

DERIVED NOMINALS FROM THE NOMINAL PERSPECTIVE

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Abstract*

Derived Nominals are considered to be the last stage in the nominalization scale. This scale includes a continuum of structures with both nominal and verbal characteristics, and derived nominals are the most nouny in it. Unlike other intermediate structures¹ derived nominals may be ambiguous between an event reading (event nominals)² and a result reading (result nominals). Pluralization is one of the criteria proposed by Grimshaw (1990) to distinguish between the two: unlike result nominals, event nominals never admit pluralization. However, several recent works have argued that telic/bounded event nominals generally pluralize, unless some structural condition blocks it (Iordăchioaia & Soare 2008, Alexiadou et al. 2008).

This paper gathers evidence showing that (a)telicity/(un)boundedness alone does not explain the asymmetric behavior of event nominalizations with respect to the possibility to pluralize. In fact, certain telic event nominals are inherently equivalent to mass terms in the nominal domain and never admit pluralization or quantization. Syntactically, it is these derived nominals that lack the ClassP projection in their internal structure.

The paper has the following parts. Section 1 places derived nominals within the nominalization scale. Section 2 gathers evidence from the literature showing that, contra Grimshaw (1990), event nominals can generally pluralize across languages. Section 3 introduces the exceptional cases for the current standard view: certain telic event nominals do not pluralize. In section 4 I follow Kamiya (2001) in relating the impossibility of those exceptional cases to pluralize to the inherent mass property of such nominals, and ultimately, to the lack of the nominal functional projection [+count] ClassP. Conclusions are reached in section 5.

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¹ For example, English verbal gerunds are invariably interpreted as verbal and they contain internal verbal structure. This is reflected by the presence of AspP, which hosts imperfective aspect. In contrast, nominal gerunds contain NumP/ClassP and are invariably interpreted as nominal (Alexiadou 2001).

² Throughout the paper, I will employ the general term «event nominals» to refer exclusively to the Complex Event Nominals in Grimshaw (1990) and I leave aside Simple Event Nominals such as *trip*, which denote events without involving any verbal base.

1. Derived nominals in the nominalization scale

The term nominalization refers to the process by which certain (usually) verbal categories are turned into a nominal group. This implies the loss of typical verbal characteristics and the adoption of nominal features. Nominalizations do not form a uniform class, and typologically, there is a scale of nominalization that includes various structures involving more or less noun-like structures.

Nominalizations usually display overt morphological traces of their verbal and/or the nominal character. In interpretative terms, we expect that the more verbal-like, the more event/process-like interpretation it gets. After all, the genuine function of verbs is to report events, in contrast to nouns, which refer to terms.

Typical examples discussed in the literature are (1-3). Morphologically, the verbal gerund in (1) is the most verbal among the three and this is signaled by the progressive *-ing*. (2) is a mixed nominal: it includes both the *-ing* verbal trait as well as the preposition *of* responsible for the accusative case on the object. (3) is the most nominal among the three: rather than the *-ing* form, it includes the derived nominal (*criticism*) as well as the preposition *of*.

- (1) John's criticizing the book.
- (2) John's criticizing of the book.
- (3) John's criticism of the book.

Basque also displays a range of nominalization structures similar to that of English (Ortiz de Urbina 1989, Zabala & Odriozola 1996, among others). Zabala & Odriozola (1996) note that the clausal infinitival formed with the nominalizing suffix *-tze* (4a) is the most verbal. Its arguments may be regular Ergative, Absolutive and Dative. It allows manner and time adverbs, subcategorized and secondary predicates, embedded clauses, negation and modal and aspectual variants. The nominal characteristic is that the infinitival clause itself is a DP that bears regular structural case. On the other extreme, the nominalization that includes a derived nominal (4c) is the most nominal. It disallows all the modifiers allowed for clausal infinitivals and takes adjectival and genitive modifiers. Also, the subject is marked Genitive rather than regular Ergative, Absolutive or Dative. Finally, (4b), which is formed with suffix *-tze*, has mixed characteristics: its subject is in Genitive, but it patterns with verb-like clausal nominalizations in allowing mood and time adverbials.

