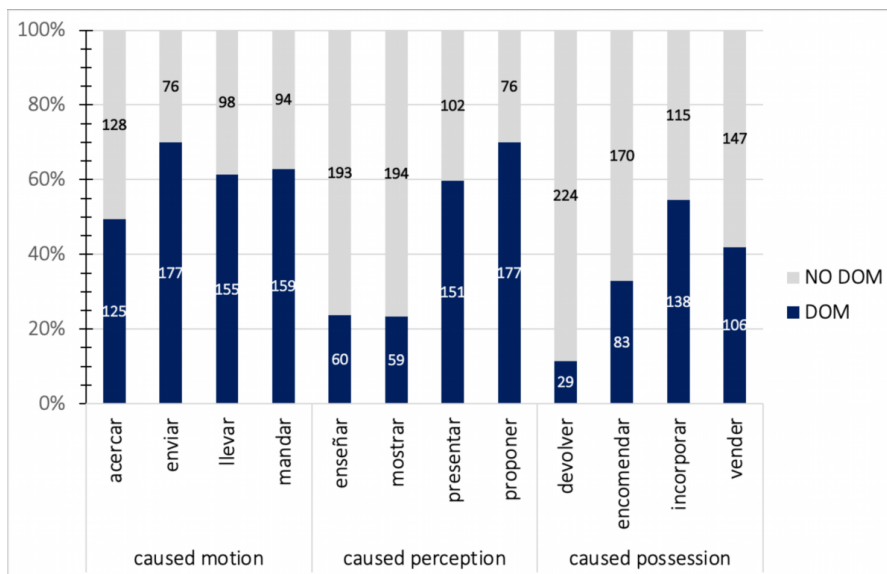


Figure 4. DOM frequency according to verb class and verb. (Exp1 and Exp2 together)

- Whereas the lexical items of the caused motion verb class behave quite similarly showing a quite high rate of DOM, the picture for the other verb classes is less clear.
- Verbs of caused perception show a remarkable bipartition: While the verbs *presentar* ‘to introduce’ and *proponer* ‘to propose’ correlate with a quite high rate of DOM and do thus pattern with the class of caused motion verbs, the lexical items *enseñar* ‘to show’ and *mostrar* ‘to show’ correlate with a quite low rate of DOM.

5. Discussion

Our discussion will focus on H3, i.e. on the impact of verbal factors on DOM, in particular on the following questions:

- Q1: Why do verbs of caused motion (e.g. *mandar* ‘send’) correlate with a relatively high frequency of DOM?
- Q2: How can we account for the strongly differing DOM distribution within the class of caused perception verbs?

5.1 Verbs of caused motion

As far as Q1 is concerned, we depart from the intuition that verbs of caused motion resemble transitive causative verbs such as *hacer* ‘to make, to cause’ appearing in canonical causative constructions, i.e. *accusativus-cum-Infinitivo* (AcI) constructions, as in (20).

- (20) *Hizo a los alumnos comprar flores.*
 make.PST.3SG DOM the students buy flowers
 ‘He made the students buy flowers.’

The literature has shown that Spanish AcI-constructions exhibit a very strong preference for DOM, at least with human direct objects (see inter alia Enghels 2007; López 2012; García García 2018). As has been argued, the striking preference for DOM seems to be conditioned by the complex argument structure of AcI-constructions, which is generally characterized by involving two events, one expressed by the matrix predicate, i.e. the causative verb *hacer* ‘to make’, and a second one realized by the embedded infinite verb such as *comprar* ‘to buy’ (see inter alia Enghels 2007 and García García 2018). Following the proto-role approach of Dowty (1991) and Primus (1999, 2006) this general insight can be spelled out more precisely: Whereas

the first argument, i.e. the causer has the proto-agent property causation and volition, entailed by *hacer* ‘to make’, the second argument, i.e. the causee has both proto-patient and proto-agent features: It is not only characterized by the proto-patient feature of being causally affected by another participant, but also by proto-agent features entailed by the infinitival verb *comprar* ‘to buy’ such as independent existence and movement. Independent existence means that “the referent is [...] not brought into being or destroyed by the event named by the verb but is presumed to exist before and after the event” (Dowty 1991: 573); movement is associated with any form of autonomous physical activity (cf. Primus 2006: 55).

For caused motion verbs, we propose a similar analysis along these lines:

- Caused motion verbs can be used in transitive constructions that strongly resemble AcI-constructions, as in (21). For verbs of caused perception and verbs of caused possession this is generally not possible, see (22).
- As the causative verb *hacer* ‘to make’, the transitive variants of the causative motion verbs qualify as object control verbs: the reference of the non-overt subject of the embedded predicate is determined by the direct object of the matrix verb.
- The direct object of (transitive) caused motion verbs has mixed semantic role properties, inter alia, the proto-patient property of being causally affected and the proto-agent property entailed by the embedded predicate, which might at least involve the properties of independent existence and movement, i.e. any kind of autonomous physical activity.

