

Chapter 8

Nominal and verbal parameters in the diachrony of differential object marking in Spanish

Marco García García

University of Cologne

This paper deals with the influence that nominal and verbal parameters have on DOM in the diachrony of Spanish. Comparing selected corpus studies, I will focus first on the different nominal parameters that build up the animacy and referentiality scales, in particular on animacy and definiteness. In order to clarify how far DOM has diachronically evolved, special attention will be paid to inanimate objects, which can be viewed as the alleged endpoint in the development of DOM in Spanish. Secondly, I will provide a systematic overview of the relevant verbal parameters, which include aspect, affectedness and agentivity. The study will show a complex interaction of nominal and verbal parameters, revealing some unexpected correlations: Obligatory object marking is not only found with human and strongly affected objects involved in a telic event, but also with inanimate, non-affected and agentive objects embedded in a stative event. In other words, in Spanish DOM patterns with both extremely high and extremely low transitivity. These findings sharply contrast with traditional accounts concerning the development as well as the explanation of DOM.

1 Introduction

Differential object marking (DOM) is a well-attested phenomenon within Romance languages (for an overview see Bossong 1998: 218–230). While in some Romance languages, such as Catalan or Modern Portuguese, DOM is confined to a reduced number of contexts, in others, such as Sardinian or Spanish, it is found in many more contexts. This paper will focus on Spanish, where DOM seems to have reached a greater stage of development than in any other Romance language.

As in most of the other Romance languages, DOM in Spanish is signaled by *a*, which goes back to the Latin preposition *ad* ‘to’. From its beginnings as a preposition with an exclusively locative-directional meaning, this preposition was firstly grammaticalized into a marker for indirect objects, i.e. datives. However, even in early Hispano-Romance,



the *a*-marker was already regularly used not only with indirect objects, but also with certain direct objects, in particular with those showing typical dative properties such as strong personal pronouns referring to humans (cf. Pensado 1995: 184–185 and Company Company 2002b: 205). Since then, DOM is reported to have evolved gradually along both the definiteness and the animacy scales (cf. e.g. Aissen 2003: 470–471). DOM in Spanish is said to depend not only on nominal parameters such as animacy and definiteness, but also on certain verbal parameters such as telicity and affectedness (cf. Torrego Salcedo 1999: 1784–1791 among others). Despite the vast literature, which mainly focuses on nominal parameters, there are still several core questions that remain open. To begin with, it is not clear which of the verbal parameters are the most important for the (diachronic) distribution of DOM in Spanish. Moreover, it is not obvious how verbal parameters such as telicity interact with nominal parameters such as animacy. Lastly, there are quite different views about how far DOM in Spanish has evolved.

The main purpose of this paper is to give an overview of the current state of research dealing with these questions. Firstly, I will critically review and compare several corpus studies in order to clarify how far DOM in Spanish has actually developed. To this end, I will concentrate on nominal parameters such as animacy and definiteness. Particular attention will be paid to inanimate objects. These can be seen as the alleged endpoint in the evolution of DOM in Spanish. According to Company Company (2002a: 147), at least Mexican Spanish is strongly heading towards a complete generalization of object marking not only for animates, but also for inanimate objects. This raises the question of whether Spanish is typologically shifting from a language with DOM to a language without DOM, i.e. to a grammatical system with a sort of a regular accusative case marking. Secondly, I will provide a systematic overview of the less well-studied verbal parameters associated with DOM, which include aspect (telicity and perfectivity), affectedness and agentivity. As far as agentivity is concerned, I will build on my previous analyses for Modern Spanish (García García 2014) and extend them to a diachronic perspective providing a test corpus study for the reversible verbs *seguir* ‘to follow’ and *preceder* ‘to precede’ (cf. §4.3.2).

The paper is organized as follows: §2 introduces the main conditions determining DOM in Modern Spanish as well as its description by means of the animacy scale and the definiteness scale. §3 explores the diachrony of DOM in Spanish along these scales on the basis of Laca (2006) and a number of other corpus studies. §4 focuses on the aforementioned verbal parameters (aspect, affectedness, agentivity) and elaborates on their complex interaction with nominal parameters. §5 summarizes and discusses the main findings.

2 Prominence scales and diachronic DOM

DOM in Spanish is reported to depend first of all on what Laca (2002; 2006) calls *local factors*, i.e. animacy, definiteness and referentiality. Besides this, the distribution of *a*-marking also seems to be influenced by what Laca (2006: 429–432; 454–462) labels *global factors*, i.e. different kinds of contextual conditions, such as topicality and certain

verbal parameters.¹ However, these are usually seen as additional, i.e. less important conditions, at least from a synchronic perspective. As for Standard Modern Spanish, it is generally assumed that DOM is confined to human or at least animate (non-human) referents (cf. e.g. Torrego Salcedo 1999: 1782). For definite human objects, *a*-marking is more or less obligatory (cf. (1a)), while for indefinite human objects there is more variation. Generally, *a*-marking is required for indefinite human objects that are specific (cf. (1b)). Note, though, that *a*-marked direct objects need not be specific. This is shown in (1c), where the subjunctive mood of the verb in the relative clause signals that the direct object, i.e. *una actriz* ‘an actress’, is non-specific, regardless of whether it is marked by *a* or not (cf. Leonetti 2004: 82–86 for discussion).

- (1) a. *Pepe ve *ø/a la actriz.*
 Pepe see[3SG] ø/to the actress
 ‘Pepe sees the actress.’
- b. *Pepe busc-a *ø/a una actriz que habl-a arameo.*
 Pepe look_for-3SG ø/to an actress who speak-3SG Aramaic
 ‘Pepe is looking for an actress who speaks Aramaic.’
- c. *Pepe busc-a ø/a una actriz que habl-e arameo.*
 Pepe look_for-3SG ø/to an actress who speak-3SG.SBJV Aramaic
 ‘Pepe is looking for an actress who speaks Aramaic.’ (non-specific reading)

As for animate non-human objects, *a*-marking is optional, even if the object is definite as in (2). With inanimate (definite) objects, *a*-marking is generally ungrammatical (cf. (3)).

- (2) *Pepe ve ø/a la vaca.*
 Pepe see[3SG] ø/to the cow
 ‘Pepe sees the cow.’
- (3) *Pepe ve ø/*a la película.*
 Pepe see[3SG] ø/to the film
 ‘Pepe sees the film.’

Fitting these overall generalizations, DOM in Spanish is usually described by means of the animacy scale (4), the definiteness scale (5) or a combination of these prominence scales (cf. Aissen 2003: 417–418, Laca 2006: 436).

¹Note that Laca (2006) does not use the terms local and global in the typological sense of Silverstein (1976), also followed by Witzlack-Makarevich & Seržant (2018 [this volume]). Thus, her notions are not associated with the distinction between languages where differential object marking is local in the sense that it only depends on the semantic properties of the object (e.g. animacy), and languages where the marking is rather global, i.e. where it also depends on the properties of another co-argument such as the animacy of the subject. The question of whether DOM in Spanish is local or rather global in the sense of Silverstein (1976) is not explicitly addressed in this paper. See, however, §4.3 focussing on the relative agentivity of the subject with respect to the object, as well as García García (2014: 40–43, 76–81), which deals with the relative animacy of subject and object.

- (4) Animacy scale:
human > animate > inanimate
- (5) Definiteness scale:
personal pronoun (pron.) > proper name (PN) > definite NP (def. NP) > indefinite specific NP (spec. NP) > non-specific NP (non-spec. NP)

As is well known, these scales provide a rough means to capture not only language-specific generalizations, but also cross-linguistic tendencies about DOM and related phenomena (for a critical discussion see Bickel et al. 2015; Haspelmath 2014; Sinnemäki 2014, and Witzlack-Makarevich & Seržant 2018 [this volume]). Typically, the scales are conceived of as implicational hierarchies. Among other things, they make the implicational prediction that if object marking is required for definite NPs in a given language, it will also be used for all higher ranging categories of the definiteness scale, i.e. proper names and personal pronouns. Conversely, it is implicated that if object marking is ungrammatical for definite NPs, it is also ruled out for all the lower ranging categories, i.e. indefinite specific and indefinite non-specific NPs.

Languages with DOM differ in at least two respects. Firstly, object marking may be sensitive to either one of the mentioned scales or to both of them (cf. Bossong 1998: 202 among many others, for a different view see Sinnemäki 2014). For example, in Hebrew or Turkish, DOM seems to depend only on the definiteness scale whereas in Spanish or Romanian DOM hinges on both the definiteness and the animacy scale. Secondly, languages contrast with respect to the transition point, i.e. the right-most category within the relevant scale(s) that requires obligatory object marking. In Hebrew, for instance, object marking is obligatory for all definite NPs but not for indefinite NPs. As an implication, object marking is also compulsory for all the higher ranging categories in the definiteness scale, namely proper names and personal pronouns. DOM in Turkish shows a very similar distribution. In contrast to Hebrew, however, Turkish also requires DOM for indefinite specific NPs (cf. Aissen 2003: 453–454 and references cited therein).

Since in Spanish DOM depends on both the animacy and the definiteness scale, the interaction of these scales has to be taken into account. A very elegant way to represent this interaction has been proposed by von Heusinger & Kaiser (2005: 40), who use a cross-classification (cf. Table 1). This representation provides a clear though still simplified picture of the conditions under which the *a*-marking of the direct object in Modern Standard Spanish is obligatory (+), optional (\pm) and ungrammatical (-).

The animacy and definiteness scales are taken to be relevant not only for the synchronic distribution of DOM, but also for its diachronic development. The diachronic expansion is claimed to proceed from the more prominent categories on the left/top of the scales to the less prominent ones to the right/bottom of these scales. The opposite holds true for the retraction of DOM in that it is supposed to affect the less prominent categories before the more prominent ones. This less well attested case seems to be evidenced by the diachronic development of DOM in Catalan (cf. Dalrymple & Nikolaeva 2011: 212) and Portuguese (cf. Delille 1970).

Table 1: DOM in Standard Spanish (cf. von Heusinger & Kaiser 2005: 40)

Definiteness →	pron. >	PN >	def. NP >	spec. NP >	non-spec. NP
Animacy ↓					
human	+	+	+	+	±
animate	+	+	±	±	–
inanimate	∅	±	–	–	–

Thus, at an initial stage, object marking may be restricted to human pronouns. At a further stage, it may become regular also for the less prominent categories of one or both scales, i.e. animate pronouns, human proper names, animate definite NPs and so forth. As is sometimes suggested in the literature, this may ultimately lead to a full grammaticalization of the differential object marker into a regular accusative case marker (cf. Aissen 2003: 255). In this respect, Villar (1983: 191–196) has argued that Proto-Indo-European had a differential object marker which, in the historic Indo-European languages, developed into an obligatory object case marker (for discussion see Bossong 1984). As has already been noted in the introduction and will be discussed with more detail in the next section, a similar development has also been claimed regarding Spanish.

