

Internal argument in nominalizations

Complex event nominals (CEN) preserve the argument structure of the verb (Grimshaw 1990):

- (1)
- a. The enemies destroyed the city in three days.
 - b. the destruction of the city by the enemies in three days
 - c. the destruction of the city in three days
 - d. *the destruction by the enemies in three days

The same rule applies to Spanish nominals:

- (2)
- la destrucción *(de la ciudad) por parte de los enemigos durante tres días
 - the destruction of the city by the enemies in three days

Internal argument in nominalizations

- (3) a. *destroy/destruir*: Agent Patient
 | |
 Subj Obj
- b. *destruction/destrucción*: (Agent) Patient
 | |
 (by-PP) of-PP

Internal argument in nominalizations

- (3)
- | | | | |
|----|------------------------------------|-------------------------|-----------------------|
| a. | <i>destroy/destruir:</i> | Agent

Subj | Patient

Obj |
| b. | <i>destruction/destrucción:</i> | (Agent)

(by-PP) | Patient

of-PP |
| c. | <i>be destroyed/ser destruido:</i> | (Agent)

(by-PP) | Patient

Subj |
- (4) *La ciudad* fue destruida (*por los enemigos*).
The city was destroyed (*by the enemies*).

The argument structure of CENs is similar to that of passive.
 Bruening (2013): *by*-phrases can be analyzed uniformly in passive
 and in nominals.

Internal argument in nominalizations

The internal argument can be left implicit if recoverable from the discourse context:

- (5) How does **a country** recover from 40 years of destruction **by an unchallenged tyrant**? (Grimm & McNally 2013:126)
- (6) Las invasiones **bárbaras (del Imperio Romano)** tuvieron lugar al final de la Edad Antigua. (Fábregas 2016:99)
The barbaric invasions (of the Roman Empire) took place at the end of the Ancient history.

Implicit agent: Existential reading

Implicit patient: Discourse licensed null object

Spanish nominalized infinitive (N-Inf)

This study is concerned with the argument realization in Spanish nominalized infinitives (N-Inf), which typically take intransitive base verbs and realize the sole argument as *de*-PP:

- (7) el andar errabundo del niño
the wander.INF aimless of.the child
“the aimless wandering of the child” (De Miguel 1996)

and intends to answer:

1. How does N-Inf behave with transitive bases?
2. How are implicit arguments interpreted in N-Inf?
3. Do current syntactic analyses account for its behavior with transitive bases?

N-Inf: Nominal properties

N-Inf allows for different determiners, including possessives.

(8) el/este/ese/aquel andar del niño
the/this/that/that.M wander.INF of.the child

(9) mi/tu/su andar
my/your/his.M wander.INF

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(9) mi/tu/su andar
my/your/his.M wander.INF

The infinitive takes adjectival modification and cannot be pluralized.

(10) ?el andar errabundamente del niño
the wander.INF aimlessly of.the child

(11) *los andares del niño
the.PL wander.INF.PL of.the child

N-Inf: Aspectual restriction

De Miguel (1996): N-Inf formation is restricted to atelic bases. Among intransitives, N-Inf is typically formed with activity (unergative) verbs; achievements (unaccusative) are generally disallowed, unless they are coerced into an imperfective reading:

- (12) a. *el llegar tardío del niño
 the arrive.INF late of.the child
- b. el florecer de los claveles
 the blossom.INF of the carnations

N-Inf: Aspectual restriction

The aspectual restriction is encoded in AspP or ClassP:

- (14) a. [DP [AspP [Asp_[-perf] [NP]]] (De Miguel 1996)
b. [DP [ClassP_[-count] [nP [VoiceP [vP ...]]]]]
(Alexiadou et al. 2011)

However, the aspectual restriction does not explain:

- ▶ The direct object in N-Inf has to be bare. In Spanish the definite article is also used in kind reference: *los chicles* “chewing gums”, *la cerveza* “beer”.
- ▶ N-Inf is restricted to the realization of agent *de*-PP.
(early report from Falk 1969 and Takagaki 1986, empirically tested by Schirakowski 2021)

Preference for agent *de*-PP

N-Inf has only one *de*-PP argument position and cannot realize both arguments as deverbal nominals do:

- (15) ?el comer de manzanas del/por el niño
the eat.INF of apples of.the/by the child
(*de* is accepted by Takagaki 1986)
- (16) ?su comer de manzanas
his eat.INF of apples

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Schirakowski (2021) shows that, for optionally transitive verbs, agent *de*-PP is strongly preferred to patient *de*-PP, even when both are used generically and do not violate the aspectual restriction.

