Case and the Event Structure of Nominalizations[*]

Luis López

luislope@uic.edu

Abstract: This article explores the distribution of morphological case in Spanish nominalizations and shows that there is a connection between morphological case and event structure. Most nominals govern genitive case *de* on their internal arguments but some allow or require a different morpheme, *a,* reminiscent of Differential Object Marking (DOM). It is argued that the event structure of the nominalization is the crucial factor in choice of *a,* in as much as the latter is limited to *process* nominals that do not entail a change of state. The same distinction between process and *change of state* nominals is then extended to two other empirical puzzles regarding the interpretations of genitive arguments in nominalizations. I present a formal analysis assuming a syntax of events inspired in Ramchand (2008).

Key words: genitive case, nominalization, event syntax, process, change of state, Spanish, English

1.   Introduction

Spanish nominalizations generally require genitive case on their arguments, as is common cross-linguistically; this is shown in (1a). However, some nominalizations allow or require that their internal arguments be introduced by *a*, as shown in (1b). (1c) shows that there is a clear division between nominalizations that allow *a* and those that do not:[1]

(1)　　a.　La　　captura　de Juan　por el perro　fue sorprendente.

　　　　　　The　　capture　GEN Juan BY the dog　　was surprising

　　　　　　'The dog's capture of Juan was surprising.'

　　　　b.　El　　ataque del　　　perro　a　　Juan　fue sorprendente.

　　　　　　The　　attack GEN.DEF　dog　　DOM　Juan　was surprising

　　　　　　'The dog's attack on Juan was surprising.'

　　c. *　La　　captura　del　　　perro　a　　Juan fue sorprendente.

　　　　　　The　　capture　GEN.DEF　dog　　DOM　Juan was surprising

Among the nominals that behave like *ataque* are: *golpe* 'hit', *miedo* 'fear', *acusación* 'accusation' and many others. Nominals that behave like *captura* include *destrucción* 'destruction', *limpieza* 'cleaning', *retraso* 'delay', etc. (a more complete list is in section 3.1).

I will refer to this phenomenon as *n-DOM*, in part because of its superficial similarity with the phenomenon of Differential Object Marking in the verbal domain (henceforth v-DOM), in part because to the extent that the literature has mentioned n-DOM it has done so in the context of an analysis of v-DOM (as in Torrego 1998). I exemplify v-DOM in (2):

(2)   a.   El perro   atacó   a   Juan.

            the dog   attacked   DOM   Juan

       b.   El perro   capturó   a   Juan.

            the dog   captured   DOM   Juan

Spanish v-DOM is a well-known phenomenon with an extensive literature, mostly focused on trying to account for its distribution (see Fábregas 2013c for a detailed overview). In contrast, n-DOM is unexplored territory: I am only aware of a two-paragraph discussion in Torrego (1998); the comprehensive grammar of Spanish compiled by Bosque and Demonte (1999) does not mention n-DOM in any of its more than 5000 pages.

In two respects, n-DOM resembles v-DOM: n-DOM is found in argument-taking nominals and it affects exclusively the internal argument. Phonologically, n-DOM and v-DOM are also identical. However, the parallels stop there. The contrast between (1c) and (2b) already points to a fundamental difference between v-DOM and n-DOM: although the verb *capturar* is compatible with v-DOM, the noun *captura* is not.

Notice that the distribution of genitive case in examples (1) and (2) poses another puzzle. Since Picallo (1991) it has commonly been assumed that in event nominalizations the internal argument but not the external argument is a true argument of the nominal (see in particular Alexiadou's 2001 extensive discussion of a data-base that includes several languages). Evidence for this claim can be seen in the case distribution of (1b): the external argument appears in an adjunct *por/by*-phrase while genitive *de/of* is reserved for the internal argument. The claim is certainly true of a subset of nominals, those that look like *captura*, as shown in (3a). But it does

not hold of *ataque* nominals. In the latter type of nominal, the external argument may appear in genitive case, as shown in (3b,c). Moreover, the genitive constituent bearing the external theta role seems to be a bona-fide noun phrase argument; a simple test like reflexive binding shows that it is not an adjunct PP, as shown in (3c):

(3) a. La captura del perro

'The dog's capture (the dog is patient)

b. El ataque del perro

'The dog's attack' (the dog is agent)

c. El ataque de Juan a sí mismo

the attack GEN Juan DOM himself

'John's attack on himself'

Finally, the phenomena exemplified in (1) and (3) point to a third puzzle. Anderson (1977) argues that only some internal arguments can appear in the *saxon genitive* construction, those that he defines as being *affected* (see also the discussion in Grimshaw 1990, Alexiadou 2001, Smirnova 2015). Consider the examples in (4). In *John's capture* 'John' has to be the internal argument but in *John's attack* 'John' is the external argument. Spanish does not have saxon genitives but it does have possessive adjectives, as shown in (4c,d). Let's use the term *s-gen* as a cover term for English saxon genitive and English and Spanish possessive adjectives. Interestingly, the interpretation of *su* in (4c,d) parallels the English (4a,b): it is a theme in (4c) and an agent in (4d):

(4) a. John's/his capture

b. John's/his attack

c. Su captura

'her/his capture'

d. Su ataque

'her/his attack'

I hypothesize that the convergence of these three properties on the same class of nouns is not chance. That is, it is not chance that the 'attack' nouns have the properties of assigning n-DOM, having a *de* genitive external argument in Spanish and having a s-gen external argument in Spanish and English while the 'capture' nouns have the opposite properties. Further, I argue that what underlies these grammatical properties is the structure of the event that the nouns denote, thus expanding the findings of the already rich literature on the subject. Thus, this article is meant to be a contribution to our understanding of the role of inner aspect in shaping the grammatical structure of a predicate.

The contrast between (1b) and (1c) is the central datum of this article. I argue that n-DOM is not possible when the event denoted by the noun entails a change of state that involves the internal argument; correspondingly, n-DOM is possible when the event does not entail a change of state. This is accounted for by means of a syntax of events directly inspired in Ramchand (2008). This syntax of events will be shown to also derive the second and third puzzles. In the course of the discussion, I show that Spanish n-DOM and v-DOM are distinct phenomena. In particular, n-DOM cannot be equated with structural accusative or inherent case.

The article is structured as follows. Section 2 presents a descriptive grammar of n-DOM in Spanish and motivates the need to study it as an independent linguistic phenomenon. This section is longer than is normally the case in articles of this type – it is however necessary to spend some time on the features of n-DOM because, as mentioned above, there is no literature that the reader can be referred to. In section 3 I present my account of the puzzle exemplified in (1) and (2). Section 4 discusses the second and third puzzles. Finally, section 5 discusses an additional issue: there are some nominals for which n-DOM is obligatory and others for which it is optional.

2.   A descriptive grammar of n-DOM

This section is organized as follows. Section 2.1 provides a quick refresher on the properties of v-DOM in Spanish while 2.2 shows that n-DOM has none of the properties that define v-DOM. Along the same lines, 2.3 shows that n-DOM cannot be equated with structural accusative case and 2.4 shows that it is unlikely to be an instance of inherent case. 2.5 discusses addicity and rounds up this part of the discussion.

2.1   Conditions on v-DOM

As is well known, v-DOM is dependent on the animacy of the object. This is what accounts for the difference between (5a) and (5b):

(5) a. Juan golpeó   a / *Ø Chomsky.

         Juan hit   DOM   Chomsky

         'Juan hit Chomsky.'

     b. Juan golpeó   *a   la   instalación.

         Juan hit   DOM   DEF   installation

         'Juan hit the installation.'

The second parameter that defines the appearance of v-DOM is the referentiality scale of Silverstein (1976), successfully deployed by Aissen (2003), as well as many others, to analyze v-DOM. Spanish v-DOM ranks quite low in the referentiality scale: v-DOM is obligatory with pronouns, definite DPs, proper names and strong quantifiers; it is optional with specific objects. This is exemplified in (6):

(6) a. La policía está   persiguiendo a   una gestora corrupta.

         The police is   pursuing   DOM   a   manager corrupt

         'The police is pursuing a (specific or non specific) corrupt manager.'

     b. La policía está persiguiendo una gestora corrupta.

         'The police is pursuing a (non-specific) manager.'

Although v-DOM is sometimes referred to as a "prepositional direct object", the *a* is not a preposition. According to traditional tests, the phrase headed by v-DOM is an ordinary noun

phrase direct object. For instance, it is promoted to subject in a passive sentence. The *a* should rather be regarded as a spell-out of accusative case.

2.2   Conditions on n-DOM

As mentioned, n-DOM and v-DOM have one property in common, they show up on internal arguments. Other than that, the conditions on n-DOM do not reproduce the conditions on v-DOM. For starters, there is no animacy constraint on n-DOM, as shown in the following examples in (7):

(7)   a.   El golpe a   la instalación   /   a   Chomsky

              the hit   DOM   the installation   /   DOM   Chomsky

              'The hitting of the installation / of Chomsky'

       b.   El ataque a   la ciudad   /   a   la candidata

              the attack DOM   the city   /   DOM   the candidate

              'The attack on the city / on the candidate'

       c.   El miedo a   las tormentas   /   a   la condesa

              the fear   DOM   the storms   /   DOM   the countess

              'The fear of storms / of the countess'

Additionally, there is no specificity effect. Consider example (8). In this example, the nominalization *persecución* 'persecution, pursuit' can assign n-DOM. I use the indicative vs

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conditional contrast in the main clause as well as the indicative-subjunctive contrast in the relative clause in order to bring out the specific and nonspecific readings in the DP 'an accountant that is honest'. The idea is that if the matrix verb is perfect and the subordinate verb is indicative, the specific reading is obligatory. If the matrix verb is conditional and the mood in the subordinate clause is subjunctive, the non-specific reading becomes prominent. These changes make no difference: either the genitive marker and the DOM marker seem to be equally possible in each case.

(8)   'María presenció / presenciaría sin remordimiento…

'Maria witnessed / would witness without remorse

…la persecución   de/a   una gestora   que fue/fuera   honrada.'

…the persecution GEN/DOM a   manager   that was.INDIC/is.SUBJ honest

…the persecution of a manager that is honest.'

Thus I conclude that the conditions on the appearance of n-DOM do not match those of v-DOM.