3 Nominal parameters and diachronic DOM in Spanish

3.1 Diachronic corpus studies

The historic development of DOM in Spanish has been analyzed in a number of studies focusing on the impact of different factors such as animacy and definiteness (cf. e.g. Company Company 2002b, Laca 2002; Aissen 2003), topicality (cf. Melis 1995) or affectedness, i.e. the influence of certain verb classes (cf. von Heusinger 2008; von Heusinger & Kaiser 2011). Recently, not only monotransitive but also ditransitive constructions have been systematically taken into account (cf. Ortiz Ciscomani 2005; 2011, von Heusinger 2018 [this volume]). While most of the empirical studies are confined to human and animate objects, some of them deal exclusively with inanimate objects (cf. Company Company 2002a, Barraza Carbajal 2003; 2008). The most detailed empirical investigation is provided by Laca (2006), whose corpus findings will serve as a reference point in the following sections. Laca's corpus analysis comprises data from the 12th to the 19th century. The data are taken from nine texts, i.e. between one and three text samples per century.² It

²The corpus is composed of samples from the following texts: *Poema de mio Cid* (12th cent.); *El Conde Lucanor* (14th cent.); *La Celestina* (15th cent.); *Lazarillo de Tormes*, *Documentos lingüísticos de la Nueva España* (16th century); *Don Quijote* (17th cent.); *La comedia nueva*, *El sí de las niñas*, *Documentos lingüísticos de la Nueva España* (18th cent.); *El Periquillo sarniento*, *Pepita Jiménez* (19th cent.).

goes without saying that, given this rather restricted empirical basis, one has to act with caution when interpreting the data. Whenever possible, her data will be complemented and compared with the findings from other empirical studies. In order to give a critical overview of what is known about the diachronic expansion of DOM in Spanish, I will first concentrate on the impact of nominal parameters, i.e. animacy and definiteness. To this end, I will focus on human objects (§3.2), animate (non-human) objects (§3.3) and inanimate objects (§3.4). In a further step, I will discuss the role of verbal parameters, i.e. aspect, affectedness and agentivity (§4.1–§4.4).

3.2 Human objects

Following Laca (2006: 436–438), I will use the animacy scale in (4) as well as the somewhat simplified definiteness scale given in (6).³

- (6) personal pronoun > proper name > definite NP > indefinite NP > bare noun

The latter scale differs slightly from the hierarchy given in (5). Most importantly, it does not include the category of specificity but that of bare nouns. Whereas indefinite NPs may be specific or non-specific, bare nouns are always non-specific. As a consequence, (6) will not allow for systematic observations concerning correlations between specificity and DOM.

On the basis of Laca’s (2006) corpus results and the simplified definiteness scale in (6), Table 2 and Figure 1 show the diachrony for DOM with human objects. It is to be noted that neither in the figure nor in the table have personal pronouns been considered since with these categories object marking was already obligatory in Old Spanish.

Table 2: Diachrony of DOM with human objects (adapted from Laca 2006: 442–443).

	XII	XIV	XV	XVI	XVII	XVIII	XIX
Proper name	96% (25/26)	100% (8/8)	100% (35/35)	95% (42/44)	100% (65/65)	86% (24/28)	89% (24/27)
Definite NP	36% (13/36)	55% (36/66)	58% (38/65)	70% (85/122)	86% (117/136)	83% (44/53)	96% (73/76)
Indefinite NP	0% (0/6)	6% (2/31)	0% (0/11)	12% (7/59)	40% (21/53)	63% (20/32)	41% (12/29)
Bare noun	0% (0/12)	0% (0/7)	17% (2/12)	5% (2/40)	3% (1/39)	9% (2/22)	6% (1/17)

³In contrast to the more fine-grained distinctions proposed by Laca (2006: 439–443), the scale in (6) neither includes the differentiation between NPs with and without lexical heads, nor the distinction between definite-like NPs with universal quantifiers (e.g. *cada* ‘each’) and indefinite-like NPs with existential quantifiers (e.g. *algo* ‘some’). Consequently, these categories have not been taken into account in Table 2 and Figure 1. For a discussion of these categories cf. Laca (2006: 437–439) and García García (2014: 82–87).

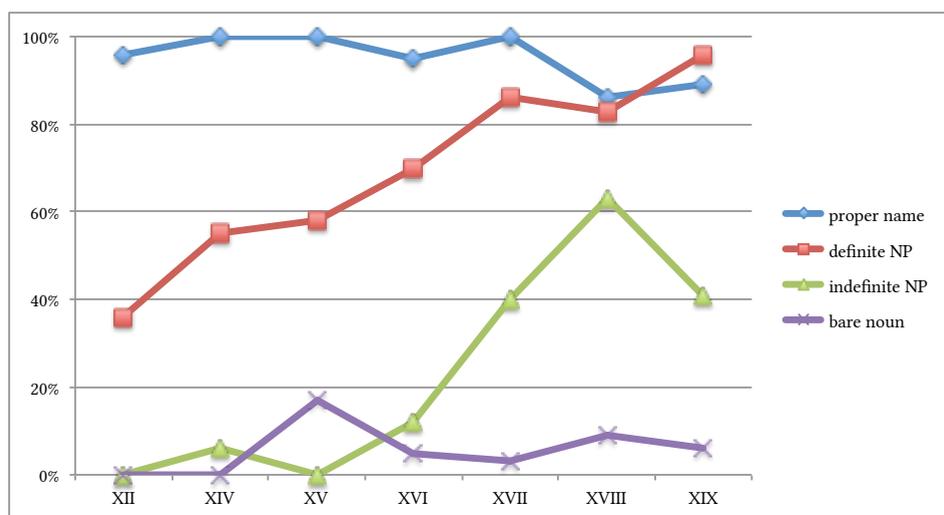


Figure 1: Diachrony of DOM with human objects (based on Laca 2006: 442–443)

Table 2 and Figure 1 allow for a number of observations: Firstly, the expansion of DOM is roughly confined to definite and indefinite NPs. With definite NPs, the frequency of *a*-marked objects increases significantly and more or less continuously. Starting with 36% of *a*-marked objects with definite NPs in the 12th century, we already find 58% in the 15th century, 86% in the 17th century and, finally, 96% in the 19th century. Thus, from being an optional marker for definite human objects in Old Spanish, essentially restricted to dislocated, i.e. topicalized NPs (cf. (7) vs. (8)), *a*-marking has become an almost obligatory requirement for any kind of definite human object in Modern Spanish, including non-topicalized NPs (cf. (9)).

- (7) *En brazo-s tened-es mi-s fija-s tan blanc-a-s como*
 in arm-PL hold-2PL 1SG.POSS-PL daughter-PL so white-F-PL as
el sol.
 the sun

‘In your arms you hold my daughters as white as the sun.’ (*Cid* 2333, *apud* Laca 2006: 455)

- (8) *a las su-s fija-s en-braço las prend-ia*
 to the 3POSS-PL daughter-PL in-arm them take-IPFV[3SG]
 ‘He took his daughters in his arms.’ (*Cid* 275, *apud* Laca 2006: 428)

- (9) *En brazo-s ten-éis a mi-s hija-s tan blanc-a-s como*
 in arm-PL hold-2PL to 1SG.POSS-PL daughter-PL so white-F-PL as

el sol.
the sun

‘In your arms you hold my daughters as white as the sun.’

As illustrated by these examples, one of the driving forces for the spread of DOM seems to be topicality. However, since topics are typically human and necessarily referential, it is not clear whether topicality is also relevant for the spread of DOM concerning other subsets of direct objects, such as those expressed by human indefinite NPs. For a discussion on the impact of topicality on (diachronic) DOM in Spanish, see Laca (1995: 85–89; 2006: 455–456); Melis (1995: 134, 161); Pensado (1995: 196–225); Delbecque (2002: 85); Leonetti (2004: 86–107); von Heusinger & Kaiser (2005: 41–45), and Iemmolo (n.d.: ch. 8.5.2).

As already mentioned above, Table 2 and Figure 1 also show a remarkable evolution with respect to human objects expressed by indefinite NPs. Contrary to definite NPs, however, we do not observe a continuous but rather a discontinuous development with indefinite NPs. From the 12th to the 16th century, *a*-marking of indefinites is attested very scarcely, showing no relevant tokens in the 12th and 15th century and merely 6% and 12% of *a*-marked NPs in the 14th and 16th century, respectively. In the 17th century, there is an abrupt rise of *a*-marked NPs up to 40% followed by a peak of 63% case-marked indefinites in the 18th century. Interestingly, case marking in this century is clearly more frequent than in the 19th century, where it is attested in merely 41% of the transitive constructions, i.e. just as often as 200 years before. As noted by Laca (2006: 460), the relatively high percentage of *a*-marking in the 18th century seems to be due to a verbal factor, namely to the disproportionately high number of causative constructions that are attested in the corresponding text samples. I will comment on this observation in §4.4.

Comparing the development of human definite and indefinite objects, Table 2 and Figure 1 allow for a second general observation: During the whole period, the frequency of marked definite objects is clearly and constantly higher than that of indefinite objects. This distribution is completely in line with the expected development based on the prominence scales.

A further observation that follows from Table 2 and Figure 1 is that with both proper names and bare nouns, there is no attested evolution: similarly to strong personal pronouns, proper names already required object marking in the 12th century (cf. (10) as well as the findings from Company Company 2002b: 207 given in Table 5). Although Figure 1 shows a slight retraction in the 18th and 19th century, it is still the strongly preferred option today.

(10) *Mat-astes a Bucar e arranc-amos el campo.*
kill-2SG.PST to Bucar and take-1PL.PST the field

‘You killed Bucar and we have won the battle.’ (*Cid* 2458, *apud* Laca 2006: 447)

With bare nouns, object marking is hardly ever attested across the centuries. Note that the absolute numbers are extremely low with respect to this category showing only two or fewer tokens with *a*-marked objects per century. This is also the case for the 15th

century, where the relatively high frequency of 17% of DOM corresponds to only 2 out of 12 relevant instances. Even in Modern Spanish, DOM of bare nouns is generally blocked. It is only found under certain conditions: (i) with bare plural objects governed by some verbs such as *golpear* ‘to beat’ (cf. example (16) in §4.2); (ii) with bare plural objects that are modified by an attribute as in (11); and (iii) with bare plurals expressing a contrastive focus as in (12).

- (11) a. ^{??}*Detuv-ieron a hincha-s.*
 arrest.PST-3PL to supporter-PL
 ‘They arrested some supporters.’
- b. *Detuv-ieron a hincha-s peligros-o-s del Atlético.*
 arrest.PST-3PL to supporter-PL dangerous-M-PL of.the Atlético
 ‘They arrested some dangerous Atlético supporters.’ (Leonetti 2004: 87)
- (12) a. ^{??}*En el poblado vi a pescador-es.*
 in the village see.PST.1SG to fisher-PL
 ‘In the village I saw some fishers.’
- b. *En el poblado vi a PESCADOR-ES, no a turista-s.*
 in the village see.PST.1SG to fisher-PL NEG to tourist-PL
 ‘I saw fishers in the village, not tourists.’ (Leonetti 2004: 88)

By way of summary, it is important to stress a fact that has not received the necessary attention in the literature: The expansion of DOM within the domain of humans only applies to definite and indefinite object NPs. For the other NP types, there is no observable evolution. DOM was either already required in Old Spanish, as is the case with proper names, or it was and still is blocked today, as is evidenced by bare nouns.

3.3 Animate non-human objects

Let us turn to animate objects that do not refer to human individuals such as animals. Table 3 summarizes the corresponding corpus results from Laca (2006). Due to the many gaps and the very low numbers of relevant tokens across all categories, no clear picture emerges from these findings.