Preference for agent *de*-PP

- (17) **Patient as *de*-PP** (Low acceptability)
Japón ha recibido fuertes críticas de varias organizaciones medioambientales que consideran **el cazar de ballenas** como un negocio cruel.
Japan was severely criticized by various environmental organizations which consider **the hunt.INF of whales** a cruel business.
- (18) **Agent as *de*-PP** (High acceptability)
El cazar de las leonas es rápido y eficaz. Atrapan a su víctima con una aceleración enorme y un salto final.
The hunt.INF of the lionesses is quick and efficient. They catch their victim by accelerating enormously and with a final jump.
(Schirakowski 2021:242–243)

Antipassive

Hypothesis: N-Inf is an antipassive nominal, characterized by the backgrounding of the internal argument.

Antipassive is a voice alternation typically found in ergative languages, in which the verb is detransitivized by demoting the patient (through deletion, case marking, incorporation, etc.).

Cross-linguistically, antipassive correlates with atelicity and imperfective aspect. (Polinsky 2017)

- | | | | |
|------|-----------------|-------|-----------|
| | | Agent | Patient |
| (19) | a. transitive: | | |
| | | Subj | Obj |
| | | Agent | (Patient) |
| | b. antipassive: | | |
| | | Subj | (Obl) |

Antipassive in Spanish

Armstrong (2017) analyzes Spanish active participles as adjectival antipassives.

- (20) a. La profesora es muy **leída** en la historia romana.
the professor is very read in the history Roman
“The professor is well-read in Roman history.”
(The professor reads a lot.)
- b. El niño está bien **comido**.
the child is well eaten
“The child is very full.” (The child has eaten a lot.)

- Derived from unergative or transitive bases.
- The internal argument is implicit with an existential/generic reading; the external argument is the agent of the habitual activity or the holder of the resultative state.

N-Inf as antipassive

An antipassive analysis explains:

- ▶ N-Inf has only one argument position.
- ▶ N-Inf is predominantly formed with unergative verbs, and disprefers unaccusative verbs.
- ▶ When the base verb is transitive, the external argument is realized as *de*-PP and the internal argument:
 - ▶ is expressed as a bare direct object (incorporation)
 - ▶ is implicit
- ▶ There appears to be an aspectual restriction as a result of the detransitivized verb.

Corpus study

N-Inf with transitive bases is predicted to be marginal, if acceptable at all. Data in the literature are almost always constructed by linguists, but with a big enough corpus, one should be able to find positive evidence for this construction and its use.

Questions for corpus study:

1. Is there a preference for agent over patient realized as *de*-PP in N-Infs constructed with transitive bases?
2. When the agent is realized as *de*-PP, does the patient receive an existential reading or a discourse-licensed null object reading?

Corpus

A purchased copy of **Corpus del Español: Web/Dialects** (Davies 2016-), containing 2 billion tokens in total from the web and from every Spanish-speaking country, parsed with Universal Dependency using spaCy model "es_dep_news_trf" (Honnibal et al. 2020). Queries were made using Python scripts.

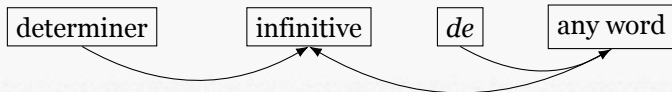


Figure: Query to find N-Inf in the corpus

Sentences containing the target phrase and a previous context of up to 150 words were collected.

Query

To keep the amount of data manageable, I only searched for a selected set of verbs from the top most common verbs from Corpus del Español and from the test items in Schirakowski (2021).

```
wanted_inf = set(['tener', 'decir', 'ir', 'dar', 'ver', 'querer', 'encontrar', 'llegar', 'seguir', 'creer', 'poner', 'llevar', 'quedar', 'conocer', 'tomar', 'realizar', 'contar', 'leer', 'esperar', 'permitir', 'venir', 'buscar', 'llamar', 'crear', 'escribir', 'presentar', 'recibir', 'usar', 'utilizar', 'considerar', 'ayudar', 'necesitar', 'pedir', 'lograr', 'empezar', 'mantener', 'perder', 'recordar', 'comenzar', 'mostrar', 'convertir', 'producir', 'explicar', 'publicar', 'ofrecer', 'ganar', 'incluir', 'entrar', 'abrir', 'comer', 'morir', 'calentar', 'estudiar', 'celebrar', 'pintar', 'beber', 'limpiar', 'cocinar', 'cazar', 'masticar', 'saquear', 'compartir', 'conseguir', 'pagar', 'escuchar', 'comprar', 'establecer', 'desarrollar', 'sacar', 'caer'])
```

(Not all the data were processed)

Agent vs. patient realization as *de*-PP

Verb base	Total	Agent <i>de</i> -PP	Patient <i>de</i> -PP
<i>compartir</i> “share”	179	28 (15.6%)	154 (86.0%)
<i>comer</i> “eat”	27	6 (22.2%)	21 (77.8%)
<i>escuchar</i> “listen”	15	2 (13.3%)	12 (80.0%)
<i>usar</i> “use”	12	0	12 (100%)
<i>desarrollar</i> “develop”	10	1 (10%)	10 (100%)
<i>recordar</i> “remember”	10	1 (10%)	9 (90%)
<i>ver</i> “see”	10	4 (40%)	6 (60%)
(Only verbs with ≥ 10 attested cases)			
Schirakowski (2021)	44	11 (25%)	33 (75%)
All verbs	355	64 (18.0%)	294 (82.8%)

Some cases realize both arguments or the interpretation is unclear.

