

**(NO) COMPETITION BETWEEN DEVERBAL NOUNS AND NOMINALIZED INFINITIVES IN SPANISH\***

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**ABSTRACT.** This paper explores the distribution of deverbal nouns and nominalized infinitives that are built on transitive verbs and occur in eventive interpretations. The study is empirically oriented and based on an acceptability judgment experiment in which argument realization and interpretational possibilities are manipulated as the independent variables. The results show that deverbal nouns prefer but are not limited to realizing the lower argument of the base, whereas nominalized infinitives are mostly restricted to realizing the higher argument. Furthermore, deverbal nouns turn out to be insensitive with regard to the distinction between episodic and generic event readings, while nominalized infinitives are shown to be specialized on generic interpretations. Deverbal nouns and nominalized infinitives are, thus, mostly neither paradigmatically interchangeable nor complementarily distributed as nominalized infinitives reach the same degree of acceptability as deverbal nouns only under very specific conditions. With regard to the ecological validity of the experimental approach, a comparison to corpus data indicates that high frequency clearly correlates with acceptability, but that the same does not hold for low frequency and unacceptability, that is forms that are not (sufficiently) attested in the corpus do not necessarily receive low ratings within the judgment task. The study, thus, also addresses a number of methodological issues in the study of event nominals.

**Keywords.** deverbal noun; nominalized infinitive; event nominal; acceptability judgment

**RESUMEN.** Este artículo examina la distribución de los nombres deverbales y los infinitivos nominalizados que se forman a partir de verbos transitivos y que ocurren en interpretaciones eventivas. El estudio tiene un enfoque empírico y se basa en un experimento de aceptabilidad en el que la realización de los argumentos y la lectura eventiva fueron manipuladas como variables independientes. Los resultados muestran que los nombres deverbales prefieren (pero no exigen) la realización del argumento más bajo de la base verbal, mientras que los infinitivos nominalizados se limitan a realizar el argumento más alto. En cuanto a la interpretación eventiva, los nombres deverbales resultan insensibles a la diferencia entre lecturas episódicas y genéricas. Los infinitivos nominalizados, en cambio, prefieren interpretaciones genéricas. Por ende, los nombres deverbales y los infinitivos nominalizados no son intercambiables en la mayoría de los contextos ni se hallan en distribución complementaria, puesto que los infinitivos nominalizados alcanzan el mismo grado de aceptabilidad que los nombres deverbales solo bajo condiciones muy específicas. En relación a la validez ecológica del enfoque experimental, la comparación con datos de corpus muestra que una alta frecuencia de ocurrencia se correlaciona de manera clara con el criterio de aceptabilidad. Sin embargo, no existe tal correlación entre una baja frecuencia de ocurrencia e inaceptabilidad, puesto que las constelaciones que no aparecen (en números suficientes) en el corpus no tienen necesariamente un nivel bajo de aceptabilidad. El trabajo discute asimismo varios aspectos metodológicos en el estudio de las nominalizaciones eventivas.

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**Palabras claves.** nombre deverbal; infinitivo nominalizado; nominalización eventiva, juicio de aceptabilidad

## 1. Introduction

Spanish has multiple means for building event-denoting nominalizations (NOM) of verbal bases. Different types of NOM are, however, not always paradigmatically interchangeable but can be specialized on focusing or defocusing different participants or components of a potentially complex event. In Spanish, the question of which factors determine the distribution of different NOM is particularly interesting as both morphological and syntactic devices are available. These are deverbal nouns (DVN), which can be built with a variety of productive affixes, and nominalized infinitives (NI), which come in different syntactic subtypes.

NI are most often classified according to their DP-internal syntactic structure (a.o. Berger 2015; Demonte & Varela 1997, 1998; Hernanz 1999; de Miguel 1996; Pérez Vázquez 2002; Yoon & Bonet-Farran 1991 for proposals). Based on argument realization, it is possible to identify at least two different forms that allow for eventive readings. In a more verbal use, the NI allows for argument realization by means of a bare noun adjacent to the infinitive or a full object DP, (1). In its more nominal form, it can realize an argument of the base verb as a PP headed by the preposition *de* (henceforth PP<sub>de</sub>) or an anaphoric possessive determiner, (2)a and (b). The scope of this study is restricted to the more nominal form exemplified in (2)a. Spanish NI can be regarded as “syntactic NOM” in the sense of Chomsky (1970) as their formation is fully productive and they systematically denote the same event as their base verb. In this respect, they differ, for instance, from NI in present-day French which are limited to fully lexicalized uses like *le déjeuner* ‘lunch’ or *le plaisir* ‘pleasure’. Spanish NI also differ from German NI in being a rather marginal means for building event NOM. They mostly occur in certain registers typical of written language and are severely restricted in their distribution.

- (1) el lamentar (las) pérdidas  
the complain.INF (the) losses
- (2) a. el lamentar de los pastores  
the complain.INF of the shepherds  
b. su lamentar  
their complain.INF

DVN represent what has been called “lexical NOM” since Chomsky (1970) as their formation can be subject to lexical blocking and the relationship between the NOM and the verbal base idiosyncratic (cf. sec. 3 and 4 for details). The formation of DVN is the default strategy for building event-denoting NOM in Spanish. The affixes that can be considered most productive in the present-day language are exemplified in (3) (cf. Rainer 1993: 212ff. for an extensive overview).<sup>1</sup>

- (3) *-ción* (coccción ‘cooking’), *-da* (subida ‘rise’), *-do* (asfaltado ‘asphalting’), *-e* (ataque ‘attack’), *-je* (embalaje ‘packing’), *-miento* (seguimiento ‘hunt’), *-o* (envío ‘dispatch’), *-ón* (empujón ‘push’)

<sup>1</sup> In the following, the term DVN will be employed for NOM that are built with an unambiguous nominalizing affix such as *-ción* or *-miento* as well as for NOM that lack such an affix and end in a consonant or one of the vowels *-a*, *-e* or *-o*.

DVN share numerous distributional properties with NI of the more nominal type such as (2). Both NOM allow, for instance, for argument realization by means of a PP<sub>de</sub> or a possessive determiner and can alternate in a number of contexts, (4).

- (4) Le disgustaba  
'He disliked'  
a. {la lamentación / el lamentar} de sus hijos.  
'the complaining of his children.'  
b. su {lamentación / su lamentar}. (Demonte & Varela 1998: 146, adapted)  
'their complaining.'

Despite extensive research on event-denoting NOM in Spanish, it remains an open question under which conditions DVN and NI surface in the same contexts as in (4) and under which conditions they might be complementarily distributed. This contribution examines this issue considering two main questions: Which argument(s) of a base verb can be mapped onto the nominalized structure? Which types of eventive interpretations are available for the NOM under investigation?<sup>2</sup>

The first question has received a great deal of attention in the theoretically oriented literature that has been concerned with formal representations of argument structure in NOM (a.o. Alexiadou 2001; Grimshaw 1990; on Spanish Fábregas 2012, 2014; Meinschaefter 2005). One result that has emerged from previous work is that the argument realization possibilities of DVN depend to a large extent on event structural properties of the base verb (cf. Meinschaefter 2016: 405-410 for an overview). This contribution focuses on one particular type of base, namely verbs such as *cook*, *read*, or *write* that allow for the unspecified object alternation (cf. Levin 1993: 33). Verbs that allow for this type of alternation are basically transitive but can appear both with and without the direct object, (5)a vs. b. Under the assumption that the availability of a transitive and an intransitive alternant in the finite verb correlates with the possibility of realizing the lower *or* the higher argument in the nominalized structure, the aforementioned verbs provide a suitable basis for investigating possible differences in argument realization preferences, (6).

- (5) a. Anna was reading a book.  
b. Anna was reading.  
(6) la lectura {del libro / de Ana}  
the read.NOM of the book / of Anna

The second question concerns the external distribution of NI, that is their occurrence in certain eventive contexts. In this respect, I will focus on the difference between episodic vs. generic interpretations drawing on the observation that event-denoting NOM can be restricted in their interpretative possibilities and have a preference for one or the other reading (a.o. Grimm & McNally 2016; Iordăchioaia & Soare 2015; Soare 2017). As Spanish NI are associated with imperfective interpretations (Demonte & Varela 1998; de Miguel 1996) and imperfectivity is typically associated with genericity,

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<sup>2</sup> In pursuing these questions, this contribution continues a previous investigation that was exclusively concerned with NI and had a stronger focus on the relevance of verbal event structure within the NOM (cf. Schirakowski to appear). This study is more concerned with the characteristics of DVN and methodological aspects in the investigation of NOM.