With regard to proper names, indefinite NPs and bare nouns, no conclusions whatsoever can be drawn on the basis of these numbers. The results are slightly better for definite NPs. Here, one may assume a certain increase of DOM: Whereas in the 14th century only 10% of the definite NPs occur with *a*-marking, we find 41% of marked objects in the 17th century and 36% in the 19th century. Note, however, that there are no cases of DOM in the 16th century and that there is a remarkable retraction in the 18th century, where, in contrast to the preceding centuries, only 6% of *a*-marked objects are attested.

The results from another diachronic corpus analysis, namely that by Company Company (2002a,b), suggest a much clearer picture. However, the overall distribution of *a*-marked animate objects is considerably lower, showing 3% of *a*-marked animate objects

Table 3: Diachrony of DOM with animate non-human objects (adapted from Laca 2006: 442–443)

	XII	XIV	XV	XVI	XVII	XVIII	XIX
Proper name	100% (1/1)	– (0/0)	– (0/0)	– (0/0)	100% (10/10)	– (0/0)	– (0/0)
Definite NP	0% (0/2)	10% (2/20)	20% (1/5)	0% (0/10)	41% (16/39)	6% (1/18)	36% (4/11)
Indefinite NP	– (0/0)	0% (0/10)	– (0/0)	0% (0/4)	7% (1/15)	4% (1/27)	0% (0/5)
Bare noun	– (0/0)	0% (0/5)	– (0/0)	0% (0/11)	0% (0/5)	0% (0/6)	0% (0/5)

in the 13th and 14th century, 6% in the 15th century, and 7% in the 16th century (cf. Table 5 in §3.4, below). These percentages may indicate a slight and constant increase of DOM, but one has to be cautious. Firstly, because the category of animates has not been differentiated with respect to definiteness in the aforementioned corpus study. This means that the frequencies within the same study may not be comparable. While the attested cases of DOM in the 13th century may contain animate indefinite NPs, the corresponding data of the 16th century may be confined to animate definite NPs or proper names. Secondly, Company Company’s (2002b) study does not provide information about the distribution of DOM with animates beyond the 16th century. Thus, in contrast to the development of *a*-marking with human objects, the diachrony of DOM with animates is far from clear.

On the basis of the corpus studies carried out so far, we cannot assess whether there really has been an evolution of DOM with animate non-human objects. We clearly need further analyses grounded on much broader empirical bases. Moreover, there are some additional parameters that must be taken into account with respect to animate non-human objects, especially with regard to the category of animals. Beyond definiteness and other related semanto-pragmatic criteria such as specificity and topicality, DOM with animals additionally seems to depend on the species of the animal denoted by the lexical noun as well as on the affective relation between the speaker and the animal referent in question (cf. Bossong 1991: 159; Aissen 2003: 457; Real Academia Española 2010: 2635). Furthermore, *a*-marking also hinges on the agentivity of the animal referent in the given event: Based on data from *Don Quijote* (17th century), García (1993: 42) observes that *a*-marking of definite animal objects is more likely in contexts where the animals are moving and acting on their own than in contexts where no movement of the animals is asserted. These parameters may be responsible for a great amount of both synchronic and diachronic variation.

Summing up the results presented so far, it can be concluded that there has been a clear evolution of DOM along the definiteness scale. However, the evolution only concerns human referents, specifically human objects expressed by full definite and indefinite NPs.

While in Old Spanish the *a*-marking was optional (\pm) for human definite objects and was not attested for human indefinite NPs ($-$), in Modern Spanish we find near obligatory *a*-marking of the former ($+$) and at least optional *a*-marking (\pm) of the latter category (cf. Table 4).

Table 4: Evolution of DOM with human objects along the definiteness scale

[+human]	Old Spanish (12th century)	Modern Spanish (19th century)	evolution
Personal pronoun	+	+	no
Proper name	+	+	no
Definite NP	\pm (36%)	+ (96%)	yes
Indefinite NP	$-$ (0%)	\pm (41%)	yes
Bare noun	$-$	$-$	no

3.4 Inanimate objects

Let us consider the diachrony of DOM with inanimate objects. Interestingly, *a*-marking with inanimate objects is already found in Old Spanish, though it is only attested very scarcely (cf. §4.3.2 for some examples). Laca (2006) does not give any numbers concerning the development of DOM with inanimate objects. However, her conclusion with respect to this lexical subset of object NPs is fairly clear: “On the basis of the analyzed corpus, one cannot assume an increase of the frequency of occurrences of object marking with inanimates, the use of the object marker is always marginal in these cases” (Laca 2006: 450, my translation).⁴

In contrast, Company Company (2002a,b) comes to a different conclusion. Her corpus study considers DOM with humans, animates and inanimates from the 13th–20th century. The data from the 20th century are exclusively from Mexican Spanish. Based on this corpus study, the author observes that *a*-marking has not only become more frequent for animate objects, in particular for humans, but also for inanimate objects (cf. Table 5).

As for the 20th century, the data shows 17% (64/363) of inanimate objects with *a*-marking. Although Company Company does not differentiate between definite and indefinite NPs, it is very likely that the *a*-marked inanimate objects are mostly definite (cf. Barraza Carbajal 2003: 28, 108, García García 2014: 38–39, 81–87). According to Company Company (2002a,b), the corpus results clearly indicate that (Mexican) Spanish is heading towards a full grammaticalization of the differential object marker into a proper accusative case marker:

⁴“Partiendo del corpus examinado, no puede hablarse de un aumento de las ocurrencias ante inanimados, antes bien, la marca en estos casos es siempre marginal” (Laca 2006: 450).

Table 5: The diachrony of DOM in Spanish according to Company Company (2002b: 207)

	XIII	XIV	XV	XVI	XX
Pronoun	100% (53/53)	100% (46/46)	99% (67/68)	99% (182/183)	100% (55/55)
PN	99% (124/125)	99% (170/172)	96% (129/134)	88% (124/147)	100% (32/32)
Human	42% (243/574)	35% (224/631)	35% (181/518)	50% (541/1086)	57% (81/141)
Animate	3% (4/155)	3% (2/64)	6% (2/34)	7% (11/168)	– –
Inanimate	1% (2/300)	0% (1/300)	3% (8/300)	8% (54/641)	17% (64/373)

Nowadays, the last stage of the grammaticalization is going on; an interesting slow invasion of the *a* case-marker into the prototype inanimate zone is taking place, it is no more a classifier ‘personal *a*’, it is becoming a true case-marker, generalizing its meaning and syntactic distribution. (Company Company 2002b: 208)

However, (Mexican) Spanish actually seems to be rather far from entering this last stage of grammaticalization. In addition to the above-mentioned findings from Laca (2006: 450), this is shown by a number of further empirical analyses (cf. Buyse 1998; Barraza Carbajal 2003; Tippetts 2011; García García 2014). In what follows, I will briefly comment on these studies.

Barraza Carbajal (2003) is a detailed diachronic corpus analysis confined to inanimate objects. The data are based on different text types (literary texts, newspapers, academic texts) from the 16th, 18th and 20th centuries. One half of the texts stem from Spain, the other half from Mexico. Similar to Company Company (2002a,b), the findings from Barraza Carbajal also suggest an increase of *a*-marking with inanimate objects. However, the increase is much lower, showing 2% (12/547) of *a*-marked instances in the 16th century, 3% (15/546) in the 18th century and only 5% (49/962) in the 20th century.

Similar results for the 20th century are provided by Tippetts (2011), a contrastive analysis of DOM based on exclusively oral material from Buenos Aires, Madrid and Mexico City. At least as far as inanimate objects are concerned, the distribution of *a*-marking is notably higher in Buenos Aires but still comparably low in all three cities: Tippetts (2011: 113) found 8% (26/339) of *a*-marked instances in Buenos Aires, 5% (18/345) in Madrid, and 5% (13/283) in Mexico City. Particularly the percentages for Madrid and Mexico resemble the above-mentioned results from Barraza Carbajal (2003). Altogether, the distribution of *a*-marking with inanimate objects across the three varieties considered by Tippetts (2011) is 5.9% (57/967).

Buyse’s (1998) study is a synchronic corpus analysis that uses mainly written texts from 20th century European Spanish. Regarding inanimate objects, his corpus shows

only 3.2% (65/1,936) of marked instances. According to my own empirical research (García García 2014: 71), the frequency of *a*-marked inanimate objects in the 20th century is even lower, namely 1.2% (573/48,231). My corpus analysis is based on the *Base de Datos de Verbos, Alternancias de Diátesis y Esquemas Sintáctico-Semánticos del Español* (ADESSE), an open source data base of 1.5 million words that pertain to written and oral texts stemming from Spain (80%) and Latin America (20%).⁵ Figure 2 summarizes the results of DOM with inanimate objects obtained in the previously mentioned corpus studies. (*DO* refers to morphologically non-marked direct objects and *a DO* to *a*-marked direct objects).

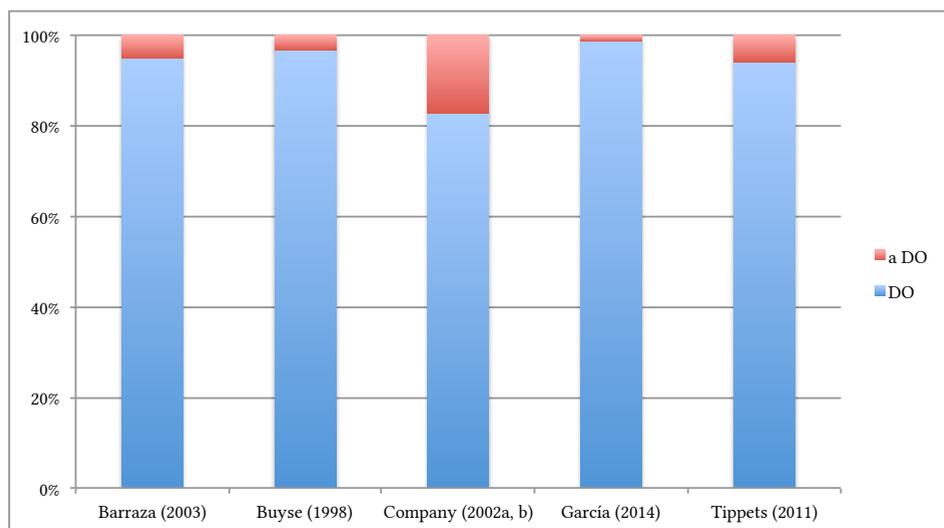


Figure 2: Percentages of DOM with inanimate objects in different corpora (20th century)

As can be observed in this figure, the percentages of inanimate objects with *a*-marking found in the cited studies range from 1.2% to 17.2%. Interestingly, the reasons for the differing results seem to be neither connected to the origin of the data (Spain, Mexico etc.), nor to the type of the data (oral vs. written), but rather to the notion of animacy. This category is usually taken for granted and not defined explicitly. Particularly important in this regard is the categorization of objects denoting collectives such as *equipo* ‘team’ or *empresa* ‘company’, which are more likely to occur with *a*-marking. Crucially, in some corpus studies such as in Barraza Carbajal (2003), collectives are classified as inanimates, whereas in others, such as my own (García García 2014), they are subsumed under the category of animates. This may be one of the causes for the differing results (cf. García García 2014: 72–75). In order not to blur the distinction between animates and inanimates, the most adequate treatment would be to put collectives in a separate class, or, as Ilja

⁵For details see <http://adesse.uvigo.es/index.php/>.

A. Seržant (p.c.) has suggested, to simply exclude them from the analysis of DOM. This would do justice to the problem that the animacy association of these nouns is context-dependent and not uniform.