2.3   n-DOM is not structural accusative case

Two lines of independent research developed in the last decade would seem to conspire to suggest an analysis of n-DOM as an expression of structural accusative case. The first line of research argues that v-DOM in many languages is indeed a spell-out of structural accusative case assigned by little *v* or a functional category within the v-VP/√P complex (Rodríguez-Mondoñedo

2007, López 2012 among many others). The evidence in favor of this analysis seems fairly conclusive. For instance, in passive sentences, arguments bearing v-DOM assume the grammatical function of subject; additionally, when v-DOM arguments are pronominalized, the pronoun exhibits overt accusative morphology.[2]

The second line of research involves nominalizations. In recent years, an analysis of nominalizations has become mainstream in which the noun phrase dominates a fully-fledged verb phrase.

(9)   *Mainstream analysis of nominalizations*

[$_{nP}$ n [$_{vP}$ v [√]]]   See Alexiadou 2001, Borer 2012, Embick 2010

The ability of nominalizations to denote complex events (in the sense of Grimshaw 1990) is attributed to the presence of the vP, which is in charge of introducing the event variable and the arguments of the event variable. It follows that a noun phrase may denote a complex event only to the extent that it dominates a vP.

If we put these two lines of research together, one could conclude that n-DOM is nothing but an instance of v-DOM that has been swallowed by a nominal structure. This seems to be the state of affairs that obtains in Hebrew, as argued by Borer (2013b); Hebrew is a language in which at least some nominalizations clearly seem to include a vP with an internal argument that can bear n-DOM (=v-DOM). However, Spanish is not like Hebrew and n-DOM cannot be regarded as a spell-out of structural accusative case.

There are at least two reasons why n-DOM cannot be equated with accusative case. First, v-DOM alternates with a DP that does not bear an external form of case:

(10)   a.   Koch cazó unos conejos.

                   'Koch caught some rabbits.'

         b.   Marine cazó **a** un hombre.

                   'Marine caught DOM a man.'

n-DOM instead alternates with genitive. Notice in particular that a DP without a case mark is not grammatical within a nominalization:

(11)   a.   La caza   **a**l   hombre escapado

                  the hunting   DOM.DEF   man escaped

                  'The hunting of the escaped man'

        b.   La caza   **de** los conejos

                  the hunting   GEN the rabbits

                  'The hunting of the rabbits'

        c.   *   La caza los conejos

If n-DOM were indeed a form of accusative case, we would expect (11c) to be grammatical, not (11b).

Second, n-DOM is not a dependent case (on this notion, Marantz 1991, Baker 2015). Accusative case is dependent on another argument receiving nominative case. The following example shows that v-DOM, which is a spell-out of accusative case, is not possible in passive sentences:

(12)   * Fue   atacado   a   Juan   por el perro.

        Was   attacked   DOM   Juan   BY the dog

The reason why (12) is ungrammatical is because in the absence of an external argument the internal argument must assume the role of subject and become a nominative DP. (12) contrasts with (13). In (13) we can see how the external argument may become an adjunct introduced by *por* or be absent altogether without triggering any effect on the case of the internal argument.

(13)   a.   El ataque a   Juan   por el perro

              the attack DOM   Juan   BY the dog

              'Napoleon's attack on the city'

        b.   El ataque a   la ciudad

              the attack DOM   the city

              'The attack on the city'

Moreover, there are reasons to doubt that (9) is indeed the best analysis of event-denoting nominals in Spanish. As I argue in López (2015), there are complex event nominals in Spanish that can't possibly be built on verbs. (14) and (15) exemplify complex event nominals that do not include a verbal base – the roots √BASTON and √MIED cannot be used as bases to form verbs. For instance, the noun *bastonazo* is built on the noun *bastón* 'stick, club'; the suffix *azo* by itself brings in the event meaning:

(14)   El   bastonazo   del   policía   al   manifestante

the "bastonazo"   GEN.DEF   policeman DOM.DEF   demonstrator

'The policeman's hitting the demonstrator (with a stick)'

(15)   El miedo de   Juan a   las arañas

the fear   GEN   Juan DOM   the spiders

'Juan's fear of spiders'

Another reason to doubt that Spanish nominalizations include a vP is that they do not license adverbs, as shown in (16):

(16)   a.   La injusta acusación al   sargento

the unjust   accusation DOM.DEF   sergeant

'The unjust accusation to the sergeant'

b. *   La injustamente   acusación al   sargento

the unjustly   accusation DOM.DEF   sergeant

This leads to the conclusion that Spanish nominalizations (excepting those derived from infinitives) do not include a fully-fledged vP. In López (2015) I argue that affixes can be derived by a parallel derivation and later merged onto the root. This is shown in (17).

(17)   a.   acusación : [[acus]$_\sqrt{}$ [[a]$_v$ cion]$_n$ López 2015

b.   acusación : [[[acus]$_\sqrt{}$ a]$_v$ cion]$_n$ Mainstream analysis

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In (18a), the verbal morpheme is embedded within the syntactic head *n* and not able to project onto a phrase. Presumably, within this structure *v* should not be able to license n-DOM either.

2.4.   n-DOM is not inherent case

Torrego (1998) argues that some instances of v-DOM in Spanish involve inherent case. These involve verbs for which v-DOM on the object seems to be obligatory. Torrego's list includes the following verbs: *acusar* 'accuse', *castigar* 'punish', *ofender* 'offend', *empujar* 'push', *golpear* 'hit'. Torrego's (1998) additional claim is that these instances of inherent accusative are the ones that survive in nominalizations. Consequently, n-DOM is in fact, according to Torrego, inherent accusative case. Indeed, it is the case that the nominalizations that correspond to the verbs in Torrego's list all exhibit n-DOM:

(18)   La acusación al   sargento fue instruida por el fiscal   de la audiencia
        the accusation DOM-DEF   sergeant was filed   by the attorney   of the audience
        provincial.
        provincial
        'The accusation against the sergeant was filed by the District Attorney.'

However, there are many examples that do not follow Torrego's generalization. As mentioned in section 2.3, there are even examples of n-DOM in nominalizations that do not derive from a verbal base (see 13, 14, 15).

Here I further argue that conceiving n-DOM as an inherent accusative case is highly implausible. This is the structure of the argument: in the previous section, I showed that n-DOM is not structural accusative case. In this section I argue that inherent dative case is not possible in nominals. The two conclusions together strongly suggest that n-DOM cannot be a form of inherent accusative case.

Ditransitive predicates in Spanish come in two forms, exemplified in (19a,b).

(19) a. María le entregó el paquete a Susana.

   Juan CL delivered the package DAT Susana

   b. María entregó el paquete a Susana.

   Juan delivered the package to Susana

   c. La entrega del paquete a Susana

   the delivery GEN-DEF package to Susana

   'The delivery of the package to Susana'

In the first form, the indirect object is doubled by a dative clitic, with the result that the semantic and syntactic properties of the construction make it akin to English DOC (see Demonte 1995, Bleam 1999, Cuervo 2003). The *a* morpheme that introduces the indirect object should be regarded as a dative case marker.[3] This is exemplified in (19a). When the indirect object is not

doubled by a clitic, the indirect object is a goal, the equivalent of the *to* indirect object. In this case, *a* is a preposition, as shown in the gloss of (19b).

Finally, (19c) exemplifies a nominalization built on the same root √ENTREG-. The question is whether the *a* that we find in the nominal is the dative case marker or the preposition. The gloss I provide shows that I have made up my mind that it is the preposition. Example (20) shows how I reached this conclusion.

(20) a. Juan le construyó una   casa   a   su padre.

          Juan CL built   a   house DAT his father

          'Juan built his father a house.'

      b. Juan construyó   una   casa   para   su padre

          Juan built   a   house for   his father

      c. La construcción de   la casa   para   su padre

          the construction GEN   the house   for his father

      d. * La construcción de   la casa   a   su padre

          the construction GEN the house   DAT his father

(20a) exemplifies a Spanish applicative construction. The dative clitic acts as the applicative morpheme and the indirect object is a beneficiary introduced by the dative case marker *a*. In (20b), without a dative clitic, the beneficiary is introduced by the preposition *para* 'for'. As can be seen in examples (20c,d), nominalizations only admit the preposition *para* and not the dative case mark *a*. This suggests that the dative case is unavailable in nominalizations.

A similar conclusion is reached when considering psychological predicates. Some psychological verbs select dative case on the experiencer, as shown in (21a). However, the nominalization is incompatible with dative case, as shown in (21b,c).

(21) a.   A   María le   preocupa   la salud   de su madre.

          DAT   Maria CL   worry   the health of her mother

          'Mary is worried about her mother's health.'

     b. * La preocupación a   María

          the concern   DAT   Maria

     c.   La preocupación de María

          the concern   GEN Maria

          'Mary's concern'

Examples (20) and (21) teach us that inherent dative case is unavailable in nominals. Since structural accusative case is also unavailable (section 2.3), I conclude that the possibility of inherent accusative case in nominals is highly improbable. (See also Alexiadou 2001:44 claim that there are no nominalizations based on double object constructions as well as Pujalte 2009, who notices that nominalizations don't accept applicative benefactives).

2.5   Addicity

n-DOM is not possible with intransitive predicates, as exemplified in (22) and (23). In intransitive predicates, only the genitive marker is possible:

(22) a. El trabajo   eficiente   de María

          the work   efficient   GEN Maria

          'Maria's efficient work'

     b. * El trabajo   eficiente   a   María

          the work   efficient   DOM Maria

(23) a. La llegada   tardía   de Juan

          the arrival   late   GEN Juan

          'Juan's late arrival'

     b. * La llegada   tardía   a   Juan

          the arrival   late   DOM Juan

Since n-DOM only affects internal arguments, the lack of n-DOM in unergative predicates seems to follow directly. In the case of unaccusatives, the account is more complex. The absence of accusative case in verbal unaccusative predicates follows from Burzio's generalization or from the assumption that accusative case is a dependent case, as argued by Marantz (1991) and Baker (2015). Along these lines, one could hypothesize that n-DOM is a form of dependent case to account for the ungrammaticality of (23b). However, as I showed in section 2.3, n-DOM is not a dependent case. Consequently, the ungrammaticality of (23b) remains a puzzle at this point (the question is retaken and an account provided in section 3.1).

Finally, the theme argument of ditransitives is also sharply ungrammatical in n-DOM form. Only the genitive marker is possible. This is exemplified in (24). As we can see in (24a,b), the theme argument may appear in genitive case while (24c) shows that it cannot exhibit n-DOM.