- (21) a. *Mand-ó* *a* *los alumnos* (*a*) *comprar flores.*³
 send-PST.3SG DOM the students to buy flowers
 ‘He sent the students to buy flowers.’
- b. *Envi-ó* *a* *los alumnos a comprar flores.*
 send-PST.3SG DOM the students to buy flowers
 ‘He sent the students to buy flowers.’
- c. *Llev-ó* *a* *los alumnos a comprar flores.*
 take-PST.3SG DOM the pupils to buy flowers
 ‘He took the pupils to buy flowers.’
- d. *Acerc-ó* *a* *los alumnos a comprar flores.*
 bring-PST.3SG DOM the pupils to buy flowers
 ‘He took the pupils to buy flowers.’

- (22) a. **Mostr-ó* *a* *los alumnos a comprar flores.*
 show-PST.3SG DOM the pupils to buy flowers
- b. **Enseñ-ó* *a* *los alumnos a comprar flores.*⁴
 show-PST.3SG DOM the pupils to buy flowers

- (23) a. **Devolvi-ó* *a* *los alumnos a/para comprar flores.*
 return-PST.3SG DOM the pupils to/for buy flowers
- b. **Vendi-ó* *a* *los alumnos a/para comprar flores.*
 sell-PST.3SG DOM the pupils to/for buy flowers

Contrary to causative verbs such as *hacer* ‘to make’, verbs of caused motion such as *enviar* ‘to send’ do not require the expression of a verbal complement, in particular when they are used in ditransitive contexts. As a consequence, the assumed agentivity of the direct object might be

³ Note that at least the verb *mandar* ‘to send’ is compatible with an embedded infinitive that need not be introduced by the preposition *a*. There are slight meaning differences: Whereas the option with the preposition involves an indirect causation (‘to send somebody somewhere to do something’), the option without the preposition entails a rather direct causation (‘to command somebody to do something’).

⁴ Interestingly, the sentence becomes fully grammatical when *enseñar* is interpreted with the proper causative meaning of ‘to teach’.

conveyed rather implicitly. However, even in ditransitive constructions the agentivity of the direct object can easily be made explicit by means of a final clause.

- (24) *El profesor mand-ó a los alumnos a-l doctor*
 the teacher send-PST.3SG DOM the students to-the doctor
a/para dar-le las gracias.
 to/for thank-him
 ‘The teacher sent the students to the doctor to thank him.’

We hypothesize that part of the meaning of caused motion verbs is that the causer does not only bring or send the causee to a recipient /goal, but that the referred event intends a further activity carried out by the causee. Put differently, caused motion verbs presuppose a subevent in which the causee, i.e. the direct object functions as an agentive argument involving at least the proto-agent features movement, i.e. some kind of autonomous activity, and independent existence.

5.2 Verbs of caused perception

Q2: How can we account for the strongly differing DOM distribution within the class of caused perception verbs?

As shown in Fig. 5, *enseñar* ‘to show’ and *mostrar* ‘to show’ appear with a relatively low rate of DOM reaching 24% and 23%, respectively, while *presentar* ‘to introduce’ and *proponer* ‘to propose’ show a relatively high rate of DOM reaching 60% and 70%, respectively. Following the role semantic analysis sketched above this result is to be expected.

proponer (‘to propose’)

The verb *proponer* ‘to propose’ patterns semantically and syntactically rather with caused motion verbs than with caused perception verbs. This is evidenced by the fact that it can easily be used in an AcI-like construction, as in (25). Note that this is not possible for any other verb of the caused perception class.

- (25) *Propuso a los alumnos comprar flores.*
 propose.PST.3SG DOM the students buy flowers
 ‘He proposed the students to buy flowers.’

As for AcI-like constructions as in (25), the role-semantic analysis sketched above can easily be applied. In a nutshell, the direct object has mixed semantic role properties, inter alia, the proto-patient property of being causally affected and the proto-agent property entailed by the embedded predicate, which might at least involve the properties of independent existence and movement. With respect to ditransitive constructions as in (26), the assumed agentivity of the direct object argument is generally implicit.

- (26) *el encargado de la tienda (le) propuso (a)-l empleado al presidente*
 the manager of the shop (CL) propose-PST.3SG (DOM)-the employee to-the president
para que realizase el ascenso que había prometido.
 so that carry_out-PST.SBJV.3SG the promotion that promise-PST.PRF.3SG
 ‘The shop manager proposed the employee to the president for the promotion he had promised.’