To summarize this section, it can be concluded that there is no clear support for an evolution of DOM with inanimate NPs. Although *a*-marking of inanimate objects seems to be attested already in Old Spanish, it is still very rare today. Thus, there is no evidence for the hypothesis that the differential object marker is becoming a non-differential accusative case marker. On the contrary, the empirical findings discussed in this section suggest that the evolution of *a*-marking from Old to Modern Spanish is basically restricted to human definite and human indefinite objects. This may lead to the conclusion that the *a*-marker is basically “a marker of animate direct objects” (de Swart 2007: 132), or human direct objects, to be more precise. However, this is a somewhat problematic simplification since, in combination with certain verbs, *a*-marking may also be required for inanimate objects (cf. §4.3 below).

4 Verbal parameters and diachronic DOM in Spanish

In this section, I will consider different verbal parameters, elaborating on their interaction with nominal parameters and their influence on synchronic and diachronic DOM. I will first look at aspect, focusing on telicity (§4.1), then take into account the role of affectedness (§4.2), and, finally, point to the relevance of agentivity (§4.3–§4.4).

4.1 Aspect

According to Torrego Salcedo (1999: 1787–1790), aspect has a clear and systematic influence on DOM in Modern Spanish. She states that direct objects governed by telic verbs, i.e. by Vendler (1957) ACHIEVEMENT and ACCOMPLISHMENT verbs such as *insultar* ‘to insult’ and *curar* ‘to treat’, take the *a*-marker obligatorily, at least if the object referents are human. This is illustrated in (13).

- (13) *Insult-aron* **ø/a* *un estudiante.*
insult-3PL.PST *ø/to* *a* student
‘They insulted a student.’

Even though the direct object in (13) is indefinite, *a*-marking is not optional but categorical. Note, however, that the verbs considered by Torrego Salcedo are not only characterized by being telic, but also by two further non-aspectual properties: firstly, verbs such as *insultar* ‘to insult’, *sobornar* ‘to bribe’, *curar* ‘to treat’ and *emborrachar* ‘to make drunk’ involve an affected object (cf. §4.2). Secondly and more importantly, these verbs only accept object arguments that are human. Thus, the alleged lexicalization of the *a*-marker assumed for these verbs might not be tied to telicity but rather to their strong preference for human objects (cf. also von Heusinger 2008: 28–29). Further evidence for this view is provided by the fact that direct objects governed by typical telic predicates

with a strong preference for inanimate objects such as the ACHIEVEMENT verbs *abrir* ‘to open’ or *cerrar* ‘to close’ are systematically blocked for DOM.⁶

- (14) *Pepe abr-e ø/*a la puerta.*
 Pepe open-3SG.PST ø/to the door
 ‘Pepe opens the door.’

Torrego Salcedo (1999) also considers atelic verbs, i.e. Vendler’s (1957) ACTIVITIES (e.g. *besar* ‘to kiss’) and STATES (e.g. *conocer* ‘to know’). They seem to differ with respect to the transition point of DOM, i.e. the right-most category within the relevant scales requiring object marking. Contrary to the above-mentioned telic predicates, with verbs denoting ACTIVITIES and STATES, *a*-marking of indefinite human objects is not obligatory but rather optional. According to Torrego Salcedo (1999: 1788–1789), object marking with ACTIVITY verbs may lead to a shift from an atelic to a telic interpretation. However, this is controversial. As convincingly argued by Delbecque (2002: 95–97), the telic reading does not depend on DOM. This is shown in (15), which clearly denotes a telic event, regardless of whether the object is *a*-marked or not.

- (15) *Bes-aron ø/a varios ciclista-s en una hora.*
 kiss-3PL.PST ø/to several cyclist-PL in one hour
 ‘They kissed several cyclists in one hour.’

From a diachronic perspective, the influence of aspect on DOM has been studied by Barraza Carbajal (2008). This study is confined to inanimate objects. Therefore, it allows for an animacy-independent evaluation of the impact of aspect. Besides telicity, her study also considers perfectivity, i.e. the proper aspectual parameter related to the viewpoint of an event (perfective vs. imperfective). As far as telicity is concerned, the results of Barraza Carbajal (2008: 343–346) show that *a*-marking through time does not correlate with telic verbs such as *comprar* ‘to buy’, but rather with atelic verbs such as *conocer* ‘to know’ (cf. Table 6).

In each of the considered time periods in Table 6, the percentages of *a*-marked objects are clearly higher with atelic than with telic verbs. This is particularly evident for the 18th century, where 93% of the *a*-marked objects are governed by atelic verbs. Note that, in all centuries, there is also a clear correlation between atelic verbs and the absence of *a*-marking. For example, in the 15th–16th century we find that not only 75% of the cases with DOM are attested with atelic verbs, but also that 61% of the instances without DOM combine with atelic predicates. Though in all of the time periods the percentages of atelic verbs are always higher for objects with *a*-marking than for those without *a*-marking, it is striking that, in the 20th century, the difference is only minimal (72% vs. 70%). This suggests that, diachronically, the influence of atelic verbs has decreased. Nowadays, the frequency of atelic verbs with *a*-marked objects roughly corresponds to the frequency

⁶Note also that there are some verbs such as *preceder* ‘to precede’ and *suceder* ‘to follow’ that require *a*-marking even when the object is inanimate. Clearly, these verbs denote atelic rather than telic events (cf. §4.3).

Table 6: Telicity and diachronic DOM with inanimate objects (Barraza Carbajal 2008: 345)

	DO		a DO	
	<i>atelic</i>	<i>telic</i>	<i>atelic</i>	<i>telic</i>
XV-XVI	61% (326/535)	39% (209/535)	75% (18/24)	25% (6/24)
XVIII	76% (404/531)	24% (127/531)	93% (67/72)	7% (5/72)
XX	70% (639/913)	30% (274/913)	72% (133/185)	28% (52/185)

of these verbs with objects without *a*-marking. The same applies for telic verbs (28% vs. 30%). Consequently, telicity itself does not seem to be a relevant factor for DOM in Modern Spanish, at least as far as inanimate objects are concerned (cf. Barraza Carbajal 2008: 345).

The results for perfectivity, that is, the criterion related to the viewpoint aspect, resemble those for telicity. Barraza Carbajal's (2008: 346–348) data show that there is a slight diachronic preference for DOM in imperfective rather than in perfective events. For the 20th century, the corpus findings show that 79% (146/185) of the *a*-marked objects co-occur with an imperfective verb form while only 21% (39/185) are attested with a perfective verb form. Similar to what is the case with telicity, the percentages for the constructions without DOM are comparable: While 74% (676/913) of the sentences without *a*-marking denote an imperfective event, 26% (237/913) express a perfective event.

To sum up, our brief discussion of aspect points to the following conclusions: Firstly, the alleged lexicalization of the *a*-marker found with certain telic verbs such as *insultar* 'to insult' may not be due to telicity but rather to the verb's restriction for human objects. Secondly, Barraza Carbajal's (2008) analysis of inanimate objects suggests that aspect in itself has only a minor influence on DOM in Spanish. Thirdly, it seems that this influence decreases through time. Finally, it is remarkable that (diachronic) DOM does not correlate with telic and perfective but with atelic and imperfective events, i.e. with verbal parameters indicating a low rather than a high degree of transitivity. This correlation seems to contradict the findings concerning the second important verbal parameter related to DOM, namely affectedness.

4.2 Affectedness

The relevance of affectedness for DOM in Spanish has been pointed to by Spitzer (1928), Pottier (1968) and Torrego Salcedo (1999), among others. Similarly to telicity, Torrego Salcedo (1999: 1791) notes that, in Modern Spanish, objects governed by verbs selecting an affected object such as *golpear* 'to beat' require *a*-marking even for human objects that are indefinite and non-specific. As (16) shows, even bare nouns require the *a*-marker, at least with the verb *golpear* 'to beat'.

- (16) *Siempre golpe-an *ø/a turistas.*
 always beat-3PL ø/to tourists
 ‘They always beat tourists.’

According to the literature, some of the verbs selecting an affected object such as *castigar* ‘to punish’, *sobornar* ‘to bribe’ or *odiar* ‘to hate’ seem to have lexicalized the object marker for all human objects (cf. Leonetti 2004: 84 among others). However, it is not clear whether this alleged lexicalization is really due to affectedness. Again, most of these verbs only accept human objects. Verbs that also allow for inanimate objects such as *odiar* ‘to hate’ only require *a*-marking when the object is human. As stated by von Heusinger (2008: 9): “It rather seems that it is just the condition of being human that triggers (obligatory) DOM.” Moreover, the assumption that verbs such as *odiar* ‘to hate’ select an affected object is not without problems. Usually, such predicates are analyzed as psychological verbs having an EXPERIENCER and a STIMULUS as their arguments, whereby neither the former nor the latter represents a properly affected participant.

The diachronic impact of affectedness on DOM in Spanish has been systematically analyzed by von Heusinger (2008) and von Heusinger & Kaiser (2011). In the latter study, affectedness is defined as the “persistent change of an event participant” (von Heusinger & Kaiser 2011: 593). Moreover, affectedness is taken as a gradual notion that is specified by means of Tsunoda’s (1985: 388) transitivity or affectedness scale, where different verb classes are ordered with respect to the degree of affectedness of the patient argument (cf. Table 7).

Table 7: Affectedness scale of Tsunoda (1985: 388, first 5 classes) with Spanish verbs (von Heusinger & Kaiser 2011: 609)

1		2		3	4	5
Direct effect on patient (=effective action)		Perception		Pursuit	Knowledge	Feeling
1a	1b	2a	2b			
+result	–result	+attained	–attained			
<i>matar</i> ‘kill’, <i>herir</i> , ‘violate’	<i>golpear</i> ‘hit’, <i>tirar</i> ‘shoot’	<i>ver</i> ‘see’, <i>oír</i> ‘hear’	<i>escuchar</i> ‘listen’, <i>mirar</i> ‘look at’	<i>buscar</i> ‘search for’, <i>esperar</i> ‘wait for’	<i>conocer</i> ‘know’, <i>entender</i> ‘under- stand’	<i>querer</i> ‘like’, <i>temer</i> ‘fear’

The left-most class, i.e. EFFECTIVE ACTION, comprises prototypical transitive verbs such as *kill* or *hit*. This class can further be subdivided into two subclasses (1a and 1b), depending on whether the event denoted by the predicate has a direct result on the patient or not. Verbs from the EFFECTIVE ACTION class 1a such as *kill* are supposed to impose the highest degree of affectedness on the corresponding patient. The verb classes to the right imply a respectively lower degree of affectedness.

Focusing on the five verb classes given in the affectedness scale in Table 7, von Heusinger & Kaiser (2011) carried out a diachronic corpus analysis considering 12 verbs, i.e. 2 verbs per class, including the subclasses of the EFFECTIVE ACTION type. Their study comprises 2,000 sentences from the 15th, 17th and 19th centuries extracted from the *Corpus del Español* and CORDE. While they only considered human NPs, they carefully differentiated between definite and indefinite NPs. They found clear significant correlations between verb classes and diachronic DOM with both definite and indefinite objects. Here, I will only consider the latter NP subtype, i.e. human indefinite objects, since the impact of verb classes on DOM is more obvious with these objects. The results are presented in Table 8 and Figure 3.