- (4) a. [Zu egunero berandu heltzea] parkaezina da.
you-Abs every day late arrive-TZE-the unforgivable is
(lit.) 'You arriving late every day is unforgivable.'
- b. [Zure egunero berandu heltzea] parkaezina da.
you-Gen every day late arrive-TZE-the unforgivable is
'Your arriving late every day is unforgivable.'
- c. [Negoziazioen bat bateko apurketa] harrigarria izan zen.
negotiation-Gen(pl.) sudden break-KETA-the amazing been has
'The sudden break of the negotiations was amazing.'

Assuming that adverbs are VP modifiers whereas adjectives are NP modifiers, we may conclude that both (4a) and (4b) contain internal verbal structure, whereas (4c)

contains internal nominal structure. Thus, it is not surprising that Basque clausal infinitives and mixed instances formed with *-tze* denote processes rather than entities, as shown by (5-6).³ In fact, in Basque, “examination” only admits an object reading in the shape of a derived nominal⁴ (7). More specifically, derived nominals are ambiguous between an event reading and a result reading: (7a) refers to the event and (7b) to the entity resulting from the event denoted by the predicate that serves as the base form for the derived nominal.

- (5) a. [Kritikari hark Benedettiren olerkiak aztertzeak] luzaroko joko du.
critic that Benedetti-Gen poems analyze-TZE-det-Erg long take Aux
(lit.) ‘That critic Benedetti’s poems analysis will take long.’
b. *[Kritikari hark Benedettiren olerkiak aztertzea] argitaratuko dute.
critic that Benedetti-Gen poems analyze-TZE-det-Abs publish-fut Aux
(lit.) ‘They will publish that critic Benedetti’s poems analysis.’
- (6) a. [Kritikari haren Benedettiren olerkiak aztertzeak] luzaroko joko du.
critic that-Gen Benedetti-Gen poems analyze-TZE-det-Erg long take Aux
(lit.) ‘That critic’s Benedetti’s poems analysis will take long.’
b. *[Kritikari haren Benedettiren olerkiak aztertzea] argitaratuko dute.
critic that-Gen Benedetti-Gen poems analyze-TZE-det-Abs publish-fut Aux
(lit.) ‘They will publish that critic’s Benedetti’s poems analysis.’
- (7) a. [Kritikari haren Benedettiren olerkien azterketak] luzaroko joko du.
critic that-Gen Benedetti-Gen poems-Gen analysis-Erg long take Aux
(lit.) ‘That critic’s analysis of Benedetti’s poems will take long.’
b. [Kritikari haren Benedettiren olerkien azterketa] argitaratuko dute.
critic that-Gen Benedetti-Gen poems-Gen analysis publish-fut Aux
(lit.) ‘They will publish that critic’s analysis of Benedetti’s poems.’

The ambiguity that arises in derived nominals in Basque is expected from a crosslinguistic perspective. Since Chomsky (1970), it is well-known that certain derived nominals are ambiguous between a process and a result reading. In (8) below, we understand that *criticism* refers either to the act/event where John criticized the book or to the concrete manifestation of the act in the shape of oral or written text.

- (8) John’s criticism of the book.

³ The purpose of introducing clausal infinitivals and mixed nominalizations in this paper is just to exemplify some of the structures that exist in the scale of nominalization and to place derived nominals in it. Further investigation on this field is beyond the scope of the present work and I leave it for future research.

⁴ Derived nominals are typically construed with other affixes such as *-keta*, *-kunde*, *-pen*, etc. Note that nominalizing morpheme *-tze* may also form derived nominals (deverbal nouns) but only when no other competing suffix is available. Thus, root *aztertu* («to analyze») is compatible with either *-tze* or *-keta*, but selects only *-keta* for the most nominal structure.