As in the case of caused motion verbs, we assume that *proponer* generally presupposes a subevent in which the direct object argument typically functions as an agentive argument, even though this subevent might only be implicit and thus not specified.

Crucially, our interpretation of the data is based on the hypothesis that DOM hinges on the agentivity of the direct object argument (cf. Primus 2012, García García 2007, 2018). Following this hypothesis, we make the following prediction:

- (27) Verbs entailing a greater number of agentivity features for their direct object argument, correlate with a greater frequency of DOM than verbs entailing a smaller number or no agentivity features at all for their direct object argument.

In our experiment this prediction is generally borne out (though we are not sure about *incorporar* ‘to incorporate’). A particular clear case is evidenced by *presentar* ‘to introduce’.

***presentar* (‘to introduce’)**

The caused perception verb *presentar* correlates with a relative high rate of DOM (60%). Though this verb does obviously not allow for an AcI-like construction, it selects a direct object argument with three agentivity features. Firstly, *presentar* entails the proto-agent feature sentience. As a consequence, the direct object argument must generally be animate. Secondly, it entails the proto-agent feature movement. Part of the meaning of the ditransitive *presentar* is that the direct object must act in some way, for example, by saying something to the indirect object participant. Thirdly, the direct object is characterized by independent existence. The assumed proto-agent features for the direct object argument of *presentar* as well as the other analyzed verbs are summarized in Table 9.

Table 9. Proto-agent entailments for the direct object argument depending on verb class

Proto-Agent properties of direct object	<i>presentar</i> ‘to introduce’	Verbs of caused motion	<i>proponer</i> ‘to propose’	Verbs of caused perception (<i>enseñar, mostrar</i> ‘to show’)	Verbs of caused possession
sentience	+	–	–	–	–
movement	+	+	+	–	–
existence	+	+	+	+	+

6. Conclusion

We put the following hypotheses:

- H1 DOM alternations are not a “stylistic variation”, but a grammatical effect depending on different grammatical parameters, including clitic doubling and verb class.
H2 Clitic doubling of the indirect object has a clear blocking effect on DOM.
H3 There is an effect of verb class: verbs of caused motion show a higher rate of DOM than other verb classes.

H1–H3 were confirmed: (i) DOM alternations depend on different grammatical parameters, including clitic doubling of the indirect object and verb class, but not word order. (ii) Clitic doubling has a significant blocking effect on DOM. This finding shows clear empirical evidence against the assumption of Company Company (1998, 2003) while it supports the view of Rodríguez-Mondoñedo (2007) and Fábregas (2013). (iii) Among the three tested verb classes, verbs of caused motion correlate with a relatively high frequency of DOM (61%). The other verb classes generally appear with a lower frequency of DOM, though with remarkable differences; in particular, within the verb class of caused perception verbs, where the frequency of

DOM with *presentar* ‘introduce’ and *proponer* ‘propose’ is as high as with caused motion verbs. We have argued that DOM is determined by the agentivity of the direct object argument, one of the verbal factors that has also been claimed to be relevant for DOM in transitive contexts. Verbs of caused motion as well as the caused perception verbs *presentar* ‘to introduce’ and *proponer* ‘to propose’ entail a greater number of proto-agent features for their direct object arguments than verbs of caused possession and the other verbs of caused perception, i.e. *enseñar* and *mostrar* ‘to show’.

Acknowledgments

The research for this paper has been funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) –Project-ID 281511265 – SFB “Prominence in Language” in the project B04 “Interaction of nominal and verbal features for Differential Object Marking” at the University of Cologne.