Table 8: Percentages of *a*-marking of human indefinite direct objects for five verb classes (von Heusinger & Kaiser 2011: 611)

	15th cent.	17th cent.	19th cent.
1a + 1b EFFECTIVE ACTION: <i>matar, herir, golpear, tirar</i>	18% (9/51)	40% (21/53)	79% (46/58)
2a +2b PERCEPTION: <i>oír ver, escuchar, mirar</i>	17% (1/6)	71% (22/31)	93% (27/29)
3 PURSUIT: <i>buscar, esperar</i>	11% (1/9)	23% (8/35)	41% (17/41)
4 KNOWLEDGE: <i>conocer, entender</i>	– (0/0)	31% (5/16)	67% (14/21)
5 FEELING: <i>querer, temer</i>	– (0/0)	52% (11/21)	75% (15/20)

Von Heusinger & Kaiser's (2011) findings show a great influence of verb classes on DOM through time. Furthermore, they suggest at least a partial correlation between diachronic DOM and affectedness. For example, there are clearly higher percentages of *a*-marked instances in each of the centuries for direct objects governed by verbs of the EFFECTIVE ACTION class (e.g. *matar* 'to kill', *golpear* 'to hit') than for direct objects combining with the PURSUIT class (e.g. *buscar* 'to search for', *esperar* 'to wait for').

However, as noted by von Heusinger & Kaiser (2011), the corpus results do not fully mirror the expectations based on Tsunoda's (1985) affectedness scale. There are some interesting mismatches concerning the correlation between diachronic DOM and affectedness. The most striking mismatch concerns the class of FEELING, which represents the lowest ranking class in the proposed affectedness scale (cf. Table 7). Contrary to expectation, this class showed a much greater affinity for object marking than the PURSUIT or the KNOWLEDGE class. Taking a closer look at the FEELING class, von Heusinger & Kaiser (2011) found that the two selected verbs, i.e. *querer* 'to like' and *temer* 'to fear', behave very differently. While the first shows the expected lower preference for object marking, the latter demonstrates an unexpected strong preference for *a*-marking. The authors explain the unpredicted behavior of DOM with *temer* 'to fear' as follows:

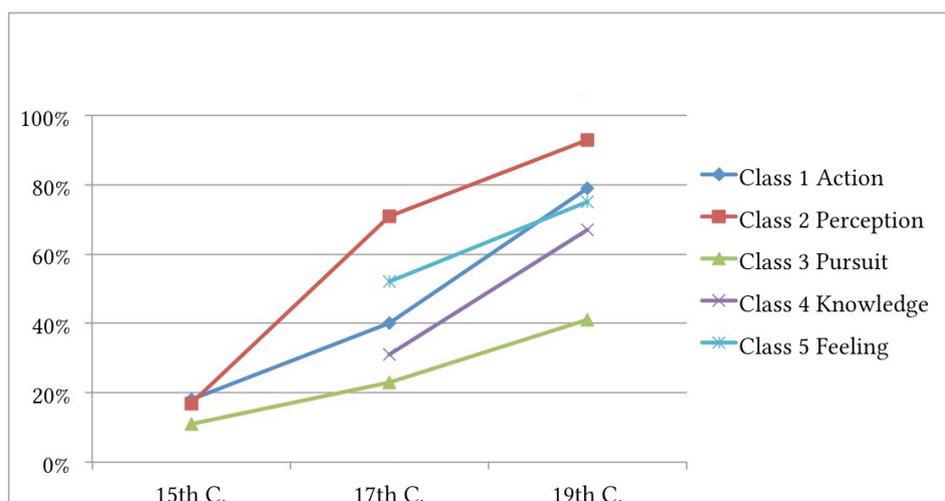


Figure 3: Percentages of *a*-marking of human indefinite direct objects depending on verb classes and time (von Heusinger & Kaiser 2011: 611)

[T]he direct object of ‘fear’ has more typical properties of a subject than a prototypical object of ‘like’ (see Kirsner & Thompson 1976). This might be the cause of *temer*’s high scores. This behaviour, however, has nothing to do with affectedness, but rather with the competition between the agentivity of the participants involved in the event. (von Heusinger & Kaiser 2011: 613)

A similar contrast as the one between *querer* ‘to like’ and *temer* ‘to fear’ is found within the PERCEPTION class. Here, the verbs of auditory perception, i.e. *escuchar* ‘to listen’ and *oír* ‘to hear’ show a notably stronger preference for diachronic DOM than the visual perception verbs *mirar* ‘to look at’ and *ver* ‘to see’ (cf. von Heusinger & Kaiser 2011: 614). The different behavior of these verbs can be explained along the same lines as the contrast between *querer* ‘to like’ and *temer* ‘to fear’. While the verbs of auditory perception presuppose a noise-producing source as their object argument, i.e. a physically active and thus agent-like participant, the object argument of visual perception verbs need not be an agentive participant (cf. also Enghels 2007: 244–273).

Summing up, on the one hand there seems to be a clear diachronic correlation between affectedness and the spread of DOM. On the other hand, however, the unexpected strong preference for diachronic DOM found with the FEELING verb *temer* ‘to fear’, as well as with the verbs of auditory PERCEPTION *escuchar* ‘to listen’ and *oír* ‘to hear’, suggest a rather contrary correlation, namely that DOM is not favored by a higher degree of the object’s affectedness but by a higher degree of the object’s agentivity. As we will see in the next section, agentivity is also the key notion for understanding the rare and seemingly exceptional cases of DOM with inanimate objects.

4.3 Agentivity and DOM with inanimate objects

4.3.1 DOM-sensitive verb classes in Modern Spanish

As shown in §3.4, *a*-marking of inanimate direct objects is generally ungrammatical in Modern Spanish; cf. (3) repeated in (17) for convenience:

- (17) *Pepe ve ∅/*a la película.*
 Pepe see[3SG] ∅/to the film
 ‘Pepe sees the film.’

However, in some cases, such as those given in (18), *a*-marking of inanimate objects is obligatory or at least the strongly preferred option.

- (18) a. *Un artículo preced-e *∅/a un sustantivo.*
 a article precede-3SG ∅/to a noun
 ‘An article precedes a noun.’
- b. *En este cóctel el vodka pued-e sustitu-ir *∅/a la ginebra.*
 in this cocktail the vodka can-3SG substitute-INF ∅/to the gin
 ‘In this cocktail, vodka can be substituted by gin.’
- c. *La euforia caracteriz-a ??∅/a la situación.*
 the euphoria characterize-3SG ∅/to the situation
 ‘Euphoria characterizes the situation.’
- d. *La mujer venc-ió ??el/al destino.*
 the woman beat-3SG.PST the/to.the destiny
 ‘The woman beat destiny.’
- e. *No llam-an conflicto *∅/a una pelea.*
 NEG call-3PL conflict ∅/to a fight
 ‘They do not call a fight a conflict.’

Note that these examples challenge many of the standard assumptions about DOM. Firstly, they call into question the implicational predictions associated with prominence scales mentioned in §2: The observation based on (18), that (definite and indefinite) inanimate objects must take the *a*-marker, would lead to the wrong prediction that *a*-marking is also obligatory for animate non-human objects.⁷ Obviously, this is not the case. In most contexts, *a*-marking of animate non-human objects is rather optional than categorical (cf. Table 1). As noted by Torrego Salcedo (1999: 1788), among others, *a*-marking in

⁷Though it is more usual to find definite rather than indefinite NPs among inanimate objects with *a*-marking (in particular with those that are not modified by an attribute), definiteness is not a necessary condition for *a*-marking (cf. (18a) and (18e)).

sentences such as those in (18) is not determined by nominal but by verbal factors, more specifically by lexical verbs such as *preceder* ‘to precede’.

This conclusion is certainly true, but it involves a second problem. It contests the traditionally assumed hierarchy of DOM conditions in Spanish, according to which object marking depends first and foremost on nominal parameters (animacy and definiteness) rather than on verbal parameters.

The very impact of verbal parameters involves yet a third puzzle for the standard assumptions about DOM (in Spanish). The main verbal factors that are taken to be relevant for DOM in Spanish are telicity and affectedness (cf. §4.1 and §4.2). However, in (18) neither the former nor the latter factors are at play. Apart from (18d), the sentences given in (18) do not denote a telic, but a stative situation. Furthermore, they involve a non-affected rather than an affected object.

Following Weissenrieder (1985; 1991) and Delbecque (2002), I have argued elsewhere (cf. García García 2007: 65–66; 2014: 147–189) that DOM with inanimate objects occurs mainly with a small number of verb classes, namely with those given in (19).

(19) DOM-sensitive verb classes

- a. Verbs of sequencing (e.g. *preceder* ‘to precede’, *suced*er ‘to succeed’).
- b. Verbs of replacement (e.g. *sustituir* ‘to substitute’, *reemplazar* ‘to replace’)
- c. Verbs of competition (e.g. *vencer* ‘to win’, *derrotar* ‘to defeat’)
- d. Verbs of attribution (e.g. *caracterizar* ‘to characterize’, *definir* ‘to define’)
- e. Verbs of naming (e.g. *considerar* ‘to consider’, *llamar* ‘to call’)

The unexpected affinity for DOM with inanimate objects found with these verbs seems to be triggered by their specific role semantics, at least as far as the classes (18a–d) are concerned.⁸ According to the generalization of *thematic distinctness* proposed in García García (2007: 71, 2014: 145); *a*-marking of inanimate direct objects is required when the subject does not outrank the object in terms of agentivity. Before illustrating this generalization, I will briefly specify my notion of agentivity, which is based on Primus’ (1999a; 2006) Proto-Role model, a refined version of that by Dowty (1991).

Primus (1999a; 1999b; 2006) distinguishes two types of thematic information that define Proto-Roles: *involvement* and *dependency*. Involvement is characterized by the number and content of Proto-properties, which roughly correspond to those mentioned by Dowty (1991: 573), that is, control, (autonomous) movement, experience and possession. The second type of thematic information, viz. dependency, describes the causal relation between the involved co-arguments. According to Primus (1999a: 52; 2006: 56), the PROTO-PATIENT always depends on the PROTO-AGENT (co-argument dependency). Crucially, the co-argument dependency relation is taken as the central criterion that distinguishes the PROTO-AGENT from the PROTO-PATIENT. Whereas the PROTO-PATIENT is defined by its causal dependency on the PROTO-AGENT, the PROTO-AGENT is conceived

⁸DOM with verbs of naming is mostly found in double object constructions, in particular when the object argument and the predicative nominal are adjacent, as in (18e). Thus, with this verb class DOM is rather due to syntactic factors (cf. García García 2014: 102–104).

of as a *causally independent co-argument*, i.e. as an argument whose existence and involvement in a given event do not depend on any other argument.

Following Primus (2006), not just participants accumulating many or all of the Proto-Agent involvement properties (control, experience etc.), such as the first argument of *Uma kills Bill*, will count as PROTO-AGENTS. Participants showing a minimal number or even none of the corresponding involvement properties, such as the subject in *Uma is brave*, are also considered as PROTO-AGENTS, though as logically weaker ones.⁹ This is due to the fact that, in both situations, *Uma* functions as a causally independent co-argument.