(24) a. La entrega de un paquete a María por Juan

the delivery GEN a package TO Maria BY Juan

'The delivery of a package to Maria by Juan'

b. ? La entrega de Juan de un paquete a María

the delivery GEN Juan GEN a package TO Maria

c. * La entrega a un paquete a María

the delivery DOM a package TO Maria

The *Distinctness Condition* (henceforth DC) provides a temptingly straightforward account of the ungrammaticality of (26c) – however the temptation must be resisted. Versions of the DC have been used by Spanish grammarians to account for the impossibility of v-DOM in (25):

(25) María presentó *a/Ø Susana a su padre.

Maria introduced DOM Susana DAT her father

'María introduced Susana to her father.'

The idea is simple: the DC is a restriction that prevents two arguments headed by the case marker *a* to be found in the same VP. Richards (2010) develops a theory of the DC and expands it to several empirical realms, including the datum in (25). His theory can be summarized in (26):

(26) Distinctness (*<α,α>)

If a linearization statement <α,α> is generated, the derivation crashes.

In Richards' view, linearization takes place by phase. Thus, (26) prevents two arguments headed by the same case morphology to be linearized in the same phase. One could then extend the analysis to (24c), where there are also two arguments introduced by *a*. However, a more detailed consideration of the data shows that the ungrammaticality of (24c) is unrelated to that in (25) and cannot be due to the DC. As predicted by DC, v-DOM in (25) becomes grammatical – in fact obligatory – when the indirect object is omitted or when the indirect object is only a clitic pronoun. In the examples (27a,b), *a Laura* can only be interpreted as the direct object:

(27) a. Les   presento   a   Laura.

          CL.DAT   introduce.1.SG DOM   Laura

          'I introduce Laura to you.'

      b. (In the midst of a loud ovation, María went on stage in order to…)

          … presentar   a   Laura.

             introduce.INF   DOM   Laura

          '…introduce Laura.'

Thus, we can use absence of an explicit indirect object to test if the ungrammaticality of (24c) is due to the DC: if it is, the judgment should improve when the indirect object is not explicit. This expectation is not fulfilled, the ungrammaticality of (24c) does not change when the indirect object is omitted, as shown in (28).

(28)   * La   entrega   al   paquete.

The	delivery	DOM.DEF	package

In (29) we have the nominalization *presentación* 'introduction' built on the verb *presentar* 'introduce'. We can see that the presence of *a* forces an indirect object reading, which indicates that *a* is the dative preposition. The direct object reading is only possible with the genitive *de*:

(29)　a.　La presentación a María

　　　　　'The introduction to Maria'

　　b.　La presentación de María

　　　　　'Maria's introduction'

Thus, the Distinctness Condition does not provide an account of the ungrammaticality of (24c).

　　This is what we have learned about n-DOM in this section: it cannot be equated with structural accusative or inherent case and it is not subject to the same restrictions that apply to v-DOM.　Thus, we must conclude that n-DOM is an independent linguistic phenomenon. With respect to n-DOM distribution, these are the puzzling empirical facts that I propose to account for in the following section: (i) the contrast between *ataque* and *captura* with respect to the availability of n-DOM, (ii) the absence of n-DOM with unaccusatives, (iii) the absence of n-DOM among ditransitives.

3.　Event structure and n-DOM

Section 3 is divided in 3 subsections. Section 3.1 presents the generalization that accounts for n-DOM distribution in Spanish. Section 3.2 articulates a formal account of the generalization. Section 3.3 discusses psych predicates.

3.1   *Process and Change of state nominals*

I propose that the distribution of n-DOM can be accounted for by appealing to the sub-event structure of the nominal. Let's assume that we can divide events into two types (for analyses of event structure see Pustejovsky 1991, Croft 1993, Levin 1999, Ramchand 2008, among many others, see also Levin and Rappaport-Hovav 2006 for an overview; the particular division of event structures that I use here has a clear precedent in Levin 1999):

Change of State: Change of State event includes a state S1 that acts as a source or initiation point. Call S1 the initial state. S1 is subject to a process that acts on the internal argument (henceforth IA) and the output of the process is a resultant state S2 in which some property of the IA has been altered. The alteration can involve:

(i) creation: The IA denotes something that exists in S2 but did not in S1: build, breed, grow, develop

(ii) modification or destruction: The IA in S2 has or lacks a property that it had or lacked in S1: kill, mutilate, dissolve, colonize, break, open.

(iii) displacement: The IA in S2 is in a location different from S1: transport, bury, lift, lower.

Process: Process event includes a S1 that acts as a source or initiation point. S1 is subject to a process that acts on the IA but the output of the process does not entail any transformation on the IA. Examples: push, attack, pursue, help. Compare mutilate (Change of State) with torture (Process), capture (Change of State) with hunt (Process), destroy (Change of State) with attack (Process).

In light of this distinction, consider now the lists of nouns in (30) and (31). The nouns in (30) accept n-DOM while the nouns in (31) do not. Some examples are shown in (32) and (33). All of the predicates in (30) and (31) are transitive. They are listed following the alphabetical order of the nominalizing morpheme or word marker – a presentation intended to convince the reader that almost any nominal suffix in Spanish can bear n-DOM. Some of the affixes listed attach directly to the root as word markers ([a], [e], [o], [on]). The other affixes attach to a root that bears the verbal theme vowel and are more properly regarded as nominalizations. As pointed out in fn 1, Spanish nominals derived directly from the root can take arguments and be Complex Event Nominals (in the sense of Grimshaw 1990) and therefore I make no distinction among root-derived or verb-derived event-denoting nominals.

The classification of nouns into the n-DOM and no-n-DOM categories is based on a survey of eight native speakers of Peninsular Spanish, who were asked to provide acceptability judgments on sentences that included n-DOM. There was individual variability because some speakers were a little more restrictive in their acceptance of n-DOM and these data only present the judgments of a sizable majority (at least 6 of the 8 respondents). I make no claim that the pattern revealed by this survey can be extended to other varieties of Spanish. In the construction of the relevant examples, care was taken to make sure that subjects were not presented with

spurious examples based on light verb constructions (as in 'give a push to someone') in which the apparent n-DOM might in fact be a homophonous indirect object of the light verb.

(30)   n-DOM:

      (i) [a]: estafa 'fraud', caza 'hunt', crítica 'criticism'

      (ii) [ada], [azo]: puñalada 'stab', bastonazo 'blow' , puñetazo 'punch'

      (iii)[aje]: chantaje 'extortion'

      (iv)[cion]: persecución 'persecution', inspección 'inspection, circunnavegación 'circumnavigation'

      (v) [da/do]: despedida 'farewell', cogida 'catching (as in a bull-fight)', bofetada 'slap', patada 'kick', barrida 'sweep'

      (vi)[e]: ataque 'attack', combate 'combat', golpe 'blow'

      (vii)[miento]: reconocimiento 'recognition, acknowledgment', acompañamiento 'accompaniment', acatamiento 'obedience', seguimiento 'follow-up'

      (viii)[ncia] : advertencia 'warning', obediencia 'obedience'

      (ix)[nza]: alabanza 'praise', venganza 'revenge', esperanza 'hope', añoranza 'homesickness'

      (x) [o]: beso 'kiss', abrazo 'hug', acoso ' harassment', consejo 'advice', repaso 'revision'

      (xi)[on]: empujón 'push', achuchón 'cuddle',

      (xii) [ura]: tortura 'torture'.

(31)   no n-DOM:

(i)   [a]: entrega 'delivery', mejora 'improvement'

(ii) [ada], [azo] nominals: Ø

(iii)[aje]: fichaje 'hiring', maquillaje 'make-up'

(iv)[cion]:   colonización   'colonization'   (cristianización   'cristianization',
catalanización 'catalanization'), mutilación 'mutilation' , disolución 'dissolution'

(v) [da/do]: bordado 'embroidering', barnizado 'barnishing'

(vi) [e]: trueque 'exchange', ligue 'hook-up', transporte 'transport',

(vii) [miento]: encubrimiento 'cover-up', descubrimiento 'discovery

(viii) [ncia] : transferencia 'transfer'

(ix)[nza]: crianza 'breeding, growing', matanza 'slaughter' limpieza 'cleaning'

(x) [o]: despido 'firing', entierro 'burial', retraso 'delay', traslado 'transfer',

(xi) [on]: Ø

(xii) [ura] nominals: captura 'capture', rotura 'break'

(32)   *Some n-DOM examples*

a.   El abrazo a mis sobrinos

        'The hug of my nephews'

b.   La caza a los politicos corruptos

        'The chase of corrupt politicians'

c.   La crítica a las ideas de Chomsky

        'The criticism of Chomsky's ideas'

d.   El reconocimiento a sus valerosas acciones

        'The recognition of her courageous deeds'

e.   La advertencia a mis hijos

        'The warning to my children'

(33)   *Some no-n-DOM examples*

        a. * La entrega al paquete   /   La entrega del paquete

               'The delivery of the package'

        b. * La mejora a la constitución   /   La mejora de la constitución

               'The improvement of the constitution'

        c. * El fichaje a Neymar   /   El fichaje de Neymar

               'The hiring of Neymar'

        d. * El transporte a los pasajeros   /   El transporte de los pasajeros

               'The transportation of passengers'

        e. * La crianza a cerdos   /   La crianza de cerdos

               'The breeding of pigs'

I propose the following claim:

(34)   The nouns that accept n-DOM on their internal argument are nouns that denote a Process event structure, that is, an event structure that does not entail a change of state for the internal argument.

Let's look at some examples to see how (34) plays out. Consider *inspección* and *colonización*. A colonization entails a change of state of the colonized people or place. An inspection does not

entail a change of state in the internal argument. Consequently, *inspección* accepts n-DOM while *colonización* does not:

(35) a. La inspección a las tropas

          'The inspection of the troups

      b. The colonización de / *a los pueblos indígenas

          'The colonization of indigenous peoples'

Similarly, *ataque* and *destrucción*: If something has been destroyed it certainly has undergone a change of state but being attacked does not entail such a change. Likewise: torture vs mutilation, chasing vs capturing, hitting vs breaking, sweeping vs cleaning. In every case the noun whose denotation entails a change of state in the internal argument is the one that does not accept n-DOM.