I will test the hypothesis that NI, but not DVN are restricted in their interpretative possibilities and favor generic readings.

The orientation of this study is empirical and methodological with an acceptability judgment experiment being the core of the paper. The results will show that DVN built on verbs that allow the unspecified object alternation prefer realizing the lower argument over realizing the higher argument but are, in principle, compatible with both options of argument realization. Furthermore, they are rated as more or less equally well-formed in generic and episodic event interpretations whereas NI need to be interpreted generically and realize the higher argument to be fairly acceptable. In the final section of this study, the experimental results are compared to the results of a corpus study on DVN. This comparison concerns the ecological validity of the empirical approach as a clear correlation arises only between high acceptability and high frequency, but not between low acceptability and low frequency.

The remainder of the study is organized as follows. Section 2 provides an overview of argument realization possibilities of DVN and NI. Section 3 introduces the data base for the experimental study, that is the selection of base verbs and the NOM derived from them. 4 discusses the question of how perfectivity and imperfectivity can be detected in NOM and summarizes the expected differences between DVN and NI. Section 5 shows how different event readings are elicited. The results of the experimental study are presented in section 5 and compared with the corpus study in section 6. The overall results are summarized and discussed in section 7.

## 2. Argument realization in DVN and NI

Starting with Grimshaw (1990), discussions of argument realization in NOM have been concerned with the question of which types of NOM even have argument structure and in which respect nominal argument structure differs from verbal argument structure. The distinction between syntactic and lexical NOM is relevant in so far as many well-known generalizations about argument realization in NOM are only valid for DVN, but not for NI. It has, for instance, been widely noticed that DVN often require the lower argument to be expressed, whereas realization of the higher argument is always optional, (7). NI, on the other hand, never require any argument of the base verb to be overtly realized, not even in an unambiguous eventive interpretation, (8). Their argument realization possibilities are, in fact, more restricted than those of DVN. While the latter can realize both arguments of a transitive base either by means of a PP<sub>de</sub> and a PP introduced by *por* or by means of a PP<sub>de</sub> and possessive determiner, (9)a and (10)a, NI of the nominal type do not allow for realizing both arguments of the base as PPs or as a PP and a possessive determiner, (9)b and (10)b.<sup>3</sup>

<sup>3</sup> The simultaneous expression of both arguments within the same DP does not appear to be ruled out for all types of Spanish NI. There are cases in which the lower argument is realized verbally, i.e. like a direct object, and the higher argument nominally, that is as a PP<sub>de</sub> or a PP<sub>por</sub>. It is, however, noteworthy, that the supposed direct object is most typically a bare noun adjacent to the infinitive and various scholars have argued that only a bare noun, but not a full object DP can appear next to the infinitive, cf. (i) and (ii).

- |                  |                   |                       |                                      |
|------------------|-------------------|-----------------------|--------------------------------------|
| (i) El construir | (*las) carreteras | del gobierno          | llevó al deterioro de ciertas zonas. |
| the build.INF    | DET roads         | of the government     |                                      |
|                  |                   |                       | (Demonte & Varela 1998: 164)         |
| (ii) El cantar   | (*estas) coplas   | de Lola nos emociona. | (Pérez Vázquez 2002: 153)            |
| the sing.INF     | DEM songs         | of Lola moves us      |                                      |

It is unclear whether or to what extent speakers of Spanish also accept NI in which a full object DP and a PP-argument are combined, (iii).

- (7) La destrucción \*(de la ciudad) (por los romanos) tuvo lugar en el año 70 dc.  
'The destruction of the city by the Romans happened in the year 70 AD.'
- (8) El destruir aún continua.  
The destroy.INF is still going on
- (9) a. la destrucción de la ciudad por los romanos  
b. \*el destruir de la ciudad por los romanos  
'the destruction of the city by the Romans'
- (10) a. su destrucción de la ciudad  
b. \*su destruir de la ciudad  
'their destruction of the city'

These differences bring up the question of whether DVN and NI can alternate at all when built on a transitive base verb and, if so, which of the two arguments of the base surfaces in the nominalized structure. In the following, I will pursue this question for argument realization by means of a  $PP_{de}$  and not include the possessive determiner position, which is information-structurally marked and being specified as given information. Furthermore, the study is limited to DVN and NI built on dynamic and durative verbs, that is Activities and Accomplishments in Vendler's (1957) terminology as these are the only two situation types that can readily be lexicalized by both DVN and NI (cf. e.g. Fábregas & Varela 2006; Schirakowski to appear). Since durative and dynamic verbs do not represent a homogenous class, the event structure of base verbs will – for the sake of clarity – be represented as predicate decompositions following Rappaport Hovav & Levin (1998) and much subsequent work. Throughout the paper, I will speak of *higher argument* and *lower argument* to refer to the participants involved in any event denoted by a two-place verbal predicate that surface as the subject and the direct object in the finite active clause.

### 2.1. The $PP_{de}$ in DVN

Within the domain of DVN, a great deal of attention has been devoted to forms built on obligatorily causative change-of-state verbs such as *destroy* whose event structure can be represented as in (11). Aspectually, these verbs often yield telic interpretations as evidenced by the time adverbial test, (12)a and (13)a.<sup>4</sup> A well-known generalization about DVN built on verbs belonging to this class is that only the lower, but not the higher argument can appear as  $PP_{de}$ , (12)b vs. c and (13)b vs. c. This observation along with the finding that realization of the lower argument can be obligatory, cf. (7) above, has been explained in different ways (a.o. Alexiadou 2001, Grimshaw 1990). In Grimshaw's lexicalist approach, it is postulated that the derivation of NOM suppresses the external argument of the predicate denoted by the verb similar to the derivation of passive structures in the syntax. In more recent syntactic approaches, the possibilities of argument realization are related to the presence or absence of verbal and nominal functional projections within the same DP (a.o. Alexiadou, Iordăchioaia & Schaefer 2011; Kornfilt & Whitman 2011, Sleeman & Brito 2010a).

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(iii) El tocar      la guitarra    de María    es muy elegante. (Yoon & Bonet-Farran 1991: 362)  
the play.INF    DET guitar    of Maria    is every elegant

<sup>4</sup> In the following, I will adapt Smith's (1997) terminology for referring to the two different levels of verbal aspect and speak of *situation aspect* vs. *viewpoint aspect* to refer to the telic/atelic distinction and the perfective/imperfective distinction respectively.

- (11) [[x ACT] CAUSE [y BECOME <destroyed>]]
- (12) a. Los Romanos destruyeron la ciudad {#durante dos semanas / en dos semanas}.
- ‘The Romans destroyed the city for two weeks / in two weeks.’
- b. la destrucción de la ciudad  
‘the destruction of the city’
- c. #la destrucción de los romanos<sup>5</sup>  
‘the destruction of the Romans’
- (13) a. El vecino barnizó la cerca [?durante dos semanas / en dos semanas].
- ‘The neighbor painted the fence.’
- b. El barnizado de la cerca  
‘the painting of the fence’
- c. #el barnizado del vecino  
‘the painting of the neighbor’

Crucially, the contrasts exemplified in (12) and (13) do not apply to DVN built on dynamic and durative verbs that denote mere activities like *use*. The event structure of such verbs can be represented as in (14). Aspectually, they always give rise to atelic interpretations as illustrated in (15)a and (16)a. The corresponding DVN not behave uniformly with respect to argument realization. Some of them pattern with DVN like *destrucción* and allow for the lower argument but not the higher argument in the PP-position, (15)b vs. c. Others are more flexible and can map either the lower or the higher argument onto the PP<sub>de</sub>, (16)b and c.

- (14) [X ACT<use> Y]
- (15) a. Los clientes utilizaron el producto {durante dos semanas / #en dos semanas}.
- ‘The clients used the product for two weeks / in two weeks.’
- b. la utilización del producto  
the use.NOM of the product
- c. #la utilización de los clientes  
the use.NOM of the clients
- (16) a. Los inspectores buscaron huellas {durante dos semanas / #en dos semanas}.
- ‘The profilers searched for clues for two weeks / in two weeks.’
- b. la búsqueda de huellas  
the search.NOM of clues
- c. la búsqueda de los inspectores  
the search.NOM of the profilers

It is, thus, not possible to draw a straightforward generalization about argument realization in DVN, but it can be recognized that the lower argument can always surface as a PP<sub>de</sub>.<sup>6</sup> The question of to what extent this position can alternatively be occupied by the higher argument, appears to be answerable only for individual verb classes.