On the basis of Primus' notion of agentivity, let me now illustrate the above-mentioned generalization of thematic distinctness. I will focus on the verbs of sequencing (19a) and the verbs of replacement (19b), which can be subsumed under the more abstract class of reversible predicates since they both point to a reversible relation between their co-arguments. Consider (18a), where the verb *preceder* 'to precede' denotes a merely temporal ordering of the core arguments *artículo* 'article' and *sustantivo* 'noun'. According to Primus (2006: 56), both arguments can be categorized as PROTO-AGENTS. This follows from the fact that, in the sequencing event denoted by *preceder* 'to precede', none of the co-arguments depends on the other. Note that the same (truth-functional) meaning as in (18a) can be expressed by means of the verb *suced*er 'to succeed/come after', which is the converse counterpart of *preceder* 'to precede':

- (20) *Un sustantivo suced-e *ø/a un artículo.*
 a noun succeed-3SG ø/to a article
 'A noun comes after an article.'

As predicted by the generalization of thematic distinctness, *a*-marking is required in (18a), as well as in (20). Note that the *a*-marked NPs in (18a) and (20) are not indirect but direct objects. Though from a semantic point of view neither *preceder* 'to precede' nor *suced*er 'to succeed' are typically transitive predicates, morphosyntactically they behave as canonical transitive verbs. This is evidenced by the fact that these verbs fulfill the standard morphosyntactic criteria for transitivity in Spanish. They allow for both pronominalization of the object by means of an accusative clitic and transformation into a passive (cf. García García 2014: 55–56).

The obligatory object marking in (18b) can also be accounted for by thematic distinctness. Similar to (18a), (18b) also denotes a reversible relation between the corresponding co-arguments. Obviously, (18b) does not encode an asymmetric substitution event, with *vodka* and *gin* functioning as the respective PROTO-AGENT and PROTO-PATIENT arguments. Rather, *vodka* and *gin* are conceived of as replaceable ingredients. This means that (18b) neither entails a proper causation on the part of the subject, nor a proper affection on the part of the object argument. Again, both arguments can be analyzed as PROTO-AGENTS since none of the participants depends on the other. To put it differently,

⁹PROTO-AGENTS having many or all of the corresponding involvement properties are specified as A^{max}, whereas PROTO-AGENTS with only a minimal or even none of the relevant involvement properties are referred to as A^{min} (cf. Primus 2006: 61).

in the referred situation *vodka* and *gin* serve the same role-semantic function: They can both be used to cause a specific change of state concerning the taste, the alcoholic content or some other characteristic property of the cocktail in question (cf. García García 2007: 80; 2014: 137–138, and Primus 2012: 78).

Although reversible verbs generally show a very strong preference for *a*-marked direct objects, there are some conspicuous differences among the lexical predicates that form this class. As I have shown in detail elsewhere (García García 2014: 162–167), this is particularly obvious with respect to the sequencing verbs *preceder* ‘to precede’, *suced*er ‘to succeed’ and *seguir* ‘to follow’. In the corpus data base ADESSE (20th century), inanimate direct objects of *preceder* and *suced*er are exclusively attested with *a*-marking. This suggests that these verbs have lexicalized the *a*-marker. However, in combination with *seguir* *a*-marking is only found in 7.5% (12/160) of the cases. The different behavior of *preceder* ‘to precede’ and *suced*er ‘to succeed’, on the one hand, and *seguir* ‘to follow’, on the other, is connected to the fact that the latter predicate is a polysemous verb. *Seguir* can be used not only with a reversible meaning in the sense of ‘x comes after y’ (21a), but also with different non-reversible meanings such as ‘to follow (with the eyes), ‘to observe’ (21b) or ‘to continue’ (21c). As illustrated in (21), *a*-marking is only found when *seguir* is used with the reversible meaning.

- (21) a. *la-s pausa-s que sig-uen [...] a su-s tarea-s de*
 the-PL pause-PL that follow-3PL to 3SG.POSS-PL task-PL of
copista
 copyist
 ‘the pauses that come after his tasks as a copyist’ (ADESSE, PAI: 086, 02)
- b. *el animal-it-o [...] segu-í-a cada movimiento de*
 the animal-DIM-MASC follow-IPFV-3SG each movement of
su-s mano-s
 his-PL hand-PL
 ‘the little animal followed/observed every movement of his hands’ (ADESSE, TER: 074, 16)
- c. *te quitaban la chuleta y seg-uí-as el examen*
 2SG.ACC remove the crib and follow-IPFV-2SG the exam
 ‘they took the crib away from you and you continued the exam’ (ADESSE, MAD: 417, 05)

Whereas (21a) denotes a situation similar to the ones expressed in (18a) and (20), i.e. a merely temporal relation in which the object is as agentive as the subject argument, both the event referred to in (21b) and in (21c) involve an object that is clearly less agentive than the respective subject participant. This correlates with the absence of *a*-marking.

In sum, the observations on reversible predicates show that the relative agentivity of the direct object is a crucial factor for DOM, at least as far as inanimate objects in Modern Spanish are concerned (for further evidence, including the other DOM-sensitive verb classes mentioned in (19), see García García 2014: Ch. 6). Building on these synchronic

insights, let us now examine whether agentivity is also a diachronically relevant factor for DOM in Spanish.

4.3.2 DOM-sensitive verb classes from a diachronic perspective

It is noteworthy that, despite its rareness, DOM with inanimate objects is already attested in older stages of Spanish, at least with definite NPs (cf. Table 5, Table 6 and (22)). As noted by Laca (2006: 451), it typically occurs with certain verbal lexemes such as those given in the examples from Fernando de Rojas' *Celestina* (1499) and Miguel de Cervantes' *Don Quijote* (1605, 1615) in (22).

- (22) a. *que preced-e a lo corporal*
 that precede-3SG to the physical
 'that it precedes the physical things' (*Celestina*, VI. 178, apud Laca 2006: 451)
- b. *a los [...] clar-o-s sol-es, nublad-o-s scur-o-s [...]*
 to the bright-M-PL sun-PL, cloudy-M-PL dark-M-PL
ve-mos suced-er
 see-1PL follow-INF
 'we see that bright sunlight is followed by dark clouds' (*Celestina*, VIII. 215, apud Laca 2006: 451)
- c. *La noche que sigu-ió al día del reencuentro de*
 the night that follow-3SG.PST to.the day of.the reunion of
la Muerte.
 the death
 'The night that followed the day with the reunion with death.' (*Quijote*, 752, apud Laca 2006: 451)
- d. *Y a ést-a-s llam-as señales de salud.*
 and to this-F-PL call-2SG signs of health
 'And you call those signs of health.' (*Celestina*, VI. 178, apud Laca 2006: 451)
- e. *la voluntad a la razón no obedece*
 the will to the reason NEG obey-2SG
 'will does not obey reason' (*Celestina*, I. 9, apud Laca 2006: 452)

Interestingly, most of these verbs correspond to the same verb classes that are also relevant for Modern Spanish: While the examples in (22a)–(22c) contain the sequencing verbs *preceder* 'to precede', *suceder* 'to succeed' and *seguir* 'to follow', (22d) shows a double object construction with the verb of naming *llamar* 'to call'. Besides, verbs having a strong preference for (agent-like) human objects such as *obedecer* 'to obey' (22e) also seem to allow for object marking with inanimates. In order to evaluate the diachronic influence of these verb classes and the impact of agentivity on DOM more thoroughly, further research is needed.

As a first step towards this research task, I carried out a test corpus analysis for the sequencing verbs *preceder* 'to precede' and *seguir* 'to follow'. On the basis of the *Corpus*

del Español, I have checked data from the 13th to the 20th century. For each century, I have analyzed the first 100 tokens with *preceder* and *seguir*, respectively. Data containing animate objects as well as cliticized objects were excluded. As a consequence, only about 20 relevant tokens per verb and century could be evaluated. The results of the corpus analysis are shown in Table 9 and the simplified representation in Figure 4.¹⁰

Table 9: Distribution of DOM with inanimate objects depending on *preceder* 'precede' and *seguir* 'follow' (Corpus del Español)

	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX
<i>preceder</i>	100% (1/1)	—	85% (11/13)	77% (20/26)	88% (7/8)	92% (22/24)	94% (29/31)	98% (39/40)
<i>seguir</i>	29% (6/21)	6% (1/17)	5% (1/22)	10% (3/30)	6% (2/34)	19% (6/32)	22% (4/18)	13% (3/23)

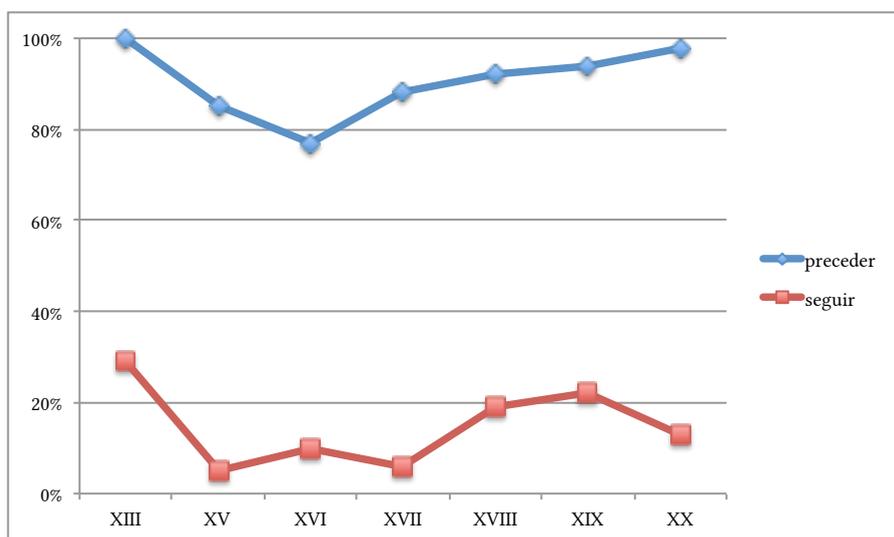


Figure 4: Percentages of *a*-marking with inanimate objects depending on *preceder* 'to precede' and *seguir* 'to follow' (Corpus del Español)

Table 9 and Figure 4 allow for the following observations: Firstly, in combination with the sequencing verbs *preceder* 'to precede' and *seguir* 'to follow', *a*-marking of inanimate objects is already attested in the 13th century. Since then, the frequency of DOM with these verbs has remained quite stable. Note that although *a*-marking shows a minimal

¹⁰In contrast to Table 9, Figure 4 does not include the findings for the 14th century. In this century, only data with *seguir* 'to follow' but no relevant tokens with the verb *preceder* 'to precede' were found.

increase from the 18th century onwards, the highest percentages of DOM with both verbs are documented in the 13th century. This suggests that there have not been any significant changes, neither for DOM in combination with *preceder* ‘to precede’ nor with *seguir* ‘to follow’. Secondly, the verbs obviously have a very different affinity for DOM over time. While *a*-marking with *preceder* is highly frequent, ranging between 77% and 100%, with *seguir* it is rather rare. With this verb, the percentages of inanimate objects with *a*-marking only range between 5% and 29%.

A closer look at the data reveals that the different diachronic behavior of these verbs is due to the same role-semantic reasons as in Modern Spanish. The verb *preceder* is nearly exclusively documented with a reversible meaning in the sense of ‘x comes before y’, as in (23a). Only twice is it found within a non-reversible predication, as in (23b). Here, it is not restricted to the denotation of a mere sequencing event, but rather used in the sense of ‘to guide’ or ‘to determine’, thus expressing a causation between the subject and the object participant (cf. Delbecq 2002: 92–93 for similar meaning variations of *preceder* in Modern Spanish).