The generalization in (34) gives us insight into what are otherwise puzzling (and subtle) empirical facts. Note the contrast between *apuñalamiento* and *puñalada*:

(36) a. La puñalada a César

          'The stabbing of Cesar'

      b. El apuñalamiento de / *a César

          'The stabbing of Cesar'

Both *apuñalamiento* and *puñalada* are translated as 'stabbing', but only *puñalada* accepts n-DOM. This follows from (34): *puñalada* does not entail that the victim was in fact hurt: the

sentence 'María suffered a *puñalada* but was not hurt because she had a thick vest on' is not contradictory. On the other hand, *apuñalamiento* does entail that the victim suffered a stabbing wound.

The contrast in (37) is equally intriguing:

(37) a. el   empujón   al   carro

          the push   DOM.DEF   cart

          'the pushing of the cart'

      b. * el   empujón   al   carro   hacia la tienda

          the push   DOM.DEF   cart   toward the store

      c. el   empujón   del   carro   hacia la tienda

          the push   GEN.DEF   cart   toward the store

          'The pushing of the cart toward the store'

As shown in (37), the nominal *empujón* 'push' allows for n-DOM on the object, unless there is a PP that denotes a path or a terminus. Interestingly, this follows directly from (34). 'Pushing' does not entail a change of state and consequently *empujón* allows for n-DOM. However, when the nominalization includes a path, the resulting structure does entail a movement of the theme object, which qualifies as a form of Change of State. Consequently n-DOM becomes impossible.

(34) can help us understand why ditransitives and unaccusatives do not accept n-DOM. Ditransitive predicates are constructed around the "transfer" schema: the theme is transferred either toward a goal or to be in possession of someone. Thus, the theme of ditransitives always entails some change of state in the form of a change of possession or a change of location (see

Levin and Rappaport-Hovav 2005, Croft 2001). Sometimes this transfer is somewhat abstract, as in "the teaching of math to John" where 'math' does not accept n-DOM. But I think that allowing for the possibility of abstract transfer does not threaten the generalization (34). Abstract transfer might also account for odd-guys such as *memorización* 'memorization' and *traducción* 'translation', which do not accept n-DOM. Both of these nouns could be understood as a form of abstract transfer.

As for unaccusatives, the literature on the topic agrees that they always entail a change of state (see Levin and Rappaport-Hovav 1995, 2006 for overviews): either as creation ('emerge', 'bud', 'sprout') as transformation ('redden', 'widen') or as displacement ('rise'). It should follow that they do not accept n-DOM.[4]

(34) makes a distinction between events that "entail a change in the internal argument" and events that do not. The distinction between these two types of events has never been discussed in the context of case assignment, as far as I know. According to the summary presented in Richardson (2012), *Telicity* figures prominently in studies on case variation of internal arguments. Usually, telicity is connected to accusative case (well-known examples are Finnish and Hungarian). I am not aware of any discussion of case variation based on change of state rather than telicity. However, telicity is too broad a notion for the analysis of the n-DOM data. Let's consider, as a hypothesis alternative to (34), that the defining property of n-DOM nominals is atelicity. Notice that a predicate like 'inspect' should be construed as telic: there is a process and a culmination state, when the inspection is finished. The usual telicity tests corroborate this impression; for instance, the verb 'inspect' and the noun 'inspection' are compatible with adjuncts that denote a time boundary: 'the sargent inspected the troops in 15

minutes', 'the inspection of the troops in 15 minutes'. According to the atelicity hypothesis, it should not allow for n-DOM. But it does:

(38)   La inspección a las tropas en 15 minutos

        'The inspection of the troops in 15 minutes'

On the other hand, 'inspect' does not entail a change of state in the internal argument. Thus, the change of state hypothesis in (34) predicts correctly the possibility of n-DOM with *inspection*.

Within n-DOM nominals, however, there seems to be an additional division. Many of them require n-DOM on the internal argument. Among these: *ataque* 'attack', *empujón* 'push', *puñalada* 'stabbing' etc. Others, on the other hand, seem to also accept *de* optionally. Thus, *inspección de las tropas* 'inspection of the troops' accepts a reading in which *de las tropas* is the internal argument. I put aside this distinction between optional and obligatory n-DOM for the time being and retake it in sections 4 and 5.

We may use the insights in Levin (1999) for a deeper understanding of n-DOM. Levin (1999) provides a detailed discussion of Change of State event structures (Complex Event Structures, in her terminology) and Process predicates (a subset of her Simple Event Structures). She argues that in the former the internal argument is required by the event structure: all change of state predicates ('break', 'open', 'kill') have an internal argument because it is required by the event structure. In contradistinction, the Process event structure does not require an internal argument. Some Process predicates require an internal argument ('sweep', and 'hit' do, while 'run' does not); this internal argument is required by the root (the *constant* in her terminology), not by the event structure itself.

Levin further argues that another distinguishing property follows from this: the internal argument of Change of State predicates is always a straight direct object with structural accusative case; the internal argument of Process predicates cross-linguistically surfaces in a range of forms: sometimes it is a regular direct object but sometimes it appears as a prepositional phrase or as a noun phrase bearing some form of inherent or lexical case: dative, instrumental, and so on. It seems clear that the n-DOM phenomenon provides an empirical extension to Levin's generalization. I take it that n-DOM is one of those special forms of licensing arguments of Process predicates. Levin's observations are based only on data from verb phrases - it is of some interest to find out that it is useful in the analysis of noun phrases as well.

3.2   Syntactic analysis

In this section I provide an account of the generalization in (34). The intuition that I try to formalize is that the complexity of the event affects the availability of n-DOM. Change of State events are more complex than Process events. Change of State events include a process and a resultant state while Process events only include a process - and this is the crucial factor.

Following recent developments (in particular Alexiadou 2001, Borer 2012, 2013a,b, Ramchand 2008, among many others), I take it that event structure constitutes a syntactic structure. If so, the complexity of the event structure is reflected in the syntax, which should correspondingly be more complex for more complex events. Change of State events have a complex syntax with separate heads for the two sub-events, the process and the result, while Process events only include a head for the process. In a nut-shell, I argue that the extra layer of structure in Change of State events protects the internal argument from being assigned n-DOM.

A second rule of genitive case assignment may then apply to internal arguments in Change of State events.

There are a number of proposals for event syntax in the market. In these pages I adopt assumptions from various sources, in particular Ramchand (2008), with the goal of approaching the empirical problems of concern here. I do not attempt to provide a theory that derives the different verb classes because that would take us too far afield. In particular, given my focus on the n-DOM phenomenon, I consider only transitive predicates.

Let's start with the following skeleton:

(39)   Init [$_{\text{ProP}}$ IA Process [√]]

The *Initiation* head (Init) (borrowed from Ramchand 2008) initiates the event and introduces the external argument, which might be an agent, causer or just an origin; Init comes in different "flavors". The head Process denotes the alteration in the environment triggered by the EA, the actual *event,* which has the potential of impinging on the IA. In this structure, Process is a two-place predicate whose arguments are the root and the internal argument (again, I am only considering transitive predicates). Examples: sweeping the floor, kissing his cheek, hitting the pot, praising the athlete…

Consider now the following structure:

(40)   Init [$_{\text{ProP}}$ Process [$_{\text{sP}}$ IA [$_{\text{s'}}$ State √]]]

In (40) Process selects for a resultant state. The head *s* denotes this resultant state and selects a root as a complement. The phrase bears the label *s*. *s* merges with the IA, which becomes the subject of this new state.

I need to articulate an additional assumption. First, event structure is not necessarily introduced by a verbal head, as commonly assumed, but rather, it is a cross-categorial property (see López 2015). Since event structure is independent of category, (39) could as well be a noun or a verb. I suggest that a category label is merged in the structure and takes Process as a complement. Once the structure is defined as nominal, it can be selected by the regular nominal heads, in particular D. Finally, I also assume that a complete noun phrase also includes a K head, whose head is the case morpheme. Thus, an event nominal that involves a change of state looks like this:

(41)   K [D [Init [n [Process [State √]]]]]

Notice that the structure Init[n] has obvious parallels in the contemporary literature. Some work by Alexiadou et al. (2006), Harley (2013) and Legate (2014) separate the verbalizer *v* from the head *voice* and let the latter select for the former in the structure Voice[v]. The proposed structure Init[n] largely incorporates these ideas.

The following summarizes the structure fragments of interest for our purposes:

(42)   a.   *Process nominal*

[$_{Init}$ (K$_{EA}$) *Init* [*n* [$_p$ K$_{IA}$ *p* [√]]]

p=process

√=root (i.e.: √ATAQ-, √TORTUR-, √PERSECU- …)

b.   *Change of state nominal*

[$_{Init}$ (K$_{EA}$) *Init* [*n* [$_p$ *p* [$_s$ K$_{IA}$ *s* [√]]]]

s=state

√=root (i.e.: √CONSTR-, √MUTIL-, √ROMP- …)

Event structures are compressed into something smaller before spell-out. I assume that head movement ensures that the root, the event heads and the categorizing head stand as a word unit for the purposes of vocabulary insertion:

(43) InitP

(EA)   Init'