The event vs. result distinction explains the apparent optional argument taking properties of certain derived nominals.⁵ Eventive derived nominals behave like verbs in that their complements are obligatory (9-10). In contrast, result nouns, like regular nominals, can not take bare NPs and when they do, such NPs are optional (11). In other words, event nominals, like verbs, have argument structure, whereas result nouns, like regular nouns, lack it.⁶

- (9) The instructor examined *(the papers).
- (10) a. *The instructor's intentional/deliberate examination took a long time.
b. The instructor's intentional/deliberate examination of the papers took a long time.
- (11) The examination (of the papers) puzzled us.

Argument structure is one of the criteria Grimshaw (1990) introduced to distinguish between the process/event and result nominals in English: process nominals denote events (12a), license event-related PPs (13a), they have argument structure (14a), allow agent-oriented adverbs (15a), disallows indefinite determiners (16a) and they must be singular (17a). Result nominals have no event interpretation, they refer to the output of the event (12b). They fail to license event related PPs (13b), they lack argument structure (14b), they disallow agent-oriented adverbs (15b), they allow for indefinite determiners (16b) and they may be plural (17b).

- (12) a. The examination of the patients took a long time.
b. *The exam of the patients took a long time.
- (13) a. The examination of the dog for an hour.
b. *The exam of the student for an hour.
- (14) a. John's examination *(of the patients).
b. John's exam.
- (15) a. Bill's intentional examination of the weak candidate.
b. *Bill's intentional exam of the weak candidate.
- (16) a. *An examination of the cat was interrupted by the fireworks.
b. One exam was rejected because it was written in red ink.
- (17) a. *Five/some examinations of the cat.
b. One, two exams.

Several authors have recently argued that pluralization is not a valid criterion to distinguish event nominals from result nominals. The next sections investigate into this matter.

⁵ The theoretical distinction between event and result nominals is reflected in their internal syntactic structure (cf. Alexiadou 2001): result nominals contain exclusively nominal layers, whereas the structure of event nominal also contains verbal layers.

⁶ Note that there are other nouns like *trip* that denote events but do not have argument structure. These are Simple Event nominals (cf. Grimshaw 1990).

2. Pluralization

Since Grimshaw (1990), the standard assumption is that derived nominals of the event type behave like mass nouns in the nominal system, since they cannot pluralize. In contrast, result nouns are like count nouns. In fact, the claim is that when event nominals pluralize, they cease to be interpreted eventively and instead carry a result interpretation (18c).

- (18) a. *Five/some examinations of the cat.
 b. One, two exams.
 c. One examination, two examinations.

Closer investigation to the phenomenon of pluralization has recently revealed that the standard assumption on pluralization is not accurate or even correct. Roodenburg (2006) claims that pluralization of event nominals is parametric. For some authors, the possibility for pluralization is related to the telicity/boundedness of the event denoted by the nominal (Mourelatos 1978, Borer 2005, Alexiadou 2007). Finally, Alexiadou (2007), Iordăchioaia & Soare (2008a) and Alexiadou et al. (2008) elaborate on this idea and propose that telic/bounded event nominals generally pluralize unless some structural condition blocks it. This section summarizes the evolution of the investigation of this phenomenon and presents the relevant data.

Several recent works have attested that pluralization of event nominals is not subject to Grimshaw's restriction. We may find examples in the literature from French (19), Czech (20), Russian (21) German (22),⁷ Dutch (23), Portuguese (24) or from Romanian (25),⁸ among others.

- (19) Les désamorçages de bombes lourdes par les recrues.
 'The dismantlements of heavy bombs by the young soldiers.'
 [Roodenburg (2006)]
- (20) Čast-á hlášení výsledk komentátor-em jsou nezbytn-á.
 frequent-nom.pl announcement.nom.pl result-gen.pl commentator-instr.sg
 be.3.pl.pres necessary-nom.pl
 'The frequent announcements of results by a commentator are necessary.'
 [Prochazkova (2006)]
- (21) vmesto nastupatel'nyx dejstvij prixodilos'zanimat'sja evakuacijami
 instead aggressive campaigns had.to be.busy evacuations.pl
 'Instead of aggressive campaigns one had to be busy with evacuations.'⁹
 [Pazelskaya (2007)]

⁷ Rathert (2007) notes that the German data are not uncontroversial. She rejects the plural in nominalizations like *Untersuchungen* «examinations», but notes that for example, Bierwisch (2009) considers plural nominal events acceptable in a general manner:

(i) Unsere Erkundungen der Insel dauerten jeweils bis zum nächsten Morgen.
 'Our explorations of the island went on always to the next morning.'