References

- Bello, A., [1847] (1988). *Gramática de la lengua castellana destinada al uso de los americanos*, volume 2. Arco Libros, Madrid.
- Campos, H. (1999). Transitividad e intransitividad. In Bosque, I. & V. Demonte (eds.), *Gramática descriptiva de la Lengua Española*, volume 2, 1519–1574. Espasa Calpe, Madrid.
- Company Company, C. (1998). The interplay between form and meaning in language change. Grammaticalization of cannibalistic datives in Spanish. *Studies in Language*, 22(3):529–565.
- Company Company, C. (2001). Multiple dative-marking grammaticalization. Spanish as a special kind of primary object language. *Studies in Language*, 25(1):1–47.
- Company Company, C. (2003). Transitivity and Grammaticalization of Object. The Diachronic Struggle of Direct and Indirect Object in Spanish. In Fiorentino, G. (ed.), *Romance Objects. Transitivity in Romance Languages*, 217–260. De Gruyter, Berlin.
- Comrie, B. (2013). Human themes in Spanish ditransitive constructions. In Bakker, D. & M. Haspelmath (eds.), *Languages Across Boundaries. Studies in Memory of Anna Siewierska*, 37–52. De Gruyter, Berlin.
- Demonte, V. (1994). La ditransividad en español: Léxico y sintaxis. In Demonte, V. (ed.), *Gramática del español*, 431–470. El Colegio de México, Centro de Estudios Lingüísticos y Literarios, México.
- Dowty, D. (1991). Thematic proto-roles and argument selection. *Language*, 67(3):547–619.
- Enghels, R. (2007). *Les modalités des perception visuelle et auditive. Différences conceptuelles et répercussions sémantico-syntaxiques en espagnol et en français*. Niemeyer, Tübingen.
- Fábregas, A. (2013). Differential object marking in Spanish: State of the art. *Borealis* 2(2): 1–80.
- García García, M. (2007). Differential object marking with inanimate objects. In Kaiser, G. A. & M. Leonetti (eds.), *Proceedings of the Workshop Definiteness, Specificity and Animacy in Ibero-Romance Languages*. Arbeitspapier 122. Fachbereich Sprachwissenschaft, 63–84. Universität Konstanz.
- García García, M. (2014). *Differentielle Objektmarkierung bei unbelebten Objekten im Spanischen*. (Linguistische Arbeiten 545). De Gruyter, Berlin.
- García García, M. (2018). Nominal and verbal parameters in the diachrony of DOM in Spanish. In Seržant, I. A. & A. Witzlack-Makarevich (eds.), *Diachrony of Differential Argument Marking*, 209–242. Language Science Press, Berlin.
- Haspelmath, M. (2004). Explaining the ditransitive person-role constraint: A usage-based approach. *Constructions* 2.
- von Heusinger, Klaus. 2018. The diachronic development of Differential Object Marking in Spanish ditransitive constructions. In Ilja A. Seržant & Alena Witzlack-Makarevich (eds.), *Diachrony of differential argument marking*, 315–344. Berlin: Language Science Press. <http://langsci-press.org/catalog/book/173>.
- Kittilä, S. (2006). Object-, animacy- and role-based strategies. A typology of object marking. *Studies in Language*, 30:1–32.
- Leonetti, M. (2004). Specificity and differential object marking in Spanish. *Catalan Journal of Linguistics*, 3:75–114.
- López, L. (2012). *Indefinite objects: Scrambling, choice functions and differential marking*. MIT Press, Cambridge.
- Ortiz Ciscomani, R. M. (2005). Los objetos concurrentes y la bitransitividad en el español en perspectiva diacrónica. In Eddington, D. (ed.), *Selected Proceedings of the 7th Hispanic Linguistics Symposium*, 192–202, Somerville, MA. Cascadilla Proceedings Project.
- Ortiz Ciscomani, R. M. (2011). Construcciones bitransitivas en la historia del español. *Medievalia* 38. Universidad Nacional Autónoma de México, Instituto de Investigaciones Filológicas, México D.F.
- Pensado, C. (1995). El complemento directo preposicional. Estado de la cuestión y bibliografía comentada. In Pensado, C. (ed.), *El complemento directo preposicional*, 11–60. Visor, Madrid.

- Primus, B. (1999). *Case and thematic roles. Ergative, accusative and active*. Niemeyer, Tübingen.
- Primus, B. (2006). Hierarchy mismatches and the dimensions of role semantics. In Bornkessel, I., M. Schlesewsky, B. Comrie & A. D. Friederici (eds.), *Semantic role universals and argument linking. Theoretical, typological and psycholinguistic perspectives*, 53-88. De Gruyter, Berlin.
- Primus, B. (2012). Animacy, generalized semantic roles and differential object marking. In Lamers, M. & P. de Swart (eds.), *Case, word order, and prominence. Interacting cues in language production and comprehension*, 65-90. Springer, Dordrecht.
- Real Academia Española. (1973). *Esbozo de una gramática de la Lengua Española*. Espasa Calpe, Madrid.
- Real Academia Española. (2009). *Nueva gramática de la lengua española. Morfología y sintaxis*. Espasa Calpe, Madrid.
- Rodríguez-Mondoñedo, M. (2007). *The syntax of objects: Agree and differential object marking*. University of Connecticut dissertation.
- Romero, Heredero, D. (in press). *Semántica verbal y marcado diferencial de objeto en español*. De Gruyter, Berlin.
- Torrego, E. (1999). El complemento directo preposicional. In Bosque, I. & V. Demonte (eds.), *Gramática descriptiva de la Lengua Española*, volume 2, 1779–1805. Espasa Calpe, Madrid.