Init$_n$ nP

n[p[s[√]]]

t(n)   pP

t(p)   sP

IA   s'

t(s)   t(√)
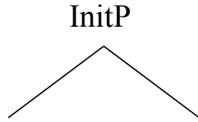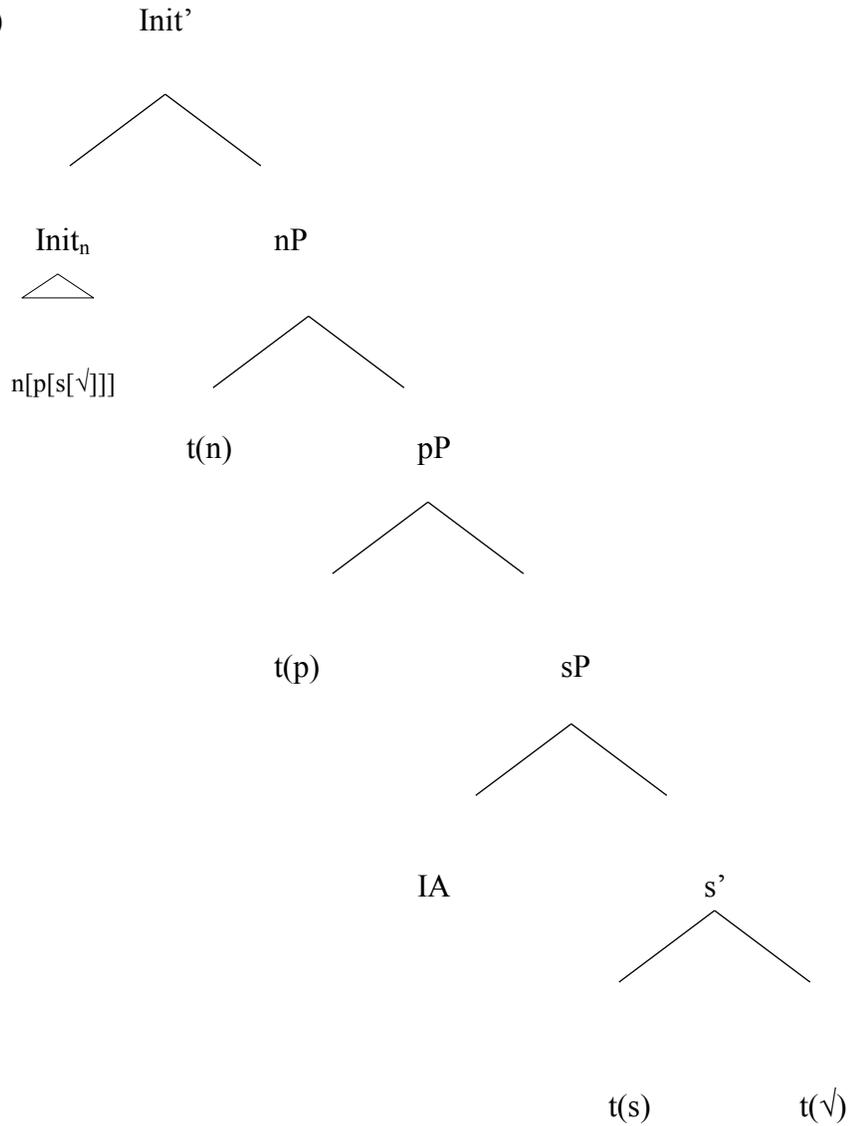
Notice that in these structures I have written the external argument in parenthesis. The question is whether there is an external argument in nominalizations at all. In particular, Picallo (1991) argues that nominalizations in Catalan are passive while Alexiadou (2001) argues quite extensively that nominalizations are cross-linguistically always ergative. One of the arguments

presented is that an external argument cannot appear in *of* genitive case but always as a *by* adjunct or as a s-gen in English. Consider the examples in (44):

(44)   a.   The destruction of the city by Napoleon.

          b. *   The destruction of Napoleon (of the city).

          c.   Napoleon's destruction of the city.

          d.   The deliberate destruction of the city.

(44) is a Change of State nominal. In (44a), the external argument appears in an adjunct phrase and (44b) shows that indeed the external argument is not allowed in the structure as an argument noun phrase in genitive case. In (44c), the external argument appears in the s-gen construction – but, Alexiadou argues, the s-gen can be an argument or an adjunct; Alexiadou argues that we interpret 'Napoleon' as the agent of destruction in (44c) because of our encyclopedic knowledge and not because a theta role has been assigned to it. (44d) shows that some form of implicit argument that licenses a subject-oriented adjunct must be present in these nominalizations. Examples similar to (44a,b,d) with identical judgments can be constructed in Spanish. I believe Alexiadou's argument holds true, but only of Change of State nominals.

        Now consider the examples in (45). Here we have a Process nominal and the internal argument exhibits n-DOM. Notice that an external argument in genitive case is possible here, as shown in (45b,c). In particular, notice that (45c) (copied from 3c above) shows that the genitive argument can bind a reflexive in the internal argument:

(45)   a.   El deliberado ataque a   la ciudad

the deliberate attack DOM   the city

'The deliberate attack on the city'

b.   El ataque de Juan   a   la ciudad

the attack GEN Juan DOM   the city

'Juan's attack on the city'

c.   El ataque de   Juan   a   sí mismo

the attack GEN   Juan   DOM   himself

'John's attack on himself'

Thus, I take it that there is no general ban on an external argument on nominalizations. Rather, some property of Change of State nominalizations prevents an external argument with genitive case. We will get back to this issue in section 4.1.

Provided the structures (42) I propose the rules in (46) to account for the distribution of structural case in Spanish argument-taking nominals. Further, I adopt the Case Filter as an active grammatical principle; it ensures that any KP must be in a dependency with a case assigner.

(46)   *Two rules for structural case assignment in Spanish nominals*

Case assigners: D and n.

a. Rule 1: n assigns n-DOM to K if n governs K.[5]

b. Rule 2: D assigns [genitive] to K if D c-commands K.[6]

Following Rule 1 in (46a), n-DOM is assigned to an internal argument by *n* in a government configuration. I adopt a basic notion of government: A syntactic terminal α governs a constituent

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β if α c-commands β and there is no other syntactic terminal γ such that γ c-commands β and α c-commands γ:

(47)   α [β   → α governs β

(48)   α [γ [β   → α does not govern β

Thus, *n* governs Spec,Process because no other syntactic terminal stands between them. Rule 2 in (46b) gives us the spell-out rule for genitive case. Genitive case shows up on many DP constituents: modifiers, possessors, relational nouns; I assume that there is an extra rule (or several rules) of genitive case assignment to these constituents. I am not discussing this further in this paper.

Back to (46), here is the crux of the matter: the n-DOM rule only applies to an argument that is governed by *n*. It follows that an internal argument in the spec of *s* is too far to feed it. This provides an analysis for the absence of n-DOM on internal arguments that suffer a change of state[7] and accounts for the first puzzle, the contrast between *ataque* and *captura*.[8]

Thus, the intuition that the rules in (46) try to formalize is the following: within the Spanish nominal there is a general rule of genitive case assignment, with locus in D, which reaches any argument within the nominal. Versions of this rule are widespread cross-linguistically. Additionally, there is a second, more specific rule of case assignment that resides in *n* and which applies more locally, to an argument that is structurally adjacent to it. I find the existence of these two rules of case assignment with different scope to be necessary to account for n-DOM in Spanish as well as resolving the two other puzzles of the introduction; this will become clear as we proceed.

Before I continue, let me show why I have not chosen other more mainstream paths for the analysis. First, there is the issue of my using government as a locality condition. I am aware that the notion of government was largely abandoned about twenty years ago (although it returns often through the back door) and locality requirements are nowadays formulated in terms of phases. Could (46a) be rephrased in terms of phases? One could posit that sP is a phase and that is the reason why *n* cannot reach it. However, this would leave D out of the sP phase too, and therefore genitive case on the argument in Spec,State would not be possible.

Second, one could consider the possibility that the two case morphologies could be due to different flavors of *n*, in parallel to Harley's (1995) and Arad's (1999) influential approach to vP structure. Thus we would have a n_{CoS} that does not assign n-DOM and a n_{Proc} that does have the n-DOM property. This solution would work technically and it would be reasonably simple. However, it would also force us to lose the intuition that the nominals that do not allow n-DOM have a more complex event structure than those that do. The appearance of n-DOM on a class of nominals rather than the other would be mere chance and not related to any structural reason.

3.3   Psych predicates

The previous discussion could lead to the conclusion that n-DOM is a form of inherent case, associated exclusively with the semantic role of *undergoer*, the subject of process. However, n-DOM can also show up in stative psych predicates, where there is no process. This leads to the conclusion that n-DOM is a structural case.

A number of psych predicates also allow or require n-DOM. The following are three examples:

(49) a. El amor de Juan a/por María

the love GEN Juan DOM/BY Maria

'Juan's love for Maria'

(Cf: Juan ama a María.

Juan loves DOM Maria)

b. El miedo de Juan a/??por las tormentas

the fear GEN Juan DOM/BY the storms

'Juan's fear of storms'

c. La admiración de Juan a/por los catalanes

the admiration GEN Juan DOM/BY the Catalans

'Juan's admiration for Catalans.'

(Cf: Juan admira a los catalanes.

Juan admira DOM the Catalans)

The examples in (49) are psych nouns of a very canonical transitive type: the experiencer is the subject of the DP and the theme/stimulus is the internal argument. Other examples with the same structure are: respeto 'respect', odio 'hatred', resentimiento 'resentment', temor 'fear', aborrecimiento 'loathing', etc. Notice that the theme may also appear in a PP headed by *por*. The analysis formalized above can be extended to these examples. I take it that a psychological state has the structure in (50). The construction includes a State but no Process and the external argument of the initiator is the experiencer (for extensive discussion of psych predicates see Landau 2010 and references therein).

(50)   *Stative psych nouns*

(EA) Init [*n* [$_{sP}$ IA s √]]

√=root (i.e.: √AM-, √MIED-, √ADMIR-…)

In representation (50), the internal argument is governed by n and can receive n-DOM.

However, there are other psych nouns that do not accept n-DOM:

(51)   a.   La vergüenza de Juan por/*a María.

'Juan's shame about Maria'

(Cf: A   Juan le avergüenza María

DAT Juan CL shames Maria)

'John is ashamed of Maria.'

b.   El asombro de Juan por/*a María

'Juan's amazement of Maria'

(Cf: A   Juan le asombra María

DAT Juan CL amazes Maria)

'Maria amazes John'

c.   El interés de   María por/*a   las matemáticas.

the interest GEN   Maria by/ DOM   the mathematics

'Maria's interest in mathematics.'

(Cf: A   María le interesan las matemáticas

DAT Maria CL interest the mathematics

'Maria is interested in mathematics.'

Other examples of this type: cabreo 'anger', crispación 'tension', enfado 'anger', enfurecimiento 'fury', excitación 'arousal', susto 'fright', sorpresa 'surprise'. Some of these psych predicates could be regarded as causative, as for instance *susto* and *sorpresa*, (see Pesetsky 1995, Arad 1999 among others who have proposed a causative analysis for this type of psych verb). Under this causative assumption, we could take the structure of these nominals to include a process as well as a resultant state and therefore the analysis presented above for Change of State predicates (see 42) generally would apply. However, a causative analysis is less plausible for some examples, such as *vergüenza* 'shame' and *interés* 'interest'.

Is there a generalization that would allow us to predict which psych nouns accept n-DOM and which do not? In fact there is one. The psych nouns that do not accept n-DOM have verbal counterparts of the unaccusative variety (see Belletti and Rizzi 1988 for the original description of unaccusative psych verbs): the experiencer appears in dative case and the theme/stimulus in nominative case. As for the psych nouns that accept n-DOM, some have verbal counterparts that accept v-DOM (*amor* 'love', *admiración* 'admiration') while others do not have a verbal counterpart at all (*miedo* 'fear') – and examples like the latter lead us to discard the possibility of identifying n-DOM with v-DOM, see also section 2.3.