<sup>5</sup> The # in (12)c and (13)c indicates that the structures are not well-formed in the intended reading. *Los romanos* and *el vecino* cannot be interpreted as the agents, but only as the undergoers of the respective events. *El vecino* in (13)c can also be interpreted as a possessor in a non-eventive interpretation of *barnizado*.

<sup>6</sup> Crucially, this generalization only applies to DVN built on transitive verbs, but not to forms built on other two-place verbs. DVN built on verbs that govern an oblique object behave differently as they do

2.2. *The PP<sub>de</sub> in NI*

For NI, the conditions that license argument realization are fundamentally different as NI are – in their most typical uses – built on intransitive verbs. NI with a transitive base disfavor realization of the lower argument in general, that is regardless of whether the base is a change-of-state verb as in (17) or an activity verb as in (18).

- (17) #el destruir de la ciudad  
the destroy.INF of the city  
(18) #el utilizar del producto  
the use.INF of the product

NI with a realized higher argument have been considered unacceptable in cases in which the base verb does not allow for the unspecified object alternation, (19)a and (20)a. Under this condition, the ill-formedness could be attributable to the fact that the verb does not license the intransitive alternant, (19)b and (20)b. This assumption is borne out when taking into consideration verbs that do allow this alternation. Both (21)a and (22)a are well-formed instances of NI in which the higher argument is realized as a PP<sub>de</sub> and the base verb allows the lower argument to remain unexpressed, (21)b and (22)b.

- (19) a. \*el destruir de los romanos (Hernanz 1999: 2345)  
the destroy.INF of the Romans  
b. ?Los romanos están destruyendo.  
'The Romans are destroying.'  
(20) a. \*un / el ordenar del general (Hernanz 1999: 2345, adapted)  
a / the order.INF of the general  
b. ?El general está ordenando.  
'The general is ordering.'  
(21) a. Aquel escribir de Gabriel explica su fama. (Ramírez 2003: 117)  
this write.INF of Gabriel explains his fame  
b. Gabriel está escribiendo.  
'Gabriel is writing.'  
(22) a. El mirar de la mujer es agradable. (Demonte & Varela 1998: 152)<sup>7</sup>  
the watch.INF of the woman is pleasant  
b. La mujer está mirando.  
'The woman is watching.'

The higher argument can, thus, be mapped onto the PP<sub>de</sub> provided that the verbal base licenses this option. In addition, it has to be noted that both (21)a and (22)a come

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not allow for realizing the lower argument by means of a PP<sub>de</sub> but require the preposition that is also headed by the base verb (cf. Meinschaefer 2004: 56-63, 56 for the example).

- (iv) a. El hijo luchó \*(contra) los enemigos de su padre.  
'The son fought against the enemies of his father.'  
b. #la lucha de los enemigos de su padre.  
the fight.NOM of the enemies of this father  
c. la lucha contra los enemigos de su padre  
the fight.NOM against the enemies of his father

<sup>7</sup> *La mujer* 'the woman' has to be interpreted as the person watching and not the person being watched as Demonte & Varela (1998: 166) themselves note that NI are limited to realizing the argument that corresponds to the subject of the active clause.

with a generic event reading whose relevance for the well-formedness for NI will be discussed in section 4 below.

### 3. Selection of base verbs and NOM for the experimental study

In the following, I will examine the criteria according to which items were selected for the acceptability judgment experiment and how variation accompanying them was controlled for.

The verbal bases were chosen from Moliner's (2001) dictionary in which verbs that allow for the unspecified object alternation are labelled as *transitivos absolutos*. Verbs that fulfill this condition were, however, excluded if no corresponding DVN could be identified. There is, for instance, no event denoting DVN built on *fumar* 'to smoke'. Furthermore, DVN built on suitable base verbs were excluded if it was clear that they do not allow for eventive readings or reject argument realization in general, (23) and (24). Ten pairs of DVN and NI that fulfill all necessary criteria were used in the final experiment, cf. table 1.

- (23) \*La cocina duró toda la tarde.  
The cook.NOM took the whole afternoon
- (24) \*La comida (\*del asado) duró toda la tarde.  
The eat.NOM of the roast took the whole afternoon

	NI	DVN	event denotation of NI and DVN	non-eventive denotation(s) of the DVN
1)	el cazar	la caza	'hunting'	'the game' (object)
2)	el celebrar	la celebración	'celebrating'	--
3)	el cocinar	la cocción	'cooking'	'cooking time' (duration)
4)	el escribir	la escritura < lat. scriptūra	'writing'	'the writing' (result object)
5)	el estudiar	el estudio < lat. studium	'studying'	'the study' (result object) 'the study, office' (location)
6)	el leer	la lectura < lat. lectura	'reading'	'the reading matter' (object)
7)	el limpiar	la limpieza	'cleaning'	'the cleanliness' (quality)
8)	el masticar	la masticación	'chewing'	--
9)	el pintar	la pintura	'painting'	'the paint' (instrument) 'the painting' (result object)
10)	el saquear	el saqueo	'plundering'	--

Table 1. NI and DVN used in the experimental study

Table 1 reveals that the NOM under investigation vary in different respects. First of all, the verbs on which the respective forms are built do not form a homogeneous event class, which is due to the fact that the unspecified object alternation is available for a wide range of dynamic and durative verbs. Our data set contains at least three aspectual classes. These are incremental theme verbs in the sense of Dowty (1991) such as *leer*, deadjectival degree achievement verbs in the sense of Hay, Kennedy and Levin (1999) like *limpiar* and mere activity verbs like *celebrar*. Crucially, the transitive alternants of these verbs can differ regarding their specification for situation aspect. Incremental theme verbs can yield telic or atelic interpretations depending on whether their lower argument denotes a physically bounded entity or an unbounded substance or mass,



(25)a vs. b. Degree achievement verbs such as *limpiar* are typically ambiguous between telic and atelic interpretations, often depending on the context, (26) (cf. e.g. Ramchand 2008). Only activity verbs such as *celebrar* are typically atelic, (27).

- (25) a. Ana (se) leyo una novela {?durante tres horas / en tres horas}.  
b. Anna leyo poesía {durante tres horas / #en tres horas}.  
'Ana read a novel / poetry for three hours / in three hours.'  
(26) Pablo limpió el baño {durante diez minutos / en diez minutos}.  
'Pablo cleaned the bathroom for ten minutes / in ten minutes.'  
(27) Los músicos celebraron su éxito {durante tres días / #en tres días}.  
'The musicians celebrated their success for three days / in three days.'

(A-)telicity could be a predictor for acceptability under the assumption that DVN built on telic event structures show a more pronounced preference for realization of the lower argument than DVN built on inherently atelic verbs. Therefore, situation aspect will be taken into consideration in the experimental analysis in the following way: First, all NOM are classified as to whether the transitive alternant of their base verb is inherently atelic (*celebrar*) or variable in telicity (*escribir*). Second, those NOM that realize the lower argument are classified as to whether the combination of the base verb and the argument yields a telic, a variable or an atelic interpretation, (28), (29) and (30).

- (28) la lectura de la novela  
the read.NOM of the novel  
(29) la limpieza del baño  
the clean.NOM of the bathroom  
(30) la celebración del éxito  
the celebrate.NOM of the success

The second source of variation lies in the morphological structure of the different DVN. Three forms (*estudio*, *escritura* and *pintura*) are not products of word formation in Spanish but go back to Latin nouns. The other seven DVN either lack an unambiguous nominalizing affix (*caza* and *saqueo*), are built with the highly productive suffix *-ción* (*celebración*, *cocción*, *masticación*) or with the one of the unproductive suffixes *-ura* (*pintura*) or *-eza* (*limpieza*) (a.o. Martín García 2010, Pharies 2002, Rainer 1993 on the different affixes). The factors productivity (productive or unproductive means of NOM), affix (presence vs. absence) as well as the origin of the DVN (Latin or Spanish) have thus to be identified as potential sources of varying acceptability.

The variation among the base verbs and the DVN was accepted intentionally since the DVN were chosen based on the verbs' ability to participate in the unspecified object alternation and on the DVNs' ability to occur as argument-supporting and event-denoting NOM. The inspection of the experimental data indicates that neither telicity nor the morphological makeup of the DVN were significant predictors for acceptability, cf. section 6.2. below.