⁸ The situation in more complex and more interesting: only Infinitival nominalizations allow for plural event nominals; nominalizations formed by the supine disallow them. See examples of this below in (34).

⁹ The author notes that *evakuacijami* «evacuations» in this sentence is eventive, since the agentive subject of the event denoted by the event nominal is controlled by the semi-auxiliary *zanimat'sja* «to be busy with».

- (22) Die gezielten Tötungen der politischen Führer durch die Armee
the targeted kill-UNG-pl the-Gen political leaders via the army
[Alexiadou (2007)]
- (23) Tijdens de martelingen van de politieke gevangenen door de zwarte brigades
moesten alle journalisten het gebouw uit.
'During the tortures of the political prisoners by the black brigades all the re-
porters had to leave the building.'
[Van Hout (1991)]
- (24) Os jornalistas estavam a assistir a várias destruições de pontes, quando chegaram
as tropas.
'The journalists were watching several destructions of bridges, when the troops
arrived.'
[Brito & Oliveira (1997), *apud* Sleeman & Brito (2007)]
- (25) Demolăire frecvente ale cartierelor vechi de către comuniști.
'The frequent demolitions of the old quarters by the communists.'
[Iordăchioaia & Soare (2008)]

Roodenburg (2006) claims that Romance is more permissive with respect to pluralization for event nominals than Germanic languages. However, as Sleeman & Brito (forthcoming) correctly suggest, the Dutch example in (23) shows that pluralization is possible in Germanic too, even in contexts that are agentive, more verbal and, in principle, less inclined to quantization. Alexiadou et al. (2008) also show that contra Roodenburg/Grimshaw, English and German eventive nominalizations can pluralize (26-27):

- (26) My frequent readings of economic magazines.
- (27) Neben den ständigen Verletzungen des Grundgesetzes durch Polizei
besides the constant violate-UNG-pl the-Gen Constitution.Gen via police

Alexiadou (2007) shows that pluralization is not subject to cross-linguistic variation: event nominalizations generally pluralize across languages. Building on several authors such as Mourelatos (1978) and Borer (2005), she argues that pluralization is related to aspectual properties such as telicity and perfectivity (boundedness). The idea is that count nouns are similar to bounded events and mass nouns to unbounded events. Later works such as Alexiadou et al. (2008) and Iordăchioaia & Soare (2008a, 2008b) show that the basic assumption concerning the relation between boundedness and plurality is correct. I elaborate on this below.

Mourelatos (1978) showed that like count nouns (28), telic events can pluralize. Count nouns can be governed by the informal phrase 'there is at least one', which is equivalent to the existential quantifier (28b). They also admit adjectives such as *many* or *few*. Mass terms, in contrast, do not generally have plural forms (without a meaning shift) (29). Mourelatos admits that having a count or mass object determines the character of the predicate as a whole (for example, (30a) is an activity but (30b) is an accomplishment). However, he focuses on the behavior of predicates independently of the nature of the object that they select in each instance.

- (28) a. squirrel, squirrels, 5 squirrels, a squirrel
 b. There is at least one squirrel.
- (29) a. wine, wines (= types of wines)
 b. much wine, too little wine
- (30) a. He played a little Mozart.
 b. He played a Mozart Sonata.

Mourelatos employs the test of nominalization-transcriptions to determine whether predicates have the count or the mass feature. Thus, in (31b), the transcription of (31a), activity predicate *push* does not include the determiner *alan* equivalent to the existential construction.¹⁰ In contrast, telic predicate *capsize* qualifies as countable according to this test (32). Of course, activity predicate *push* can be turned into countable once the pushing is understood as telic, as in (33).