At this point, all I can say is that it seems that there are some psych roots like √INTERÉS, √ASOMBR- that bear the property of cancelling case assignment by *n* or *v*. As a consequence, the nouns derived from these roots do not allow n-DOM while the verbs derived from them do not allow accusative case. This seems to be an instance of a more general property, since governed prepositions work in the same way: from the root √CONFI- 'trust' we can derive the verb *confiar*

and the noun *confianza* and both select the preposition *en*. I leave a deeper exploration of this property and its consequences for the theory of grammar for future research.[9]

Here is the interesting conclusion that we can extract from the psych data: n-DOM is not a form of inherent case assigned together with a theta role. n-DOM is assigned to any constituent that is governed by *n* in a nominalization. n-DOM is a form of structural case.

4. The second and third puzzles

4.1 The second puzzle

The second puzzle turned around the distribution of genitive case. The set up of Rule 2 in (46) would lead us to expect that the external argument should be able to appear freely in genitive case. However, this is not the case, and we find that availability of genitive case on the external argument reflects an additional empirical difference between Change of State and Process nominals. In Change of State nominals, the genitive argument is always the internal argument. This is shown in the following examples:

(52)   Change of state

      a.   El escalamiento del conflicto

              'The escalation of the conflict'

      b.   La evaporación del gas

              'The evaporation of the gas'

c.   La colonización de los indígenas

'The colonization of indigenous peoples'

d.   La humillación del alumno

'The humiliation of the student'

e.   El apuñalamiento de César

'César's stabbing (by someone)'

If there is a constituent that looks like an external argument in Change of State nominals, it is an adjunct introduced by *por/by*. Thus, there must be some property in Change of State nominals that prevents application of Rule 2 to the external argument.

In Process nominals, the state of affairs is more complicated. As the reader may recall, I have mentioned that some Process nominals require *a* for the internal argument while others allow *a* or *de*. This gives rise to an ambiguous reading for the genitive argument among the latter nominals. Consider the examples below. *Persecución* 'pursuit' and *despedida* 'farewell' allow *de* or *a* on the internal argument. Consequently, (53a) and (53b) are ambiguous, since the *de* argument could be an external or an internal argument. As for (53c,d,e) *Estafa* 'swindle', *advertencia* 'warning' and *puñalada* 'stabbing' only allow n-DOM on the internal argument and, as a result, the *de* argument can only be the external argument.

(53)   Process

a.   La persecución de los fugitivos

'The pursuit of the fugitives' (ambiguous)

b.   La despedida del empleado Pérez

'The farewell of the employee Pérez' (ambiguous)

c.   La estafa de Rita

'Rita's swindle'

d.   La advertencia del policía

'The policeman's warning'

e.   La puñalada de Bruto

'Bruto's stabbing (of somebody)'

Thus, Puzzle 2 actually involves three questions: (i) P2Q1: why Change of State nominals do not accept an external argument in genitive case, (ii) P2Q2: why Process nominals allow the external argument to appear in genitive case, and (iii) P2Q3: why some Process nominals allow an internal argument in genitive case.

Let's start with Change of State. The examples in (54) show us that the only way to introduce an overt external argument is in the shape of a *por* adjunct:

(54)   a.   La captura   de   los fugitivos

               the capture   GEN   the fugitives

       b. *   La captura   de   la   policía de   los fugitivos

               the capture   GEN   the police GEN   the fugitives

       c.   La captura   de   los fugitivos   por la policía

               the capture   GEN   the fugitives   BY the police

I take (54b) as the starting point of the analysis. The ungrammaticality of (54b) can be accounted for using the DC (see 26). In fact, Fábregas 2013b discusses the restriction on the presence of two genitives in the same noun phrase extensively and argues that it can be accounted for using the DC. Since the DC prevents a fully formed transitive predicate, the grammar adopts an ergative structure, such that the external argument is in fact an adjunct *by*-phrase, as shown in (54c). Under the assumption that Change of State nominals generally adopt an ergative structure, it follows that in (54a) 'de los fugitivos' can only be an internal argument. Thus, it turns out that the answer to P2Q1 turns around the DC.

As mentioned in the previous section, Alexiadou (2001) has argued extensively that all nominalizations are ergative structures. However, this claim is too general. As I show in (45), (53) and below, Process nominals do seem to have a proper transitive structure with an external argument. Moreover, Alexiadou presents the ergative structure of nominalizations as a primitive property; if my analysis is correct, it is derived from the DC.

Let's move on to P2Q2: why Process nominals, unlike Change of State nominals, allow the external argument to appear in genitive case. The question can now be addressed as follows: the external argument can receive genitive case from D following Rule 2 (46). The DC, which forces Change of State nominals to project the external argument as an adjunct, does not have the same effect among Process nominals. This is because in Process nominals the internal argument can bear a distinct morphology for K via Rule 1, thus avoiding a violation of the DC. Let's see the details.

Consider *inspección*. This is a nominal whose genitive argument can be external or internal. Consider the examples in (55)

(55) a.   La inspección   de   los soldados

the inspection   GEN   the soldiers

'the inspection of the soldiers' or 'the inspection by the soldiers'

b. * La inspección   de   la policía   de los soldados

the inspection   GEN   the police GEN the soldiers

c.   La inspección   de   los soldados   por la policía

the inspection   GEN   the soldiers   BY the police

'the inspection of the soldiers by the police'

d.   La inspección   a   los soldados

the inspection   DOM   the soldiers

'the inspection of the soldiers'

e.   La inspección   de   la policía a   los soldados

the inspection   GEN   the police DOM   the soldiers

'the inspection of the soldiers by the police'

f.   La inspección   a   los soldados   por la policía

the inspection   DOM   the soldiers   BY the police

'the inspection of the soldiers by the police'

Since *inspección* is a nominal that allows but does not require n-DOM, (55a) is ambiguous, the

soldiers may be the ones who inspect or the ones who are inspected. (55b) is ungrammatical,

which can again be attributed to the DC. The introduction of a *por* argument in (55c) forces an

internal argument reading on the genitive KP. (55d,e,f) are examples with n-DOM. In (55d) the

n-DOM is the only argument in the noun phrase, in (55e) the genitive argument is the external

argument and in (55f) the external argument appears as an adjunct. The data in (55) seem to form a complex patchwork, but we can immediately extract the following generalizations: (i) the genitive argument can be external or internal; (ii) this ambiguity can be resolved in context, so that if there is an n-DOM argument the genitive must be an external argument and if there is a *by* adjunct the genitive must be an internal argument.

We can now tackle P2Q2: why Process nominals allow a genitive external argument. The answer lies on the availability of n-DOM, which allows Process nominals to project a full transitive structure without running afoul of the DC. The key datum is (55e): here we can see that it is possible to have a genitive argument as a proper external argument provided that the internal argument is introduced by n-DOM.

For completeness, let's consider the data for *ataque,* a nominal that requires n-DOM on its internal argument:

(56) a. El ataque de   los fugitivos

          the attack GEN   the fugitives

          'the attack by the fugitives'

     b. * El ataque de   la policía   de los fugitivos

          the attack GEN   the police GEN the fugitives

     c. * El ataque de   los fugitivos   por la policía

          the attack GEN   the fugitives   BY the police

     d. El ataque a   los fugitivos

          the attack DOM   the fugitives

          'the attack on the fugitives'

e.   El ataque de   la policía a   los fugitivos

     the attack GEN   the police DOM   the fugitives

     'the attack on the fugitives by the police'

f.   El ataque a   los fugitivos   por la policía

     the attack DOM   the fugitives   BY the police

     'the attack on the fugitives by the police'

(56a) is not ambiguous: *de los fugitivos* has to be an external argument. It follows that (56c), in contrast to (56b), should also be ungrammatical. The other sentences work as in the *inspección* example. The obligatoriness of the external argument reading in (56a) is discussed in section 5.

Let's now tackle P2Q3. P2Q3 asks why the genitive argument of some Process nominals can be interpreted as an internal argument - that is, why (55a) is ambiguous. There are two possible paths to take here. According to the first path, *a* is always the spell out of Rule 1 and *de* is always the spell out of Rule 2. Thus, there would be nothing surprising about the ambiguity of (55a), it would just mean that internal arguments may be subject to Rule 2. But this is problematic for two reasons: first, we would have to figure out what inhibits application of Rule 1 so that application of Rule 2 on an internal argument is permissible. Second, we would have to figure out why Rule 2 does not apply in the subset of Process nominals that do not allow internal arguments to surface in genitive case (exemplified with attack in 56). These two problems are insurmountable and therefore I do not take this avenue.

The second path goes as follows: the internal arguments of Process nominals are *always* subject to Rule 1. The reason why we obtain a *de* form optionally with some nominals is because *de* is a possible spell-out of Rule 1 for this subset of nominals. Since *de* is a possible spell-out for

Rule 1 for a subset of nominals, it follows that *de los soldados* in (55a) may be interpreted as internal argument. I adopt this path here – and it will prove additional advantages in section 4.2.

Let's see how this works out. Assume that application of Rule 1 excludes application of Rule 2. This can be achieved if we can take the rules to be ordered so that Rule 1 applies before Rule 2. This is natural in a bottom-up theory of grammar in which *n* is introduced into the structure before D is:

(57) 1.   n [K_{IA} *p* √]

 2.   Rule 1: Assignment of case to K by *n*.

 3.   D [*Init* n [K_{IA} *p* √]]

 4.   Rule 2: D does not assign case to K because the latter is already case-marked

To summarize this section: The account of the difference between Change of State nominals and Process nominals capitalizes on my earlier conclusion that Process nominals have two strategies for structural case assignment (Rule 1 and 2) while Change of State nominals only have one (Rule 2). The reason why Change of State nominals cannot make use of Rule 1 is because of the more complex syntactic structure that the event involves. Since Process nominals have two sources of structural case, Process nominals can have a proper external argument, as shown in (55) and (56).

4.2   The third puzzle

Let's now turn to Puzzle 3: Anderson's (1977) realization that the internal argument must be *affected* when used in the saxon genitive or, more generally, in the s-gen. Consider the examples in (58).