- (23) a. *El matrimonio [...] preced-e a los otr-o-s sacramento-s.*
 the marriage precede-3SG to.the other-M-PL sacrament-PL
 ‘Marriage precedes the other sacraments.’ (13th century, Alf. X., *Siete partidas*)
- b. *la certeza y seguridad [...] deb-e preced-er su ejercicio*
 the certainty and confidence must-3SG precede-INF 3SG.POSS
 practice
 ‘certainty and confidence must guide his practice’ (16th century, Solórzano Pereira, *Política indiana*)

Contrary to *preceder*, the verb *seguir* is only rarely attested with a reversible predication in the sense of ‘x comes after y’, as in (24a). It is used much more frequently with a non-reversible meaning such as ‘to continue’, illustrated in (24b).

- (24) a. *sigu-e ala primer-a faz de Aries*
 follow-3SG to.the first-F phase of Aries
 ‘it follows/comes after the first phase of Aries’ (13th century, Alf. X., *Judizios de las estrellas*)
- b. *non quis-o ssegu-ir el pleito*
 NEG want.PST-3SG follow-INF the lawsuit
 ‘he did not want to continue the lawsuit’ (13th century, Alf. X., *Espéculo*)

As shown in (23) and (24), inanimate objects of reversible relations are regularly marked with *a*, both in combination with *preceder* and *seguir* while those found in non-reversible predications, which are much more common with *seguir*, lack *a*-marking. These observations suggest that it is not the verb *per se* that triggers DOM through time but rather the agentivity of the direct object that follows from the more or less frequently

attested reversible meanings of the investigated verbs. This claim is supported by the synchronic distribution of DOM found with most of the other DOM-sensitive verb classes mentioned in (19). A case in point are the verbs of replacement *sustituir* ‘to substitute’ and *reemplazar* ‘to replace’: Similar to *seguir* ‘to follow’, both *sustituir* and *reemplazar* have a reversible meaning (‘x takes the place of y’) and a non-reversible meaning (‘x substitutes/replaces y (with z)’), whereby the reversible variant patterns systematically with DOM and the non-reversible patterns with the absence of object marking (cf. Weisenrieder 1985: 395–396; García García 2014: 149–154). However, so far, these verbs have only been examined in Modern Spanish.

In order to obtain a more detailed picture of the diachronic impact of agentivity on DOM, the diachronic test corpus study undertaken for *preceder* ‘to precede’ and *seguir* ‘to follow’ must be complemented by empirical analyses considering all the other DOM-sensitive verb classes mentioned in (19), in particular by verbs of replacement (e.g. *reemplazar* ‘to replace’), verbs of attribution (e.g. *caracterizar* ‘to characterize’) and verbs of competition (e.g. *vencer* ‘to win’).

4.4 *Accusativus-cum-infinitivo*-constructions (AcI)

This section deals with AcI-constructions with causative and perception verbs. Thus, it does not consider a proper verbal but a constructional parameter. As we will see, AcI-constructions also seem to underpin the (diachronic) influence of agentivity on DOM. Let us reconsider the diachronic development of DOM with human indefinite objects reported in §3.2. As illustrated in Table 2 and Figure 1, the expansion of *a*-marking with this subset of objects shows a striking irregularity. While there are 40% (21/53) of *a*-marked objects in the 17th century and 41% (12/29) in the 19th century, the greatest percentage of *a*-marking with indefinite human objects is found in the 18th century, showing a remarkable peak of 63% (20/32). As noted by Laca (2006: 460), the relatively high percentage of *a*-marked objects found in this century is due to the disproportionately high number of causative constructions attested in one of the corresponding text samples, namely the *Documentos lingüísticos de la Nueva España*. In this text sample, 9 out of 12 of the *a*-marked indefinite human objects contain a causative construction such as the one given in (25).

- (25) *hiz-o* *parec-er* *ante* *sí* *a* *un yndio* *que* [...]
 make.PST-3SG appear-INF before REFL to an Indian who
dij-o *llamarse* *Pedro* *Martín*
 say.PST-3SG to.be.called Pedro Martín
 ‘He summoned to him an Indian who said that he was called Pedro Martín.’
 (DLNE, 1733, 189.487, apud Laca 2006: 460)

The affinity of AcI-constructions for DOM is not only evidenced by constructions with causative verbs, but also by those with perception verbs. Although DOM is probably less frequent with the latter type of AcI-construction than with the causative type (cf.

Roegiest 2003: 316–317), it is still very common to also use the object marker in AcI-constructions with perception verbs, at least in Modern Spanish:

- (26) *Se o-yó maull-ar a un gato.*
 REFL hear-3SG.PST meow-INF to a cat

‘We heard the meowing of a cat.’ (Corrales Egea, apud Roegiest 1979: 50)

The question here is why AcI-constructions show such a striking preference for DOM. One can assume that this is due to agentivity, i.e. to the semi-agentive status of the object participant. As argued by Roegiest (1979: 50), the direct object of the matrix verb is concurrently the “subject” of the infinitival verb, whereby the latter relation involves an “activation” of the object, that is, an agentive interpretation of the corresponding participant. Within the Proto-Role model, it can be specified that the second participant of an AcI-construction shows both proto-agent and proto-patient properties (cf. Primus 1999b: 161–162). This is particularly obvious with respect to (26). Whereas the first argument of the perception event denoted by *oír* ‘to hear’ has the Proto-Agent property *experience*, the second argument, i.e. the indefinite non-human NP *un gato* ‘a cat’, is not only characterized by the converse Proto-Patient property of *being experienced*, i.e. of being perceived, but also by the Proto-Agent property *move*, entailed by the infinitival verb *maullar* ‘to meow’. Note that the Proto-Agent property *move* is associated with any form of autonomous physical activity (cf. Primus 2006: 55).

The close connection between the direct object’s agentivity and DOM is also corroborated by Enghels’s (2007: 241–273) fine-grained study on AcI-constructions with perception verbs in Modern Spanish (cf. also Torrego Salcedo 1999: 1792). Enghels differentiates between different factors that determine the agentivity degree of the direct object, i.e. of the second argument of an AcI-construction, such as (i) the modality of the perception verb (visual vs. auditory), (ii) the animacy of the second argument (human, animate, inanimate etc.) and (iii) the semantics of the infinitival verb (transitive, unergative, unaccusative). With respect to the latter factor, it is assumed that AcI-constructions embedding predicates that are transitive, such as *matar* ‘to kill’, presuppose a high agentivity degree of the second argument, while AcI-constructions embedding unergative verbs such as *reír* ‘to laugh’ and those having unaccusative verbs such as *morir* ‘to die’ imply a respectively lower agentivity degree of the second argument. Enghels’ (2007: 241–273) findings reveal that the more the mentioned factors indicate an agentive interpretation of the direct object argument, the greater the probability for *a*-marking. Though the modality of the perception verb (visual vs. auditory) and the animacy of the second argument are the most relevant factors, there is also a clear and independent effect with respect to the semantics of the infinitival verb (cf. Table 10).

Table 10 represents the influence of the embedded infinitival predicate on DOM in AcI-constructions with human direct objects. As can be observed, *a*-marking is noticeably more frequent with transitive verbs (98.6%) than with intransitive verbs, especially in comparison with unaccusative verbs (71.1%), that is, with those predicates presupposing the lowest agentivity degree of the direct object.

Table 10: Distribution of DOM with human objects in Acl-constructions depending on the semantics of the infinitival predicate (adapted from Enghels 2007: 268)

infinitival predicate	DO		a DO	
transitive	1.4%	(5/369)	98.6%	(364/369)
unergative	4.5%	(17/308)	94.5%	(291/308)
unaccusative	28.9%	(123/425)	71.1%	(302/425)

5 Conclusion

In Spanish, DOM is diachronically triggered not only by nominal, but also verbal parameters. The general picture that emerges from the current research on nominal parameters (animacy and definiteness) is that DOM is a remarkably stable system. Although there has clearly been an evolution of DOM from Old to Modern Spanish, this development is basically restricted to human definite and indefinite objects (cf. Table 4). Other NP types do not seem to have undergone any remarkable changes. This applies in particular to the category of inanimates: The *a*-marking of inanimate direct objects was and still is a scarcely attested phenomenon (cf. Figure 2). Thus, there is no clear support for the hypothesis that the *a*-marker is grammaticalizing into a proper accusative case marker and, consequently, that Spanish is changing from a language with DOM to a language without DOM. Nevertheless, it would be wrong to conclude that DOM in Spanish is essentially driven by humanness.

The discussion of verbal parameters has revealed that the occurrence of DOM through time is also influenced by agentivity, affectedness and, in some rather inconsistent way, also by aspect. As for agentivity, the test corpus analysis of *preceder* ‘to precede’ and *seguir* ‘to follow’ (13th–20th century) has shown that agentive objects require *a*-marking even when the referent is inanimate. Thus, in both Modern and Old Spanish, agentivity overrides the strong DOM condition of humanness. Further evidence for the relevance of agentivity is provided by the unexpected preference for DOM with verbs such as *temer* ‘to fear’ (cf. von Heusinger & Kaiser 2011: 613), as well as by Acl-constructions, which also show a clear preference for DOM, at least from the 18th century on. In these constructions the direct object not only functions as a patient, but also as an agent argument.

Note that the conclusion that DOM is diachronically conditioned by both the object’s humanness and the object’s agentivity is no contradiction. On the contrary, humanness can be taken as an inherent nominal feature that encodes a very typical, though not necessary, property of an agent. As pointed out by Delbecque (1998: 398) and Primus (2012: 78–79), among others, human direct objects can be conceived of as potential agents.

The interaction of nominal and verbal parameters, though, remains challenging. As has been shown, diachronic DOM also depends on affectedness and, to some extent, on telicity. However, these factors only seem to be relevant with respect to human objects. While there are some telic predicates involving a highly affected object that have lexical-

ized the *a*-marker, such as *matar* ‘to kill’ and *insultar* ‘to insult’, it must be emphasized that these verbs only accept human or at least animate objects. If we only consider inanimate objects, telicity has a rather negative influence on diachronic DOM (cf. Table 6). Besides, we also find atelic verbs selecting a non-affected object such as *preceder* ‘to precede’ and *sucedee* ‘to succeed’ that seem to have lexicalized DOM, too. This leads to the puzzling conclusion that, in terms of Hopper & Thompson (1980), DOM in Spanish is driven by both extremely high and extremely low transitivity (cf. also Fábregas 2013: 67). Obligatory *a*-marking is not only found with human, strongly affected objects involved in a telic event, but also with inanimate, non-affected and agentive objects embedded in a stative event.

In order to understand these contrary facts, more research on the interaction of nominal and verbal parameters is needed. In particular, systematic analyses of agentivity, affectedness and telicity that are independent of animacy are necessary.

Acknowledgments

I would like to thank Ilja A. Seržant, Javier Caro Reina and Klaus von Heusinger for their very useful comments on the entire manuscript.