#### 4. Viewpoint aspect in nominalizations and genericity

In the discussion on the availability of eventive interpretations, several studies have dealt with the question of how to identify aspectual features within the structure of NOM. It has been argued that different affixes or types of NOM can introduce perfective or imperfective readings and that NOM can, thus, be marked for viewpoint aspect (cf. Demonte & Varela 1998; Ehrich 1991; Ferret, Soare & Vilhoing 2010; Ferret

& Villoing 2012; de Miguel 1996). Under this view, the distribution of NOM is explained by assuming that certain forms are specialized on presenting an event in its completion from an external perspective, whereas others perspectivize it as ongoing and from an internal perspective. The identification of viewpoint aspect in NOM is, however, not straightforward as neither Spanish DVN nor NI (at least those of the nominal type) can be morphologically or syntactically marked for it. The identification, therefore, must rely on other criteria. Ferret, Soare & Villoing (2010) and Ferret & Villoing (2012) focus on distributional tests and the (in-)compatibility with certain matrix predicates. They claim that only perfective NOM can be embedded under the preposition *after*, whereas only imperfective NOM can occur as the subject of *to progress*. Similarly, Ehrich (1991) draws on the (in-)compatibility with terminative predicates such as *to have ended* for diagnosing viewpoint aspect and argues that imperfective NOM reject this type of matrix verb.

Another strand of the discussion is concerned with the correlation between countability and (im-)perfectivity as countability is usually viewed as a nominal correlate to verbal aspect (a.o. Jackendoff 1991, Krifka 1989, Mourelatos 1978).<sup>8</sup> Regarding countability as the relevant criterion, various authors have claimed that NOM that cannot be pluralized show a preference for imperfective readings (e.g. Iordăchioaia & Soare 2007), whereas NOM that can be pluralized lean towards perfective interpretations (e.g. Knittel 2011).

Applying these diagnostics shows that Spanish NI provide a clear example of imperfective NOM. They are infelicitous when combined with terminative predicates or the preposition *después de*, (31) and (32), but well-formed in the subject position of a continuative predicate such as *progresar*, (33). Furthermore, they cannot be pluralized except for fully lexicalized forms such as *el deber / los deberes* ‘the duty / the duties’, (34).

- (31) ?/\*Aquel corretear majestuoso de su tía ya ha finalizado.  
This run.around.INF queenly of their aunt already stopped  
(Demonte & Varela 1998: 149, adapted)
- (32) ?después del subir de los precios  
after the rise.INF of the prices
- (33) El subir de los precios está progresando.  
the rise.INF of the prices is advancing
- (34) \*los subir-es de los precios  
the-PL the rise.INF-PL of the prices

For DVN, the picture is less conclusive. First, event-denoting and argument-supporting DVN do not behave uniformly with regard to the acceptance of morphological plural marking as some forms can be pluralized, while others cannot (e.g. Alexiadou, Iordăchioaia & Soare 2008; Picallo 1999: 377-378 for Spanish), cf. (35) vs. (36).

- (35) Presenciaron los saqueos de los edificios.  
They witnessed the plunder.NOM.PL of the houses.
- (36) ? Presenciaron las pinturas de los cuadros.  
They witnessed the paint.NOM.PL of the pictures.

<sup>8</sup> There is, however, an ongoing debate about whether the relevant correlation is between situation aspect and countability or between viewpoint aspect and countability in NOM (cf. Meinschaefer 2016: 401-404 for a summary).

Second, the (in-)ability to pluralize in eventive readings does not seem to correlate with a pronounced preference for a certain aspectual interpretation. In fact, many DVN appear to be compatible with both perfective and imperfective event readings. This is illustrated by some DVN from my dataset in (37). All DVN seem well-formed with matrix predicates that trigger imperfective readings as well as with predicates that evoke imperfective readings, (37)a vs. b. This observation holds true despite of different affixes or the lack thereof and aspectual differences between the base verbs.

- (37) {El saqueo de los edificios / La escritura del libro / La limpieza del baño / La caza de ballenas}  
the plunder.NOM of the buildings / the write.NOM of the book / the clean.NOM of the bathroom / the hunt.NOM of the whales  
a. ya está terminad(o/a).  
'has already been ended.'  
b. está continuando aún.  
'is going on still'

It thus appears that only Spanish NI, but not DVN are clearly specified for viewpoint aspect. This difference is relevant for the distinction between episodic and generic event interpretations as imperfectivity and genericity are usually regarded as being interrelated (a.o. Arregui, Rivero & Salanova 2014; Carlson 2011; Mari et al. 2013). It is, for instance, well known that in languages like Spanish that can mark the perfective-imperfective distinction morphologically, the imperfective form is also used to encode characterizing, i.e. generic sentences, (38).

- (38) Juan conducía un coche deportivo.  
Juan drive.IMPF.3SG a sports car.  
a. 'Juan was driving a sports car.'  
b. 'Juan used to drive a sports car.' (cf. Mari et al. 2013: 48)

Similarly, NOM that are specialized on the imperfective perspectivization of event episodes might also show a preference for generic readings. I, thus, expect such a preference for NI, but not for DVN, which should be available in a broader range of eventive contexts.

## 5. Eliciting eventive interpretations of NOM

Comparing NI and DVN for their interpretational preferences, requires strictly controlled contexts as DVN tend to be semantically ambiguous and often allow for eventive as well as for non-eventive interpretations, cf. table 1 above (e.g. Ehrich & Rapp 2000; Melloni 2011). In some cases, the availability of non-eventive interpretations can be derived from the event structure of the base verb. DVN built on incremental theme verbs such as *escritura*, for instance, typically allow for result (object) readings (cf. Bisetto & Melloni 2005; Melloni 2011). In other cases, the possibility of non-eventive interpretations is less predictable such as the temporal extension of *cocción*. Even when occurring with a PP<sub>de</sub>, the interpretation can remain ambiguous since not only event-denoting, but also result-denoting DVN can support arguments under certain conditions (cf. Ehrich & Rapp 2000; Sleeman & Brito 2010b). Without being contextualized, the DVN *la escritura del poeta* 'the writing of the poet',

for instance, can receive an event reading or a result object reading and the PP<sub>de</sub> can be interpreted as an agent, an author or a possessor.

For the purpose of this study, semantic ambiguities of this kind had to be excluded and the NOM were embedded in contexts in which the only possible interpretation was not only clearly eventive, but also generic or episodic. To differentiate between generic and episodic readings, I used distributional diagnostics provided in the semantic literature on genericity (cf. Carlson 2011; Krifka et al. 1995). Most of the tests have been introduced for distinguishing between generic and episodic sentences but appear to be equally adequate for differentiating between generic and episodic event readings on the DP-level. The tests will be illustrated briefly using (variations of) the stimuli from the experimental study. First, there are a few kind-level predicates that impose not only a generic, but also an eventive interpretation on their argument, (39). Furthermore, matrix predicates can be modified in a way that the only possible interpretation for the embedded NOM is a generic one. (40)a, for instance, is ambiguous, but insertion of an adverb such as *normalmente* or a verbal periphrasis such as *soler* yield unambiguous generic readings, (40)b and c. If the matrix predicate permits its argument to have a non-eventive reading, the context has to ensure that the NOM in question can only be interpreted as eventive. The matrix predicate *ser rápida y eficaz* in (40), for instance, allows in principle for either an event-denoting or an object-denoting argument. Therefore, additional context is provided in the experiment to evoke an unambiguous event reading, cf. (43)d below.

- (39) ser {una mala costumbre / un tipo de suceso / un evento común}  
to be {a bad habit / a type of event / a common event}
- (40) La caza de las leonas  
the hunt.NOM of the lionesses  
a. es rápida y eficaz.  
'is quick and efficient.'  
b. normalmente es rápida y eficaz.  
'is normally quick and efficient.'  
c. suele ser rápida y eficaz.  
'is usually quick and efficient.'

Reversely, an episodic interpretation is triggered if a NOM is embedded under a progressive phrase built with *estar* + gerund or is modified by a definite temporal expression, (41) and (42) (cf. Ehrich 1991). To trigger an eventive interpretation, the NOM were most often combined with verbs of duration such as *continuar* 'to continue', *prolongarse* 'to go on' or *ir para largo* 'to drag on'. Non-eventive interpretations, which are available for the majority of the DVN tested in this study (cf. table 1), could, thus, be excluded since entities such as (result) objects or locations do not have a temporal dimension (cf. Vendler 1967).<sup>9</sup>

- (41) [...] y la celebración del cumpleaños se está prolongando ahora más de lo habitual.  
[...] and the celebrate.NOM of the birthday is going on longer than usual.