- (31) a. John pushed the cart for hours.
 b. For hours there was *a pushing of the cart by John.
- (32) a. Mary capsized the boat.
 b. There was a capsizing of the boat by Mary.
- (33) a. John pushed the car three times over the hill.
 b. There were three pushings of the cart over the hill by John.

In short, atelic events are mass-quantified and telic events are count-quantified. This strong association between telicity and quantization has led several researchers to investigate into the aspectual characteristics of different nominalization strategies across languages. As expected, the inherently imperfective aspectual character of certain structures correlates with the impossibility of pluralization.¹¹ One such example is Romanian, where the infinitives and the supine differ in that only the former accepts the plural (34). Interestingly, following Cornilescu (2001), Iordăchioaia & Soare (2008a) argue that the infinitive is bounded as opposed to the unbounded aspect of the supine.¹²

- (34) a. demolă-r-i-le frecvente ale cartierelor vechi de către comuniști.
 demolish-INF-pl-the frequent-pl of quarters-Gen old by communists
 'The frequent demolitions of old quarters by the communists.'
- b. *demola-t-uri-le frecvente ale cartierelor vechi de către comuniști.
 demolish-SUP-pl-the frequent-pl of quarters-Gen old by communists
 'The frequent demolitions of old quarters by the communists.'

¹⁰ Similarly, Mourelatos notes that imperfective aspect, as in *John was painting the Nativity*, does not qualify for pluralization (**John was painting the nativity twice*), unless it is understood as referring to occasions by, for example, adding adverb *again* (*John was again painting the Nativity*).

¹¹ As cited in Alexiadou et al. (submitted), several authors (Rouveret 1994, Alexiadou 2001, Rijkhoff 2002, Fassi-Fehri 2005, among others) have previously noted that verbal outer Aspect (perfectivity) is in complementary distribution with nominal Number.

¹² Cornilescu (2001) shows that the infinitive is incompatible with unergatives, because they are atelic. Only the supine structure allows for unergatives.

Further evidence of the structural constraint on pluralization of event nominals comes from English gerund nominals (Alexiadou 2001, Borer 2005) and Spanish nominal infinitives (de Miguel 1996), as exemplified in (35) and (36), respectively. These structures are incompatible with telic verbs and hence, also with the plural:

- (35) *The constant pushings of the cart by John.
 (36) *Los constantes construíres casas de los albañiles.
 the.pl constant.pl build.INF.pl houses of the workers
 ‘The constant building of houses by the workers.’

To summarize, the pluralization of event nominals seems to be possible across languages and it may be constrained by two independent factors: one is inner aspect or telicity, the lexically determined value of aspect (e.g. states and activities per se do not admit pluralization). The other is associated to the inherent perfective/imperfective aspect of the nominalization strategy involved in each instance, the outer aspect (e.g., Romanian supines are imperfective/unbounded and do not allow for nominal pluralization). In the next section I will add an additional twist to the phenomenon of pluralization of eventive nominals. I will show that not all telic eventive nominals accept pluralization.

3. Not all telic derived nominals pluralize

Kamiya (2001) shows that the test of nominalization-transcriptions reveals that not all telic event denoting nominals can pluralize. Consider the contrast in (37-38): *destruction*, in contrast to *discussion*, does not allow for cardinal count adverbials.

- (37) a. They discussed the presidential voting 17 times.
 b. There were 17 discussions of the presidential voting.
 (38) a. Taro destroyed the volcano/17 times.
 b. There was *a destruction/*17 destructions of the volcano by Taro.
 (cf. There was destruction of the volcano by Taro.)

Other predicates that behave like *destruction* are *construction* (39) and *pollution* (40). In contrast, *revision* (41) or *correction* (42) pattern with *discussion*:

- (39) a. They have constructed the hotel.
 b. There is *a construction of the hotel.
 (40) a. They have polluted the river.
 b. There is *a pollution of the river.
 (41) a. They have reviewed the paper.
 b. There has been a revision of the paper.
 (42) a. He has corrected the essay.
 b. There has been a correction of the essay.