References

- Aissen, Judith. 2003. Differential object marking: Iconicity vs. Economy. *Natural Language and Linguistic Theory* 21(3). 435–483.
- Barraza Carbajal, Georgina. 2003. *Evolución del objeto directo inanimado en español*. Mexico City: Universidad Nacional Autónoma de México dissertation.
- Barraza Carbajal, Georgina. 2008. Marcación preposicional de objeto directo inanimado. In *Actas del VII Congreso Internacional de Historia de la Lengua Española: Merida (Yucatán), 4–8 septiembre de 2006*, 341–352. Madrid: Arco Libros.
- Bickel, Balthasar, Alena Witzlack-Makarevich & Taras Zakharko. 2015. Typological evidence against universal effects of referential scales on case alignment. In Ina Bornkessel-Schlesewsky, Andrej L. Malchukov & Marc Richards (eds.), *Scales*, 7–43. Berlin: de Gruyter Mouton.
- Bossong, Georg. 1984. Review of Francisco Villar. *Ergatividad, acusatividad y género en la familia lingüística indoeuropea*. Theses et Studia Philologica Salmanticensia 21. Salamanca. 1938. *Lingua* 62(3). 239–247.
- Bossong, Georg. 1991. Differential object marking in Romance and beyond. In Dieter Wanner & Douglas A. Kibbee (eds.), *New analyses in Romance linguistics. Selected papers from the XVIII Linguistic Symposium on Romance Languages, Urbana-Champaign, April 7–9, 1988*, 143–170. Amsterdam: John Benjamins.
- Bossong, Georg. 1998. Le marquage différentiel de l’objet dans les langues d’Europe. In Jack Feuillet (ed.), *Actance et valence dans les langues de l’Europe*, 193–258. Berlin: De Gruyter Mouton.

- Buyse, Kris. 1998. The Spanish prepositional accusative. What grammars say versus what corpora tell us about it. *Leuvense Bijdragen* 87. 371–385.
- Company Company, Concepción. 2002a. El avance diacrónico de la marcación prepositiva en objetos directos inanimados. In Alberto Bernabé, José Antonio Berenguer, Margarita Cantarero & José Carlos de Torres (eds.), *Presente y futuro de la lingüística en España. La Sociedad de Lingüística 30 años después*, 146–154. Madrid: Consejo Superior de Investigaciones Científicas.
- Company Company, Concepción. 2002b. Grammaticalization and category weakness. In Ilse Wischer & Gabriele Diewald (eds.), *New reflections on grammaticalization*, 201–215. Amsterdam: John Benjamins.
- Dalrymple, Mary & Irina Nikolaeva. 2011. *Objects and information structure*. Cambridge: Cambridge University Press.
- de Swart, Peter. 2007. *Cross-linguistic variation in object marking*. Nijmegen: Radboud University Nijmegen dissertation.
- Delbecque, Nicole. 1998. Why Spanish has two transitive construction frames. *Leuvense Bijdragen* 87. 387–514.
- Delbecque, Nicole. 2002. A construction grammar approach to transitivity in Spanish. In Kristine Davidse & Béatrice Lamiroy (eds.), *The nominative & accusative and their counterparts*, 81–130. Amsterdam: John Benjamins.
- Delille, Karl Heinz. 1970. *Die geschichtliche Entwicklung des präpositionalen Akkusativs im Portugiesischen*. Bonn: Romanisches Seminar der Universität Bonn.
- Dowty, David R. 1991. Thematic proto-roles and argument selection. *Language* 61(3). 547–619.
- Engiels, Renata. 2007. *Les modalités de perception visuelle et auditive. Différences conceptuelles et répercussions sémantico-syntaxiques en espagnol et en français*. Tübingen: Niemeyer.
- Fábregas, Antonio. 2013. Differential object marking in Spanish: State of the art. *Borealis* 2. 1–80.
- García García, Marco. 2007. Differential object marking with inanimate objects. In *Proceedings of the workshop “Definiteness, specificity and animacy in Ibero-Romance languages”*, 63–84. Universität Konstanz: Fachbereich Sprachwissenschaft (Arbeitspapier 122).
- García García, Marco. 2014. *Differentielle Objektmarkierung bei unbelebten Objekten im Spanischen*. Berlin: De Gruyter Mouton.
- García, Érica C. 1993. Syntactic diffusion and the irreversibility of linguistic change: Personal *a* in Old Spanish. In Jürgen Schmidt-Radefeldt & Andreas Harder (eds.), *Sprachwandel und Sprachgeschichte, Festschrift für Helmut Lüdtke zum 65. Geburtstag*, 33–50. Tübingen: Narr.
- Haspelmath, Martin. 2014. Descriptive scales versus comparative scales. In Ina Bornkessel-Schlesewsky, Andrej L. Malchukov & Marc Richards (eds.), *Scales and hierarchies. A cross-disciplinary perspective*, 45–58. Berlin: de Gruyter Mouton.
- Hopper, Paul J. & Sandra A. Thompson. 1980. Transitivity in grammar and discourse. *Language* 56(2). 251–299.

- Iemmo, Giorgio. n.d. Differential object marking. University of Zurich.
- Kirsner, Robert S. & Sandra A. Thompson. 1976. The role of pragmatic inference in semantics: A study of sensory verb complements in English. *Glossa* 10. 200–240.
- Laca, Brenda. 1995. Sobre el uso del acusativo preposicional en español. In C. Pensado (ed.), *El complemento directo preposicional*, 61–91. Madrid: Visor Libros.
- Laca, Brenda. 2002. Gramaticalización y variabilidad: Propiedades inherentes y factores contextuales en la evolución del acusativo preposicional en español. In Andreas Wesch, Waltraud Weidenbusch, Rolf Kailuweit & Brenda Laca (eds.), *Sprachgeschichte als Varietätengeschichte. Historia de las variedades lingüística*, 195–203. Tübingen: Stauffenburg.
- Laca, Brenda. 2006. El objeto directo. La marcación preposicional. In Concepción Company Company (ed.), *Sintaxis histórica del español. Primera parte: La frase verbal*, vol. 1, 423–475. Mexico: Universidad Nacional Autónoma de México.
- Leonetti, Manuel. 2004. Specificity and differential object marking in Spanish. *Catalan Journal of Linguistics* 3. 75–114.
- Melis, Chantal. 1995. El objeto directo personal en El Cantar de Mio Cid. Estudio sintáctico-pragmático. In Carmen Pensado (ed.), *El complemento directo preposicional*, 133–163. Madrid: Visor Libros.
- Ortiz Ciscomani, Rosa María. 2005. Los objetos concurrentes y la bitransitividad en el español en perspectiva diacrónica. In David Eddington (ed.), *Selected Proceedings of the 7th Hispanic Linguistics Symposium*, 192–202. Somerville, Massachusetts: Cascadilla Proceedings Project.
- Ortiz Ciscomani, Rosa María. 2011. *Construcciones bitransitivas en la historia*. México: Universidad Nacional Autónoma de México, Instituto de Investigaciones Filológicas.
- Pensado, Carmen. 1995. La creación del complemento directo preposicional y la flexión de los pronombres personales en las lenguas románicas. In Carmen Pensado (ed.), *El complemento directo preposicional*, 179–233. Madrid: Visor Libros.
- Pottier, Bernard. 1968. L'emploi de la préposition a devant l'objet en espagnol. *Bulletin de la Société de Linguistique* 1. 83–95.
- Primus, Beatrice. 1999a. *Cases and thematic roles. Ergative, accusative and active*. Tübingen: Niemeyer.
- Primus, Beatrice. 1999b. Rektionsprinzipien. In Heide Wegener (ed.), *Deutsch – kontrastiv. Typologisch vergleichende Untersuchungen zur deutschen Grammatik*, 135–170. Tübingen: Stauffenberg.
- Primus, Beatrice. 2006. Hierarchy mismatches and the dimensions of role semantics. In Ina Bornkessel, Matthias Schlesewsky, Bernard Comrie & Angela D. Friederici (eds.), *Semantic role universals and argument linking. Theoretical, typological and psycholinguistic perspectives*, 53–88. Berlin: Mouton de Gruyter.
- Primus, Beatrice. 2012. Animacy, generalized semantic roles, and differential object marking. In Monique Lamers & Peter de Swart (eds.), *Case, word order and prominence: Interacting cues in language production and comprehension*, 65–90. Dordrecht: Springer.
- Real Academia Española. 2010. *Nueva gramática de la lengua española*. Madrid: Espasa-Calpe.

- Roegiest, Eugene. 1979. A propos de l'accusatif prépositionnel dans quelques langues romanes. *Vox Romanica* 38. 37–54.
- Roegiest, Eugene. 2003. Argument structure of perception verbs and actance variation of the Spanish direct object. In Giuliana Fiorentino (ed.), *Romance objects. Transitivity in Romance languages*, 299–322. Berlin: De Gruyter Mouton.
- Silverstein, Michael. 1976. Hierarchy of features and ergativity. In R. M. W. Dixon (ed.), *Grammatical categories in Australian languages*, 112–171. Atlantic Highlands, NJ: Humanities Press.
- Sinnemäki, Kaius. 2014. A typological perspective on Differential Object Marking. *Linguistics* 52(2). 281–313.
- Spitzer, Leo. 1928. Rum. P(r)e, span. á vor persönlichem Akkusativobjekt. *Zeitschrift für romanische Philologie* 48. 423–432.
- Tippets, Ian. 2011. Differential object marking: Quantitative evidence for underlying hierarchical constraints across Spanish dialects. In Luis A. Ortiz-López (ed.), *Selected proceedings of the 13th Hispanic Linguistics Symposium*, 107–117. Somerville, MA: Cascadilla Proceedings Project.
- Torrego Salcedo, Esther. 1999. El complemento directo preposicional. In Ignacio Bosque & Violeta Demonte (eds.), *Gramática descriptiva de la lengua española. Las construcciones sintácticas fundamentales. Relaciones temporales, aceptuales y modales*, vol. 2, 1779–1805. Madrid: Espasa Calpe.
- Tsunoda, Tasaku. 1985. Remarks on transitivity. *Journal of Linguistics* 21(2). 385–396.
- Vendler, Zeno. 1957. Verbs and times. *The Philosophical Review* 66(2). 143–160.
- Villar, Francisco. 1983. *Ergatividad, acusatividad y género en la familia lingüística indoeuropea*. Salamanca: Ediciones Universidad de Salamanca.
- von Heusinger, Klaus. 2008. Verbal semantics and the diachronic development of DOM in Spanish. *Probus* 20. 1–31.
- von Heusinger, Klaus. 2018. The diachronic development of Differential Object Marking in Spanish ditransitive constructions. In Ilja A. Seržant & Alena Witzlack-Makarevich (eds.), *The diachronic typology of differential argument marking*, 315–344. Berlin: Language Science Press. DOI:10.5281/zenodo.1228263
- von Heusinger, Klaus & Georg A. Kaiser. 2005. The evolution of differential object marking in Spanish. In Klaus von Heusinger, Georg A. Kaiser & Elisabeth Stark (eds.), *Proceedings of the Workshop “Specificity and the Evolution/Emergence of Nominal Determination Systems in Romance”*, 33–69. Universität Konstanz: Fachbereich Sprachwissenschaft (Arbeitspapier 119).
- von Heusinger, Klaus & Georg A. Kaiser. 2011. Affectedness and differential object marking in Spanish. *Morphology* 21. 593–617.
- Weissenrieder, Maureen. 1985. Exceptional uses of the accusative *a*. *Hispania* 68(2). 393–398.
- Weissenrieder, Maureen. 1991. A functional approach to the accusative *A*. *Hispania* 74(1). 146–156.
- Witzlack-Makarevich, Alena & Ilja A. Seržant. 2018. Differential argument marking: Patterns of variation. In Ilja A. Seržant & Alena Witzlack-Makarevich (eds.), *Di-*

Marco García García

achrony of differential argument marking, 1–40. Berlin: Language Science Press.
DOI:10.5281/zenodo.1228243