<sup>9</sup> The only problematic candidate within the data set is *cocción* as this NOM has a non-eventive durational interpretation along with the eventive reading (cf. table 1). Typical event-selecting predicates such as *tener lugar* 'to take place' or *asistir en* 'to attend' were not employed in this study as they did not provide the most natural contexts with many of the base verbs at stake.

- (42) Esta mañana, el estudio del vocabulario se está haciendo muy pesado. [...].  
This morning, the study.NOM of the vocabulary is getting very tedious. [...].

Contexts of this type were used to elicit generic and episodic event interpretations of the NOM under investigation and to compare DVN and NI for their compatibility with one or the other reading.

## 6. The acceptability judgment experiment

The goal of the acceptability judgment experiment was to test the following hypotheses: DVN prefer realization of the lower argument (H1), while NI only permit realization of the higher argument (H2). As for event readings, the acceptability of DVN is not affected by the distinction between episodic and generic event interpretations (H3), whereas, for NI, the distinction is relevant with generic interpretations being preferred (H4).

### 6.1. Material

The study is based on a three-factorial design with two levels for each factor: type of NOM (DVN vs. NI), argument realized as a PP<sub>de</sub> (lower argument vs. higher argument) and event reading (episodic vs. generic). The experiment, thus, includes eight conditions, which are exemplified by a concrete token set in (43).

- (43) a. *lower argument, episodic*  
Esta vez, {la caza / el cazar} de ballenas continuará durante todo el día, incluso cuenta con permiso oficial como las ballenas grises ya no se consideran como animales en peligro de extinción.  
This time, the hunt.NOM of the whales will continue all day long, it even relies on an official permission as gray whales are no longer considered animals threatened to become extinct.
- b. *lower argument, generic*  
Japón ha recibido fuertes críticas de varias organizaciones medioambientales que consideran {la caza / el cazar} de ballenas como un negocio cruel.  
Japan has received severe criticism from various environmental organizations, which consider the hunt.NOM of whales a cruel business.
- c. *higher argument, episodic*  
Todavía continúa {la caza / el cazar} de las leonas. Están intentando separar una cebra de su manada.  
The hunt.NOM of the lionesses is still going on. They are trying to separate a zebra from its herd.
- d. *higher argument / generic*  
Como han observado, {la caza / el cazar} de las leonas suele ser rápida y eficaz. Atrapan a su víctima con una aceleración enorme y un salto final.  
It has been observed that the hunt.NOM of the lionesses is typically quick and efficient. They catch their victim by accelerating enormously and with a final jump.

The material consisted of 80 stimuli, that is ten token sets à eight stimuli. In some cases, the argument in the PP<sub>de</sub>-position had to be varied regarding the choice of lexeme, determiner and/or number in order to further disambiguate the intended event reading

and/or the interpretation as lower or higher argument (cf. table 3 in the appendix, sec. 9). Matrix predicates were chosen based on the criteria laid out in section 5. In each case, context was added to support episodic or generic event interpretations in the best possible way. The NOM never occurred at the beginning nor at the end of the context in which they were embedded.

### 6.2. *Participants*

The participants were 64 monolingual speakers of Castilian Spanish 49 of which were recruited at the University of Sevilla and could enter a raffle for three gift certificates. The other 15 participants were recruited via Amazon Mechanical Turk and received 5€ each for their participation (cf. Ortega-Santos 2019, Sprouse 2011 for this approach). All potential participants had to answer questions about their linguistic background prior to starting the experiment and were excluded from the analysis if they could not unambiguously be identified as monolingual speakers of Castilian Spanish.

### 6.3. *Procedure*

The experiment was based on a within-subject design. For purposes of counterbalancing, the material was distributed onto eight lists, each of which contained 10 NOM and 16 filler items. Since the design included eight experimental conditions, participants rated six experimental conditions once and two experimental conditions twice. Thus, participants did not rate the same number of stimuli for each condition. This was, however, compensated by distributing the stimuli onto the lists in a way that every stimulus was judged by the same number of participants.

The study was carried out as a web-based experiment using the online questionnaire tool *surveygizmo*. In the introductory part, participants were asked to fill out a questionnaire which was concerned with certain linguistic features of Castilian Spanish. They were told that their intuitive judgments as native speakers were needed but not aware of the exact object of investigation. The participants were asked to read the paragraphs presented to them and informed that each paragraph contained a critical item, which was underlined. After reading the paragraph in question, they judged the underlined item for contextual adequacy. It was asked whether the item fitted into the context and judgments were elicited on a seven-point Likert scale on which 1 was labelled “does not at all fit into the context” and 7 stood for “fits perfectly into the context”. The working instruction included two anchor items for the lowest point and the highest point to establish a floor and a ceiling (cf. Schütze & Sprouse 2013: 37). The stimuli were presented in a pseudo-randomized order alternating experimental items and filler items in an irregular fashion. Each questionnaire started with three fillers as unannounced practice items in order to familiarize participants with the task. The filler material was taken from two stimulus sets one of which was concerned with differential object marking, the other with the (in-)compatibility of past tense forms and time adverbials. The fillers included acceptable, unacceptable, and disputable items in order to cover the full range of the scale. The questionnaire took appr. 25 minutes to complete (cf. "Experimental material" for the exact wording of the working instruction and all stimuli, i.e. both NOM and filler items).

### 6.4. *Results*

Prior to the statistical analysis, the acceptability ratings of each participant were transformed into z-scores in order to eliminate biases in how different participants used

the 7-point scale (cf. Schütze & Sprouse 2013).<sup>10</sup> Data points with z-scores more than 2,5 standard deviations from the mean were excluded for each participant (cf. Staum Casasanto, Hofmeister & Sag 2010: 226). This outlier removal process affected 5 of 640 judgments. The remaining 635 z-scores were the data on which the statistical analysis was performed. To estimate the effects of the experimental manipulations, I performed Generalized Linear Mixed Models (GLMM) with a Gaussian family distribution using R (R Core Team 2018) and the package lme4 (Bates et al. 2015). Argument realization, event reading, telicity, the type of affix and interactions of it were treated as fixed factors. All models included by-item random intercepts.<sup>11</sup> The models that were fitted for DVN and NI respectively, also include by-item random slopes for the factor argument realization as there is a high amount of variation between individual items in this respect (cf. figure 1 and 2 below). The models that were fitted to analyze the impact of the type of NOM include only by-item random intercepts as, according to the fit criteria AIC and BIC, models containing by-item random slopes for type of NOM have proven less explanatory. As for fixed factors, p-values were obtained by pairwise comparisons of a model with an effect in question against the model without this effect using ANOVAs and Bonferroni correction.<sup>12</sup>

Figure 1 shows that DVN received higher acceptability ratings than NI under all four manipulated combinations of argument realization and event reading. The statistical analysis shows a highly significant effect of the type of NOM (DVN vs. NI) for the conditions “lower argument, episodic” ( $\chi^2(1) = 38,52, p < 0,001$ ), “lower argument, generic” ( $\chi^2(1) = 28,39, p < 0,001$ ) and “higher argument, episodic” ( $\chi^2(1) = 13,28, p < 0,001$ ). Type of NOM was, however, not a significant predictor for acceptability for those NOM that instantiated the condition “higher argument, generic” ( $\chi^2(1) = 1,22, p > 0,05$ ).

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<sup>10</sup> Higher z-scores represent higher ratings which lie above the participant’s mean rating, lower z-scores stand for lower ratings, which lie below the participant’s mean (cf. Cowart 1997: 114). Positive z-scores typically occur with items whose acceptability is beyond dispute (cf. Kush, Lohndal & Sprouse 2018: 760).

<sup>11</sup> Participants were not included as a random factor in the final model as the data were normalized per participant prior to analysis and a GLMM that included random intercepts and random slopes for each participant yielded the exact same results as the model without this random factor.

<sup>12</sup> One of the reviewers has pointed out that the statistical power of the models is most likely not sufficient to argue for robust findings in all cases (cf. Brysbaert & Stevens 2018 for a stimulation study on sufficiently powered mixed effect models). As this experiment is based on a 2x2x2-design and includes various subset analyses, more data points would be necessary to ensure statistical power. Follow-up studies will, therefore, have to reduce the number of variables and/or increase the number of items and participants.