It is interesting to note that two works from two different approaches to the phenomenon of event nominalizations attest that certain telic nominalizations are countable and others are not. To start with, in a lexical-semantic investigation of Italian nominals, Bisetto & Melloni (2007) mention that two accomplishment predicate-

classes display a different syntactic behavior. On the one hand, *construire*-type predicates (result-object verbs) respect the ban on pluralization stated in Grimshaw (43). In contrast, other classes such as the *tradurre*-class (44) and the *corregger*-class (45) allow for the plural form in the nominalization.¹³

- (43) La creazione di quella scultura (da parte dell'artista) fu lunga e difficoltosa.
'The creation of that sculpture (by the artist) was long and troubled.'
- (44) Traduzioni frettolose possono altere considerevolmente il significato originale del testo.
'Rushed translations can consistently alter the original meaning of the text.'
- (45) Ripetute correzioni hanno modificato il testo originale.
'Repeated corrections modified the original text.'

From a lexico-semantic perspective, what is special about the *construire*-class is that the nominal denotes an event that puts into existence a new object/entity which corresponds to an incremental theme in the sense of Dowty (1991). In contrast, the internal argument of nominalizations formed by *tradurre* and *corregger* are either new objects created in relation with the existing one (*tradurre*) or by altering the existing object (*corregger*).

Next, consider the argument presented by Pazelskaya (2007) for the Russian data: the author notes that not all event nominals can be pluralized in this language. For example, *gluyings*, *buildings* and *cleanings*¹⁴ are out (46) whereas *evacuations* is accepted (47). Interestingly, the author mentions that repetitive and distributive pluralities are excluded, "since the result of this action is usually irreversible".

- (46) a. *prikleivanija 'gluing, sticking'
b. *stroitel'stva 'buildings'
c. *uborki 'cleanings'
- (47) vmesto nastupatel'nyx dejstvij prixodilos'zanimat'sja evakuacijami.
instead aggressive campaigns had.to be-busy evacuations.pl
'Instead of aggressive campaigns one had to be busy with evacuations.'

The general idea behind the unacceptable plural morphology in event nominalizations seems to be that, in such instances, the object is beyond altered, i.e., it is new created, destroyed, etc. This is related to the notion of "affectedness" on the object.¹⁵ For

¹³ Bisetto & Melloni (2007) note that, unlike in the *construire*-class, the lack of argument structure in the *tradurre* and the *corregger*-classes does not trigger a result reading. This goes against the Grimshaw criterium on Argument Structure.

¹⁴ Contrary to the data from other languages, according to Pazelskaya (2007) in Russian *razrušenie* «destructions» is acceptable in an event reading. If *destruction*-type predicates are exceptions to pluralization across languages, we expect that in the Russian case too, the event denoted by the plural refers to different occasions of destructions. This requires that the object that was destroyed has been rebuilt and that destructions actually refer to re-destruction instead.

¹⁵ The notion «affectedness» has syntactic consequences related to the process vs result readings in Spanish. According to Picallo (1999), when the theme is affected by the event denoted by the derived nominal, the agent may not be introduced by preposition *de* («of»), it must be introduced by agentive *por* ('by'). The former structure typically denotes a result reading and the latter are processes.

the present purposes, what I would like to stress is that, although most nominalizations built on telic predicates allow for pluralization, not all of them accept it. In what follows, I will introduce the proposal presented in Kamiya (2001) for explaining the asymmetric behavior of telic nominals with respect to pluralization. The set of data presented in this proposal will reveal the nature of the internal structure involved in telic nominals that pluralize and those that do not: only the former contain [+count] ClassP.

4. A Dimensional approach: Process vs. Individuation of event

As Kamiya (2001) correctly notes, there is a distinction between the nouns *water* vs. *desk* that is somehow reflected in derived nominal pairs like *knowledge* vs. *discussion*: in the former, semantically, mass nouns imply substance, and count nouns do individuation. Similarly, although both derived nominals *knowledge* and *discussion* are nouns, “intuitively, *knowledge* means some kind of state, but *discussion* means some kind of event”. Kamiya investigates whether mass/count properties can correlate with different eventualities in derived nominals.