(58) a. John's/his capture / improvement / transformation / hiring / of the city

b. John's/his criticism / farewell / warning / inspection of Chomsky

c. John's/his capture / improvement / transformation / hiring

d. John's/his criticism / farewell / warning / inspection

When we have both an s-gen and an *of* genitive, the former is the agent and the latter is the theme, regardless of the type of nominalization. This can be seen in (58a,b). When there is only one argument and it appears in the s-gen form, the Change of State predicate requires a theme interpretation (58c) while the Process predicate requires an agent interpretation (58d). This particular distribution is what needs an account.

As mentioned in the introduction, Spanish does not have a saxon genitive construction. But it does have a possessor construction, in which one of the arguments of the nominalization appears as a possessive adjective. When that happens, the pattern of interpretation is exactly what we see in English. In (59a,b), the possessor is the agent, in (59c) it is a theme, in (59d) it is an agent. I take it that this is not chance but rather it reveals that there is a commonality in structure between the nominalizations in both languages:

(59) a. su   captura de   la ciudad

POSS.3RD capture GEN   the city

'Her/his capture of the city'

b.   su   crítica   de/a   Rajoy

POSS.3RD   criticism   GEN/DOM   Rajoy

'Her/his criticism of Rajoy'

c.   su   captura

POSS.3RD   capture

d.   su   crítica

POSS.3RD   criticism

In the previous sections I argued that the distinction between Process nominals and Change of State nominals underlies an account of the case distribution in Spanish nominals. In this section I argue that the distribution of s-gen also depends on the complexity of event structure.

Recall that Anderson (1977) argues that the relevant notion to account for the restriction on the English s-gen is Affectedness: themes can be used in the s-gen construction only if they are affected. Smirnova (2015:571) defines internal arguments in s-gen constructions as "denot[ing] a change of state or a change of location". I am in total agreement with Smirnova's description. Thus, I would like to foreground the following descriptive generalization: the set of nominals that do not accept n-DOM in Spanish is the same set that forces an internal argument reading on the s-gen. It seems that a parallel analysis is called for.

In order to approach this problem, I draw again on insights found in Levin (1999). Recall that she argues that Change of State events require an internal argument while the internal argument in Process predicates is in fact required by the root (the *constant* in her terminology). Additionally, Levin (1999: 240) proposes the following condition:

'Her/his capture of the city'

b.   su   crítica   de/a   Rajoy

POSS.3RD criticism   GEN/DOM   Rajoy

'Her/his criticism of Rajoy'

c.   su   captura

POSS.3RD capture

d.   su   crítica

POSS.3RD criticism

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(60)   Structure Participant Condition (SPC): there must be an argument XP in the syntax for

each structure participant.

We are now very close to an answer to Puzzle 3. As a consequence of the SPC, the event

structure of Change of State nominals requires an internal argument (in our model: an argument

in Spec,State) while the event structure of Process nominals does not - if a Process nominal has

an internal argument (an argument in Spec,Process), it is selected by the root. In this light,

consider now 'John's capture' again; if 'John' were an external argument, the nominalization

would violate the SPC because the internal argument, required by the event structure, would be

absent. So, 'John' can only be the internal argument. As for 'John's criticism', the Process event

structure does not require an internal argument and therefore 'John' can be interpreted as

external argument. Minimality then forces the interpretation of external argument. In the

following paragraphs I flesh out the details.

The analysis of s-gen requires that we assume a third rule of case assignment in argument

taking nominals. Let's call it Rule 3:

(61)   Rule 3: $D_{[poss]}$ assigns [s-gen] to K if Merge (K, D).

Rule 3 is active in Spanish and English. It applies liberally to all kinds of KPs in English,

allowing branching KPs to form a Spec,$D_{[poss]}$ while possessive adjectives fuse with the $D_{[poss]}$.

Spanish only has the second possibility: D cannot host a spec in this language.

Let's now focus on the Spanish data. I suggest the following approach. The internal arguments of Process nominals are always subject to Rule 1, as claimed in section 3.3. The reason why we obtain a *de* form optionally with some nominals is because *de* is a possible spell-out for Rule 1. Let's further assume that Rule 1 applies before Rules 2 and 3. This ordering is a direct consequence of the claim that Rule 1 involves *n* as the assigner while Rules 2 and 3 involve D (see (57) above). The result of this state of affairs is that the pronoun *su* in (59d) cannot be interpreted as an internal argument because the internal argument of *crítica* is subject to Rule 1, which excludes application of Rule 2 or Rule 3.

Exporting this idea to English requires just one assumption: English also has Rule 1 but it does not have a specific spell-out realization for n-DOM. Therefore the output of Rule 1 falls within the general spell-out rule of K within a nominal, namely *of*. This assumption is all that is required to account for (58d): 'John' cannot be the patient of 'criticism' because 'John' is subject to Rule 1, which blocks Rule 3.

Let's now move onto Change of State nominals and the data in (59a,c). The internal argument of Change of State predicates can appear as *of* genitive or as s-gen – that is, it can receive Case via Rule 2 or Rule 3. This follows from my assumptions: if both Rules 2 and 3 apply when D is inserted in the structure, then neither blocks the other: this is how you get the following grammatical sentences in English: 'the city's destruction by the soldiers' and 'the soldiers' destruction of the city'. On the other hand, "*The city's destruction of the soldiers" (with 'the soldiers' as agent) is banned because Change of State nominals are ergative and therefore 'of the soldiers' is not a possible realization of the external argument.

To conclude: the detailed examination of case patterns in nominalizations has revealed a commonality of structure between English and Spanish that was not apparent at the beginning of

this investigation. The only difference between these two languages turns out to revolve around the spell-out of the output of Rule 1.

I would like to point out that an analysis of the s-gen phenomena in which English has no Rule 1 is not immediately forthcoming. That is, suppose that English has a Rule 2 that assigns *of*-genitive, a Rule 3 that assigns s-gen and no Rule 1. The main challenge of this reduction is how to prevent an internal argument of a Process nominal from receiving s-gen (as in (58b,d) and (59b,d)). One possibility could go as follows: assignment of Rule 2 to the internal argument blocks Rule 3. Consequently, the possibility of 'the criticism of his policy' blocks '*his policy's criticism'. However, this analysis overgenerates, because 'the destruction of the city' incorrectly blocks 'the city's destruction'. The empirical fact is that *of* does not block s-gen generally, only among Process nominals, and this empirical fact is not captured with a simple system with Rules 2 and 3. My analysis, of course, makes the right predictions. To recap: both 'the city's destruction' and 'the destruction of the city' are ruled in: 'destruction' is a Change of State nominal and therefore only rules 2 and 3 are operative. Both rules involve D as head and therefore can apply freely; 'criticism' instead is a process nominal and therefore Rule 1 enters the fray: '*his policy's criticism' is ungrammatical because Rule 1 has applied and assigned case to the internal argument and this case is spelled out as *of*, resulting in 'the criticism of his policy.'

Another alternative to the analysis presented here could go along the lines of inspecting the argument structure in more detail. For instance, one could argue that Process nominalizations are always transitive with an argument external argument in Spec,Int that could optionally spell out as an empty pronominal *pro*. Thus, "*his policy's criticism" would be blocked by minimality because *pro* would intervene. However, the assumption that Process nominalizations are always transitive would wrongly predict that "the criticism of his policies by the press" would be

ungrammatical. All in all, it seems to me that the assumption of a Rule 1 in English is the only path to account for the data; it also has the advantage of providing an elegant analysis of the differences and similarities between English and Spanish nominalizations, an analysis based not on disparities on how case morphology is computed in the computational system but only on how case morphology is spelled-out.

Let me summarize section 4. Section 4 started with the second puzzle, namely, why the external argument can appear in genitive (*de/of*) case in Process nominals and not in Change of State nominals. This property is derived from the simpler event structure of Process nominals. Process nominals can give rise to n-DOM, which itself allows for a genitive external argument without violating the DC. Section 4.2 then moved onto s-gen nominals and tackled the affectedness constraint; this constraint was again shown to follow from event structure, as the simple event structure of Process nominals makes the internal argument susceptible to Rule 1 and therefore inaccessible to Rule 3, the rule that assigns s-gen. Thus, event structure has wide-ranging consequences for the distribution of morphological case in nominalizations.

5.   Obligatory and optional n-DOM

In the previous sections I have discussed, in passing, that some Process nominals exhibit n-DOM obligatorily while others do so optionally. In this section, I address this issue and present a tentative description of the optional and obligatory n-DOM nominals.

Recall that the noun *ataque* requires n-DOM while *inspección* allows n-DOM and genitive case. The contrast between them can be seen in (62b) and (63b):

(62) a.   El ataque de Napoleón a   la ciudad

              the attack GEN Napoleon DOM   the city

              'Napoleon's attack on the city'

    b. *   El ataque de la ciudad   por Napoleón.

              the attack GEN the city   BY Napoleon

    c.   El ataque a   la ciudad   por Napoleón

              the attack DOM   the city   BY Napoleon

              'The attack on the city by Napoleon'

(63) a.   La inspección de los ingenieros a   las cañerías

              the inspection GEN the engineers DOM the pipes

              'The engineers' inspection of the pipes'

    b.   La inspección de las cañerías   por los ingenieros

              the inspection GEN the pipes   BY the engineers

              'The inspection of the pipes by the engineers'

    c.   La inspección a   las cañerías   por   los ingenieros

              the inspection DOM the pipes   BY the engineers

Notice that the conclusions reached in the previous section allow us to be more precise with respect to the difference between (62b) and (63b): *ataque* requires that the output of n-DOM always spells out as *a* while *inspección* has two alternative spell-outs for Rule 1.

In fact, the classification of Process nominals in two classes is insufficient. I claim that there are two types of obligatory n-DOM nominals. Consider the following lists:

(64)   n-DOM(1) obligatory: advertencia 'warning', consejo 'advice', acoso 'harassment', alabanza 'praise', obediencia 'obedience', acatamiento 'compliance'.

(65)   n-DOM(2) obligatory: *ataque* 'attack', *bofetada* 'slap', *patada* 'kick', *golpe* 'blow', *barrida* 'sweep', *puñetazo* 'punch', *beso* 'kiss', *abrazo* 'hug', *empujón* 'push', *achuchón* 'cuddle', *combate* 'combat'.