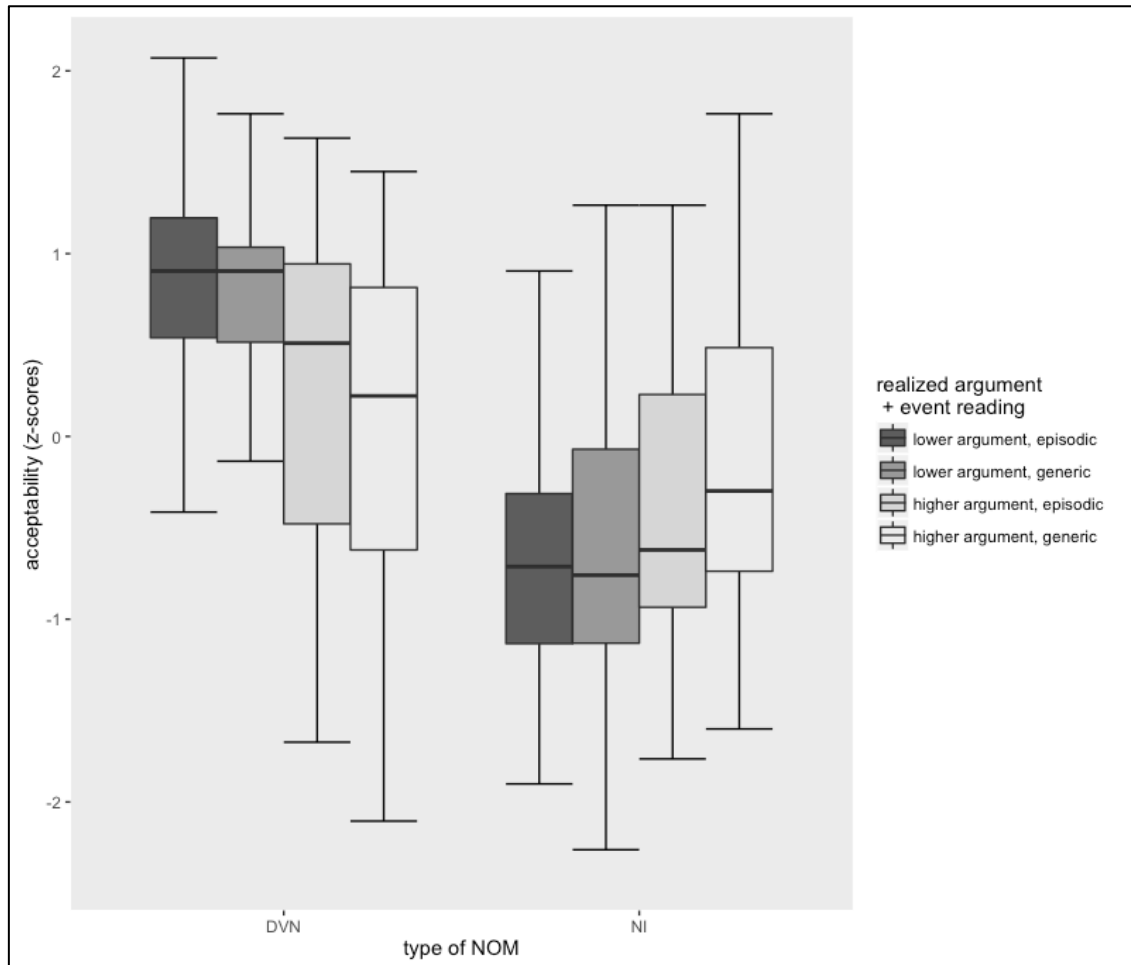


Figure 1. *Acceptability of DVN vs. NI per experimental condition*

Figure 1 also illustrates that DVN and NI behave oppositely under the respective experimental conditions with DVN preferring realization of the lower argument over realization of the higher and episodic event readings over generic interpretations, while NI prefer the opposite pattern for both variables. For DVN, the boxplots show that judgments are more broadly scattered for items with a realized higher argument than for those with a realized lower argument whose acceptability is not in dispute. In the case of NI, dispersion of the data is considerable and acceptability severely restricted under all four conditions. The acceptability judgments are represented per item and realized argument in figure 2 and figure 3 for DVN and NI respectively.



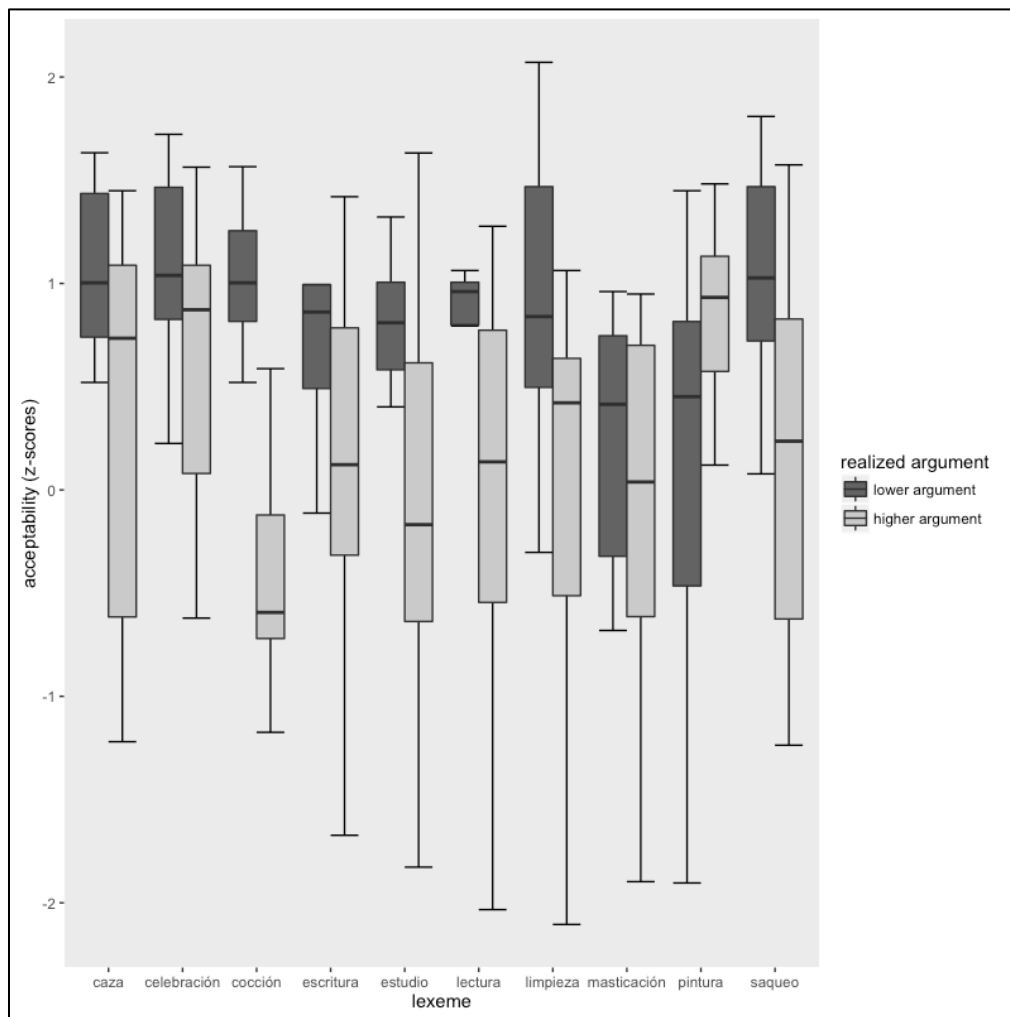


Figure 2. Acceptability of DVN per lexeme and realized argument

Visual inspection of the DVN reveals a considerable degree of variation among individual items. Some items such as *cocción* show a pronounced preference for realization of the lower argument, whereas others such as *masticación* are almost equally acceptable with both options of argument realization. *Pintura* represents an exception from the overall tendency in being the only item that prefers realization of the higher argument. In the final model, argument realization survived as the only significant predictor of acceptability of DVN ( $\chi^2(3) = 55,68$ ,  $p < 0,001$ ). Event reading did not have a significant effect ( $\chi^2(1) = 2,59$ ,  $p = 0,1$ ). Neither did the type of affix significantly improve the model ( $\chi^2(4) = 0,01$ ,  $p > 0,5$ ) nor the inclusion of (a-)telicity ( $\chi^2(2) = 0,33$ ,  $p > 0,5$ ).