He presents the paradigm in (48-50) involving different types of derived nominals and he is interested in the gradation in the grammaticality of the sentences. The (a) examples show that derived nominals can be modified by degree modifiers, the (b) examples illustrate that certain derived nominals (*destruction* and *discussion*) can be measured by the duration of time. The (c) examples show that only *discussion* can be counted by a numeral.¹⁶

- (48) a. John's knowledge of French is great.
 b. *John's two hours of knowledge of French is great.
 c. *John's three knowledges of French is great.
- (49) a. The destruction of the city was incomplete.
 b. (?) There was destruction of the city for two hours.
 c. *There were three destructions of the city.¹⁷
- (50) a. The discussion of the presidential voting was insufficient.
 b. There were two hours of discussion of the presidential voting.
 c. There were seventeen discussions of the presidential voting.

Kamiya analyzes the proposal in Muromatsu (1998) for the classification of nouns and suggests a parallel analysis for derived nominals. Muromatsu adopts the Dimensional theory in Uriagereka (1999), whereby lexical concepts are recursively built on layers or dimensions. Dimensions (henceforth D) are defined inductively, based on the previous D. As a consequence, higher D include the lower ones. Muro-

(i) *La construcción de los albañiles de una casa./La construcción de una casa por los albañiles.

(ii) La traducción de Juan de ese texto/La traducción de ese texto por Juan.

¹⁶ According to the judgments that I have gathered, the paradigm illustrated in (48-50) also holds for Spanish and for Basque.

¹⁷ As Kamiya claims, *destructions* is not possible, because once an object is destroyed it is gone. However, he attests that some English speakers accept *destroyings*. He mentions the possibility that *destroying* can be a 3D of *destruction* (see below on D (Dimensions)).

matsu’s proposal is that the simplest nouns are Abstract nouns. Next, Mass nouns include Abstract nouns. Finally, Count nouns include the other two. Thus, if a noun is countable, it also includes massness and concept. If a noun is mass, it includes concept. Abstract nouns can only be concept. Examples (51-53) illustrate all this.

1 st Dimension: ABSTRACT <i>e.g. peace</i>	2 nd Dimension: MASS <i>e.g. honey</i>	3 rd Dimension: COUNT <i>e.g. book</i>
Concept — —	Concept Mass —	Concept Mass Count

Table 1

- | | |
|----------------------------------|-------------------------------|
| (51) a. Mary gave a peace sign. | c. *John bought three peaces. |
| b. *The peace weighs six pounds. | |
| (52) a. Mary found a honey bee. | c. *John bought three honeys. |
| b. This honey weighs six pounds. | |
| (53) a. Mary is a book reviewer. | c. John bought six books. |
| b. This book weighs six pounds. | |

Muromatsu claims that what convert 1D to 2D nouns are mass words. Classifiers are responsible for the shift from 2D to 3D. Evidence for this comes from the fact that Japanese shows obligatory numeral classifiers only to counts. In nouns, the property characteristic of 1D is Quality, of 2D is Substance/Material and of 3D is Individuation.

Turning back to derived nominals, Kamiya presents a parallel dimensional analysis that accounts for the paradigm in (48-50) above. 1D corresponds to states, 2D to processes and 3D to individuation of events.

1 st Dimension: EVENTHOOD ¹⁸ <i>e.g. knowledge</i>	2 nd Dimension: PROCESS <i>e.g. destruction</i>	3 rd Dimension: INDIVIDUATION OF EVENT <i>e.g. discussion</i>
Eventhood ¹⁹ (48a) — (48b) — (48c)	Eventhood (49a) Process (49b) — (49c)	Eventhood (50a) Process (50b) Individuation (50c)

Table 2

¹⁸ According to Kamiya, the fact that derived nominals are compatible with degree modifiers like *complete* shows that they have stative eventuality.