 (66)   n-DOM(3) optional: *inspección* 'inspection', *repaso* 'revision', *persecución* 'persecución', *despedida* 'farewell', *reconocimiento* 'recognition, acknowledgment'

Let's start with obligatory n-DOM-(1). This list consists of predicates whose internal argument is necessarily human. Since v-DOM has a requirement of animacy on the complement there seems to be a connection between n-DOM and v-DOM in this respect (see section 2.1). The connection is weak: if the nominal predicate does not require a human internal argument, it does not fall in the n-DOM(1) camp, while v-DOM has a requirement on animacy on the DP even if the verbal predicate does not require an animate complement. The presence of *obediencia* 'obedience', and *acatamiento* 'compliance' might seem a little surprising here, since one can obey or comply with the law, not necessarily a human being. However, these nouns confirm the generalization: it is possible to say *obediencia a la ley* or *obediencia de la ley* ('obedience to the law') but it is not possible to say **obediencia de los padres* ('obedience to parents'), unless the

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genitive argument is an external argument. So with these sub-set of nominals, referring to *a* as a form of DOM is appropriate.

The contrast between n-DOM(2) and the optional n-DOM(3) is more intriguing, but I think the correct generalization is the following: The predicates involved in n-DOM(2) are all of the type in which the internal argument is subject to surface contact or impact by the external argument (although the contact might be somewhat abstract in the internet era, as in the case of *ataque*). n-DOM(3) does not entail any physical contact.

The contrast between n-DOM(2) and n-DOM(3) is puzzling. Let me show you why. Take Beavers' (2011) *Affectedness Hierarchy* (AH) shown in (67). (For my purposes, I will reduce Beavers' AH from four members to three):

(67)　1.　　Internal argument undergoes a change.

　　　　1.1　　A quantized change: break, shatter, destroy…

　　　　1.2　　A non-quantized change: widen, cool, cut…

　　　2.　　Internal argument has potential for change (because there is surface contact, impact):

　　　　wipe, scrub, rub, punch, hit…

　　　3.　　Internal argument is unspecified for change: see, smell, follow…

The internal arguments at the top of the scale are the highest ones in the AH. They are also the ones that do not accept n-DOM – that is, the ones that are not subject to Rule 1. The second members in the AH (68.2) are the ones that have an obligatory n-DOM(2). Finally, the ones lowest in the AH have optional n-DOM(3). If we look at the distribution of n-DOM from a scales

perspective (as in Aissen's 2003 analysis of v-DOM) our result is puzzling. If the AH is a scale, one should expect the intermediate member of the scale to behave in a manner intermediate between the other two. Instead, what we see is that the intermediate member is the most radical one.

Let's try – somewhat tentatively - a second approach. As mentioned n-DOM(2), involve an internal argument that denotes a surface that is contacted or impacted. Interestingly, the directional locative preposition in Spanish also spells out as *a*:

(68)   *Ir a* 'go to'; *venir a* 'come'; *dirigirse a* 'go in the direction of'; *llegar a* 'arrive at'…

Thus, I suggest that the reason why n-DOM(2) is obligatory is because the usage of *a* in this context is reinforced by the similarity of both the n-DOM morpheme and the theta role of the internal argument to the preposition and the theta role of the locative construction.

To conclude: argument-taking nominals with a Process argument structure are compatible with n-DOM. If the nominal selects for an animate complement, Rule 1 spells out as *a* obligatorily. If the nominal entails contact with a surface, Rule 1 also spells out as *a*. Otherwise, the spell-out of Rule 1 as *a* is optional.

Conclusions

In the initial sections of this article I have argued that Spanish n-DOM is distinct and independent from v-DOM. In particular, n-DOM is not a survivor of structural or inherent

accusative case brought from the vP into the nominalization. It is also clearly a form of structural case, since it can be assigned to arguments that bear different theta roles. Consequently, n-DOM is a previously unidentified grammatical phenomenon.

In sections 3 and 4 I have developed a detailed discussion of three puzzles concerning the grammar of case in argument-taking nominals: the distribution of n-DOM in Spanish, the interpretation of genitive arguments in Spanish and English and the affectedness constraint on internal arguments in the s-gen construction in English. I have argued that all three puzzles can be accounted for by means of an analysis that capitalizes on the syntactic structure of events. In particular, this article presents an argument that the more complex event structure of change of state nominalizations gives rise to important differences in the case distribution of their arguments. It is also of note that my analyses have exploited proposals for the syntax of events that have previously only been argued for in the context of verb phrases. The essential similarity of what Ramchand calls first-phase syntax in verb phrases and event-denoting noun phrases is assumed. Likewise, the grammars of Spanish and English are distinct only with respect to one spell-out rule: both the structure and the features involved are the same.

My analyses naturally lead to some questions regarding the theory of morphological case. When Case Theory became central in generative linguistics – early 1980s – it was commonly assumed that the morphological case that one could find in noun phrases was genitive case, which was regarded as a type of inherent, not structural case (see Chomsky 1981), despite the fact that genitive case can be associated with any theta role. Certainly, linguists were aware that a variety of morphological cases can be found in a noun phrase but the fact of the matter is that the study of cases within the noun phrase has been postponed for a long time. The outstanding

exception to the latter claim is Pesetsky's (2013) detailed study of case in the Russian noun phrase.

It seems to me that one of the contributions to the literature in this article is precisely the confirmation that structural case is assigned within the noun phrase. But this realization, together with the particular analyses developed here, present new puzzles to our understanding of morphological case. This article has shown that the operations of case assignment in a nominalization seem to be bewilderingly different from the clause. In a clause (putting aside ergative languages) there are two clearly structural cases – nominative and accusative – each of which is assigned within their phasal domain. In particular, nominative is assigned by T, accusative by Voice/Init. Moreover, accusative is a dependent case assigned by the same head that assigns the external theta role. In addition, a clause can include inherent cases of various types. In a nominalization, there is a general operation of genitive case assignment that affects external or internal arguments and which is limited only by event structure. Voice/Init assigns no case; instead, a rule of case assignment that resides in *n* assigns case; case by *n* takes place within its government domain, rather than the broader domain of a phase. I hope that future research will provide an explanation as to why case assignment in nominalizations appears to be so different from clauses.

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[1] The example *ataque 'attack'* and many of the Spanish nouns used in this paper are probably not derived from verbs; rather, both the noun and the verb are derived from the same root. I will refer to them occasionally as "nominalizations" even if properly speaking they are not. Fábregas (2013a) and López (2015) have shown that Spanish nominals directly derived from the root can be argument-taking complex event nominals.

[2] For most varieties of Spanish, which follow the so-called etymological distribution for pronominal case. As is well-known, some peninsular varieties follow a distribution of direct/indirect object pronouns based on animacy and gender rather than grammatical function.

[3] Notice that the dative case marker is homophonous with DOM, a matter that has inspired some analyses of DOM as a form of dative. In these pages, I adopt the relatively conservative idea that they are two distinct morphemes. Likewise, the directional preposition is also spelled out as [a].

[4] Nevertheless, notice that (34) is not stated as a double conditional. That is because there are some Process nominals that do not accept n-DOM. Some of them involve governed prepositions: For instance, *confianza* 'trust' governs the preposition *en* (as does the verbal derivation *confiar* 'trust'). A few others remain unaccounted for: *analisis* 'analysis', *evaluación* 'evaluation', *abandono* 'abandonment', *deserción* 'desertion'. For instance, my consultants rejected *la evaluación a los maestros* 'teachers' evaluation' (although I found some examples in Google).

[5] The scholars that propose a Voice-v separation argue that the head that introduces the external argument and assigns case to the object is Voice. This assumption allows for an elegant account of the active/passive alternation: if Voice is absent or in a reduced form, it follows that that there will not be an external argument in the structure and that there will not be accusative case in the structure. If my analysis of Init-n were truly parallel, I would have *Init* as case assigner, not *n*. Since I argue that *n* and not *Init* is a case assigner, we are led to conclude that there is a difference between the nominal and verbal domain regarding the properties of case assignment. The empirical evidence supports this conclusion: we have already seen that assignment of n-DOM is compatible with a passive-like structure (see example (13)), which suggests that n-DOM assignment cannot depend on the transitivity of Init/Voice.

[6] Pesetsky (2013) suggests that genitive case originates in the noun instead. I do not have any strong arguments to make genitive case dependent on D, except that, since genitive case can affect any argument in the clause, it should probably be dependent on a high functional head. The literature on possessors and genitive case assumes or argues that genitive case is assigned from a high position in the DP structure (see Szabolcsi 1994 for an early summary of the arguments).

7 In Ramchand (2008) the subject of State raises to Spec,Process, so that the argument that changes state is also the one that undergoes a process. Under this analysis, the structural distinction between the subjects of process and the subjects of state would be lost. Fortunately, I don't think that movement from Spec,State to Spec,Process is necessary. Notice that suffering a change of state entails being an undergoer. Consequently, the interpretation of the event does not require raising from Spec,State to Spec,Process because this movement does not add anything to the distribution of semantic roles. Since this movement is superfluous, I take it that it does not exist.

8 An anonymous reviewer points out that the noun head and the KP are not necessarily adjacent, since an adjective can stand between them:

(i)   El ataque brutal a   la ciudad

        The attack brutal DOM the city

        'The brutal attack on the city.'

(ii) ?? El ataque a la ciudad brutal

Notice the position of the adjective in the equivalent English noun phrases:

(iii)   The brutal attack on the city

(iv)*   The attack brutal on the city

(v) *   The attack on the city brutal.

The question is whether this should lead to the conclusion that there is in fact more structure in process nominals than I propose. The matter is complex and a full treatment would take us too far afield. A provisional analysis that can be drawn from the contrast with English is that the Spanish n+√root raises to a higher position within the nominal complex, thus accounting for the lack of linear adjacency between *n* and the internal argument (this is probably in the right track

although somewhat simplistic, see Cinque 2010 for a detailed investigation of word order in noun phrases).

[9] Non-psych stative predicates do not accept n-DOM

(i)   El peso de 50 kilos   /   *el peso a 50 kilos

       the weight of 50 kilos

(ii)   el encuentro de la carretera con el río

       the meeting of the road with the river

Ramchand (2008) places these predicates, together with psych predicates in one single category, called *rheme*. It is unclear to me whether (i) and (ii) should have the same structure as (49). An anonymous reviewer suggests that it may be the case that the arguments or stative predicates (including 51) are not really *internal* but rather related to the Voice structure. I regret having to postpone the matter for future research.

Luis López

luislope@uic.edu

Department of Hispanic and Italian Studies MC 315

601 South Morgan

University of Illinois at Chicago

Chicago, IL 60607