Figure 3 below shows that NI also display a considerable amount of variation regarding acceptability and the dispersion of judgments per item. Certain items such as *pintar* show a clear preference for realization of the higher argument, whereas others, e.g. *cocinar*, even show a slight preference for realization of the lower argument, thus, deviating from the overall tendency. The final model of NI includes two predictors: argument realization and event reading ( $\chi^2(4) = 31,54$ ,  $p < 0,01$ ). Affixes did not come into play and (a-)telicity did not turn out to be significant ( $\chi^2(2) = 1,19$ ,  $p > 0,5$ ).

However, the variables (a-)telicity and type of affix require further investigation due to relatively few data points in the respective subsets.

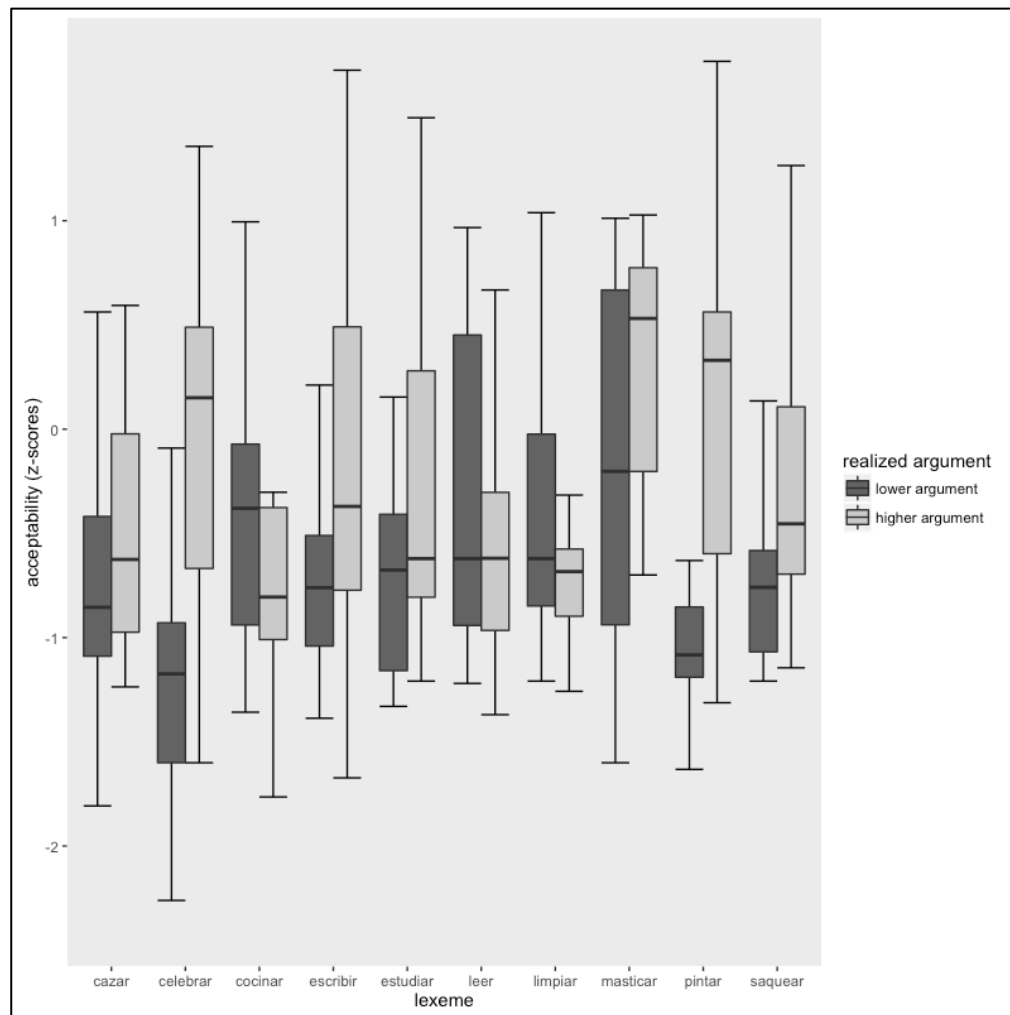


Figure 3. Acceptability of NI per lexeme and realized argument

## 7. Comparing judgment data and corpus data

In the following, the results of the acceptability judgment experiment will be related to results of a corpus analysis that was part of a broader comparative study on NOM in Romance and Germanic by Meinschaefer (2017). A comparison of the results appears interesting concerning the question of to what degree judgment data and corpus data yield similar results and what possible differences might tell us on a methodological level.

The corpus analysis is based on the annotated version of the *Corpus de Referencia del Español Actual* (CREA) made up of written language and containing more than 126m. words. As the material was developed collaboratively, the acceptability judgment experiment and the corpus study tested the same DVN for their argument realization possibilities and both dealt exclusively with singular DVN preceded by a definite article.<sup>13</sup> Table 2 shows the total number of DVN followed by a PP<sub>de</sub> in the rightmost column and the cases in which the PP<sub>de</sub> could be identified as corresponding to the lower or the higher argument of the respective base verb in the middle columns.

<sup>13</sup> The only item that was part of the acceptability judgment experiment but not included in the corpus study was *cocción* ‘cooking’.

As already discussed in section 3, the ability to combine with a PP<sub>de</sub> is not necessarily accompanied by an unambiguous event interpretation of the DVN.

DVN (word form)	N of occurrences with <b>lower</b> argument realized	N of occurrences with <b>higher</b> argument realized	Total N of corpus examples analyzed (attested)
1. <i>caza</i> hunt.NOM	101	3	113
2. <i>celebración</i> celebrate.NOM	92	0	100 (631)
3. <i>escritura</i> write.NOM	30	13	61
4. <i>estudio</i> study.NOM	66	0	101
5. <i>lectura</i> read.NOM	87	1	100 (220)
6. <i>limpieza</i> clean.NOM	24	0	74
7. <i>masticación</i> chew.NOM	—	1	3
8. <i>pintura</i> paint.NOM	10	14	102
9. <i>saqueo</i> plunder.NOM	100	6	103

Table 2. Occurrences of DVN followed by a PP<sub>de</sub> in the CREA corpus<sup>14</sup>

For those DVN that occur with an eventive interpretation the analysis of the corpus data showed that the lower argument is realized much more frequently than the higher argument, (44) and (45). Realization of the higher argument is attested with some DVN, but infrequent, (46) and (47).

- (44) [...] además de la instalación de los puntos de información, el único acondicionamiento realizado ha sido la preparación de la senda y *la limpieza del bosque*. (CREA, Arqueoweb, 04/2001)  
‘[...] apart from the setup of information points, the only refurbishment that was realized has been the preparation of the track and the cleaning of the forest.’
- (45) [...] Mientras todas estas medidas se van cumpliendo, *el estudio del lince* continua y se cuenta ahora con la ayuda económica de la Fundación [...]. (CREA, ABC, 11/03/1987)  
‘While all these measures are being taken, the study of the lynx continues, and we are now counting on economic support by the Foundation [...].’
- (46) [...] que sus ganados se salvaran de la liquidación que estaban sufriendo por falta de sal, por *el saqueo del ejército invasor* [...].’ (CREA, 1985, Colombia)  
‘[...] that their cattle was saved from liquidation from which it was suffering due to lack of salt, due to the plundering of the invading army [...].’

<sup>14</sup> The variation among the total N of DVN came into being as follows: The search was initially limited to data from a) Spain and b) nonfictional texts. In cases in which this query yielded roughly 100 hits, all of them were analyzed. In cases in which a query yielded < 100 hits, the above-mentioned limitations were removed. If the number of hits was – despite of limitations in the query – significantly > 100, it was reduced to a subset of 100 hits that were chosen based on recency, that is year of occurrence. As for the PP<sub>de</sub>, all queries were limited to DVN followed by the amalgamated form *del*, i.e. the NP selected by *de* was definite, masculine and singular such as *del bosque* ‘of the forest’. The search was expanded to *de* + other articles only in cases in which the number of hits was < 100. In some cases, the number of hits remained < 100 even after all limitations were removed from the query, cf. e.g. *masticación*.