¹⁹ Kamiya proposes that in the regular nominal domain, Concepts take measure words and turn to 2D. However, Concepts can also be converted to eventhood in 1D by argument structure. In other words, argument structure serves to take derived nominals to the event-zone. This is how we get ambiguous readings between events and common nouns in terms like *construction, translation, proof* or *explanation*.

What convert 1D into 2D are measure words, and classifiers turn 2D to 3D. According to the dimensional theory, higher dimensions include lower ones, but not vice versa. This is the reason why a derived nominal like *discussion*, apart from being countable by numerals (50c), can also be measured by duration adverbials (50b) or for that matter, modified by degree modifiers (50a). *Destruction* type nominals belong to 2D: they admit degree modifiers (49a) or modification by time adverbials (49b), but cannot be counted (49c).²⁰

Considering all this, we may state that the asymmetric behavior of derived event nominals with respect to pluralization is due to a difference in the internal complexity of the derived nominal. In other words, only derived nominals that belong to 3D pluralize. According to Kamiya, the additional complexity in 3D is the existence of Classifiers in the relevant nominals. From this, we may conclude that only derived nominals whose internal structure contains Classifiers can pluralize.

Evidence for the idea that Classifiers are the key ingredient distinguishing 2D and 3D comes from Japanese. *Destruction* (2D) contrasts with *eruption* (3D) in that only the latter admits classifiers in the presence of count adverbials:

- (54) a. *John ga sono ie o zyuunana-kai torikowasita.
 John nom that house acc seventeen CLASS (times) destroyed
 (*John destroyed the house seventeen times.)
 b. *John niyuru sono ie no zyuunana-kai no torikowasi.
 John by that house gen seventeen CLASS (times) destruction
 (*John's seventeen destructions of the house.)
- (55) a. Kazan ga zyuunana-kai hunka sita
 volcano nom seventeen CLASS (times) erupt past
 'The volcano erupted seventeen times.'
 b. Kazan no zyuunanakai no hunka
 volcano gen seventeen CLASS (times) gen eruption
 'Seventeen eruptions of the volcano.'

To summarize, this section has shown that, whichever the semantics that distinguishes among telic nominals *destruction* and *discussion*,²¹ languages seem to consider them as belonging to different classes. Syntactically, the Japanese data show that the

²⁰ Kamiya notes that the compatibility/incompatibility of certain adjectives with derived nominals suggests that adjectival modification is sensitive to the internal hierarchy of derived nominals and provides further support for the idea that there are dimensions in derived nominals.

- (i) John has a complete/*careful/*particular *knowledge* of French.
 (ii) The complete/careful/*particular *destruction* of the paper was observed by John.
 (iii) There was a complete/careful/particular *discussion* of the problem by people.

²¹ According to Jackendoff (1991), the plural is a function that maps a bounded entity into an unbounded multiplicity of entities. If it is not telic it is not bounded, hence not compatible with plurality. On the other hand, Jackendoff's view to plurality may reveal why intuitively, 2D *destruction*-type derived nominals cannot pluralize. Once the object is destroyed it is gone, once the object is constructed it cannot be constructed again (however, it can be re-constructed if it is demolished or destroyed repeatedly), etc. In other words, no multiplicity of entities can be construed in events whose existence is dependant upon the physical object they take as complement.

difference lies in the projection ClassP which hosts the [+count] feature. More specifically, assuming the proposal in Picallo (2006), *destruction*-type predicates are mass nouns and prevent the projection of NumP and hence, pluralization.

5. Summary and conclusion

This paper has investigated into whether the general criterion of plurality is valid for distinguishing process nominals from result nominals. Evidence from recent literature on the topic suggests that it is not: event nominalizations generally pluralize across languages. However, the standard assumption that telicity is the ingredient responsible for this phenomenon is not accurate, since certain telic event nominals do not pluralize. The syntax of the exceptional cases in Japanese reveals that only countable derived nominals project a rich enough functional structure so as to host [+count] ClassP. From this we may conclude that the correct generalization regarding the phenomenon of pluralization of event nominals is not that telic nominals generally pluralize, but that event nominals whose internal nominal structure contain [+count] ClassP pluralize.

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