- (47) Siguen sin darse cuenta de que lo que presencian es *la caza del hombre hacia otro hombre*. El hombre es un lobo para el hombre. (CREA, 1994)  
 ‘They still do not realize that what they are witnessing is man’s hunt for other men. A man is a wolf to another man.’

*Escritura* and *pintura* are exceptions in this respect as they are both attested with a realized higher argument in a two-digit number of cases. However, the interpretations of the respective DVN are not (unambiguously) eventive. *Escritura* in (48), for instance, allows for a result (object) interpretation, *pintura* in (49) for a manner reading.

- (48) [...] le compraron una lápida. Sobre ella Apollinaire escribió con buril el epitafio, que el escultor Brancusi y el pintor Ortiz de Zárate, siguiendo *la escritura del poeta*, grabarían tres años más tarde [...].  
 [...] they bought him a tombstone. On it, Apollinaire wrote with a burin the epitaph that the sculptor Brancusi and the painter Ortiz de Zárate, following the poet’s writing, engraved three years later [...].’
- (49) Esos dibujos permiten un mejor conocimiento de *la pintura del artista* y muestran también [...]. (CREA, ABC Cultural, 09/08/1996)  
 ‘These drawings allow for a better understanding of the artist’s painting and also show [...].’

Comparing these results to those of the experiment shows that DVN are both more frequent and more acceptable with a realized lower argument than with a realized higher argument. Low frequency, however, cannot be correlated to low acceptability in a parallel way. Clearly event-denoting DVN rarely occurred with a realized higher argument in the corpus. In the experiment, they received lower ratings than their counterparts with a realized lower argument. Nevertheless, they proved to be fairly acceptable, cf. figure 1 above.

These findings agree with common assumptions made in the methodological literature (e.g. Featherston 2008; Gibson & Fedorenko 2013) according to which frequency and judgment data are equally suitable for identifying the optimal candidate among various conditions, in the present case, a DVN with a realized lower argument. However, for differentiating between structures that are “suboptimal”, an experimental approach seems indispensable as corpus data do not necessarily provide enough data in order to reach generalizations. This observation is particularly relevant for the questions of under which conditions NOM can realize the higher argument of the base verb and of which factors determine the distribution between DVN and NI as the latter usually do not occur in enough numbers in corpora anyway.

## 8. Discussion and conclusions

The contribution has shed light on the distribution of two different types of NOM by investigating their ability to support an argument of the base verb and their availability in different event readings. The experimental study has shown that DVN and NI are not complementarily distributed in a strict sense as DVN proved to be more acceptable under all manipulated conditions. I did, however, identify one condition under which NI can compete with DVN. These are cases in which the respective NOM are interpreted as event kinds and the higher argument is mapped onto the PP<sub>de</sub>. I thus conclude that DVN face only marginal competition by NI when it comes to nominalizing transitive base verbs. This result is further confirmed by the observation

that only DVN, but not NI are able to realize both arguments of the base verb, cf. (9) and (10) above.

The comparison brings up the question of whether there even are domains in which DVN and NI truly compete. As for transitive base verbs, competition only comes into play between DVN and NI of the more verbal type, cf. (1) above. Both types of NOM realize the lower argument of the base verb, albeit in different ways, cf. (50) and (51). Again, NI seem to be more restricted in their interpretational possibilities as they favor generic over episodic readings, cf. (51) (cf. Schirakowski 2016 on NI). Competition between DVN and NI of the nominal type appears to be an issue primarily for NOM built on intransitives. This seems to be the case, in particular, if the base verb is associated with a manner interpretation, for instance, due an evaluative affix such as *-et-* in (52). As NI of the nominal type typically shift the focus to the manner in which the event denoted by the base verb comes about (e.g. Di Tullio 2001), they appear to be a true competitor for DVN under this condition.

- (50) La observación de (los) pájaros a. aún continua b. es una actividad popular.  
 the observe.NOM of (the) birds is going on still is a popular activity
- (51) El observar (los) pájaros a. ¿aún continua b. es una actividad popular.  
 the observe.INF (the) birds is going on still is a popular activity
- (52) el {correteo / corretear} de la gente  
 the run.around.NOM/INF of the people

For DVN, I can confirm H1 according to which they prefer realizing the lower argument over realization of the higher argument. However, DVN built on verbs that allow for the unspecified object alternation show that the argument realization possibilities of NOM are not always categorical in nature. Both options – realization of the lower or the higher argument – can be available but still be accompanied by differences in acceptability. Furthermore, DVN proved to be flexible regarding different eventive interpretations (H3) showing only a non-significant preference for episodic readings. The exceptional behavior of *pintura* might be related to the fact that DVN in which *-ura* directly attaches to a verbal root are rare (Rainer 1993: 671). Fábregas (2015: 189f.) even claimed that DVN ending in *-ura* are restricted to non-eventive interpretations.<sup>15</sup> In this study, however, *pintura* did not prove as unacceptable in eventive readings, it just deviated in argument realization preferences from the other DVN under investigation (cf. Rainer 1993: 671, where *pintura* is also listed as an *action noun*). On a more general level, the inter-lexeme variation attested in our study shows that the argument realization possibilities of NOM are not yet fully understood despite extensive research on the topic. Furthermore, the impact of certain affixes or aspectual features does not appear to be as straightforward as sometimes assumed. To further improve our understanding in this regard and to ensure sufficiently powered analyses, follow-up studies will have to focus on these factors individually.

For NI, the experiment confirmed their context sensitivity and showed that they are specialized on the reference to kinds of events (H4). In preferring realization of the higher argument (H2), NI deviate from the general preference of DVN and it remains

<sup>15</sup> This claim is part of a discussion about the endings *-ura* and *-dura* which concerns the question of whether they are two different affixes, allomorphs of the same affix or whether there is only the affix *-ura*, which can attach to the perfect participle morpheme *-d-* (e.g. Martín García 2010; Fábregas 2015 for different views on this issue). According to Fábregas, the prerequisite for an eventive interpretation is the presence of a verbal theme vowel or a verbalizing affix, none of which is present in forms like *pintura*.

an open question to what this property can be ascribed. I tentatively assume that the preference (or at least the possibility) of mapping the higher argument to the postnominal PP position loosely correlates with the NI's specialization on imperfective and generic readings. In these interpretations, realization of the higher argument might be favored or at least facilitated as the focus is not on the completion or result of the event. Extending this thought to DVN, however, the picture is less clear. First, DVN do not show a uniform behavior regarding argument realization possibilities as many forms can also map the higher argument onto the PP<sub>de</sub>-position. Second, it is not apparent that DVN are specialized on perfective readings. Thus, the question of to which extent argument realization in NOM correlates with viewpoint aspect requires further investigation. In this respect, it also appears worthwhile to further examine the availability of pluralization as DVN with a realized higher argument might preferably occur in the plural form, which was not part of this study.

From a methodological point of view, corpus data are certainly the more efficient tool for establishing proof of the argument realization preferences of DVN. Acceptability judgment experiments, on the other hand, appear to be more powerful for detecting subtle differences regarding those structures whose acceptability is in dispute. It seems, however, noteworthy that frequency of occurrence and perceived acceptability might not relate to the exact same notion of linguistic well-formedness. Also, both empirical methods come with methodological drawbacks. Acceptability judgments allow for investigating only very restricted number of lexemes. With corpus data, it can be challenging to unambiguously identify the interpretation of NOM that are semantically ambiguous. This is the case with the vast majority of DVN, but not with NI. Taking into consideration the diversity of event-denoting NOM available in Spanish, a combination of experimental and corpus research could offer the most effective empirical approach for further investigation.

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**Appendix**  
**NOM with realized arguments**

NOM	higher argument		lower argument	
	episodic	generic	episodic	generic
{la caza / el cazar} de	ballenas		las leonas	
{la celebración / el celebrar} de(l)	cumpleaños		los exalumnos	
{la cocción / el cocinar} de(l)	las setas	estas setas	chef	este chef
{la escritura / el escribir} de(l)	guion	un guion	del niño	un autor
{el estudio / el estudiar} de(l)	vocabulario		Juan	
{la lectura / el leer} de(l)	capítulo	una novela	Pablo	
{la limpieza / el limpiar} de(l)	baño		un delincuente	Clara
{la masticación / el masticar}	chicle		Ramón	un niño
{la pintura / el pintar} de(l)	cuadro	un cuadro	artista	
{el saqueo / el sacar} de(l)	edificios	edificios	los vándalos	del ejército victorioso