Agent vs. patient realization as *de*-PP

Other verbs with attested agent *de*-PP: *beber* “drink”, *buscar* “look for”, *considerar* “consider”, *contar* “count/tell (stories)”, *crear* “create”, *escribir* “write”, *esperar* “wait”, *ganar* “earn”, *llamar* “call”, *pedir* “request”, *producir* “produce”.

Verbs with only patient *de*-PP: *calentar* “heat”, *cocinar* “cook”, *conseguir* “achieve”, *convertir* “convert”, *empezar* “start”, *establecer* “establish”, *leer* “read”, *lograr* “achieve”, *limpiar* “clean”, *mantener* “maintain”, *masticar* “chew”, *mostrar* “show”, *necesitar* “need”, *perder* “lose”, *recibir* “receive”, *seguir* “follow”, *usar* “use”, *utilizar* “utilize”.

(Lack of data does not suggest incompatibility with agent *de*-PP.)

Agent vs. patient realization as *de*-PP

- Q: Is there a preference for agent over patient realized as *de*-PP in N-Infs constructed with transitive bases?
- A: Contrary to the literature and to Schirakowski's (2021) experiment, patient *de*-PP is attested far more often than agent *de*-PP.

Why?

- ▶ Lack of competition with deverbal nominals (**compartimiento*, **compartición*)
- ▶ Core transitives (Levin 1999) such as *calentar* “heat” require the expression of patient
- ▶ Marginal and low-quality data (*el andar de* alone has 467 hits, in contrast to the 355 hits coming from 36 verbs)

Interpretation of implicit internal arguments

Some verbs are strongly associated with specific types of internal arguments. The implicit argument has an existential/generic reading:

<i>comer</i> “eat”	food, meals
<i>beber</i> “drink”	alcoholic drinks
<i>ganar</i> “earn”	earnings, profits

- (21) [...] no dejar algo tan importante como **el comer de 200 familias** a este atajo de sinvergüenzas
not to leave something as important as **the eating of 200 families** to this bunch of shameless people
- (22) Es este **el beber de los sujetos abandonados a las gratificaciones inmediatas**.
This is **the drinking of the subjects abandoned to instant gratifications**.

Interpretation of implicit internal arguments

The context narrows down the implicit argument to an unexpected kind. The implicit argument still has an existential/generic reading:

- (23) No habrá misericordia, solo serás tú y el corazón negro que adquieres después de **beber la sangre** de tu Creador [...] **El beber de un animal** es solo como para sobrevivir, un vampiro se alimenta hasta 6 veces al día.
There will be no mercy, only you and the black heart that you acquire after **drinking the blood** of your Creator [...] **The drinking of an animal** is only to survive, a vampire eats up to 6 times per day.

This is similar to indefinite object drop.

Implicit internal argument as null object?

Occasionally, the object is recoverable from the context:

- (24) **Cuando Dios me ve** no es como cuando un hombre mira a otro hombre, es decir, un ser concluso a un ser concluso, sino que **el ver de Dios** me crea a mí.

When God sees me it is not like when a man looks at another man, that is to say, a conclusive being at a conclusive being, but instead **the seeing of God** creates me.

Is this a null object reading, or is it an implicature?

- ▶ A possibility is that the implicit argument is still semantically existential. There is an implicature that the object is “me”, but the emphasis is placed on “God” and his “seeing”.

Interpretation of implicit internal arguments

The object is not recoverable or restricted by the verb, but focus is placed on the process or its manner:

- (25) In a football match report:
A los 33' otro horror en la zaga y el 2-0. Gonzalo Fierro toca hacia atrás, lejos de Vilches que no alcanza a llegar, el propio Lalinde agarra el balón y ante la entrada a el área le da al primer palo de Salazar. A cobrar y el Monumental en silencio. De ahí en adelante fue **un buscar y buscar de Colo-Colo**, pero sin ideas, con pocas alternativas y nula jerarquía.
From then on was **a looking-for and looking-for of Colo-Colo**, but without ideas, with few alternatives and no hierarchy.
- (26) Es por eso erróneo comparar **el crear de Dios** con el del artista.
For this reason it is erroneous to compare **the creating of God** with that of the artist.

Back to the questions

My antipassive hypothesis: Unlike complex event nominals, N-Inf does not have a passive configuration, but an antipassive one.

1. How does N-Inf behave with transitive bases?

My corpus data show that N-Inf does allow for transitive bases; but contra theoretical predictions and experiment results, the realization of patient *de*-PP is prevalent.

Next step: Fine-grained verb classes, experiment with core transitive verbs

2. How are implicit arguments interpreted in N-Inf?

Existential/indefinite/generic interpretation (predicted by antipassive); occasional null object (?)

Next step: Experiment

Back to the questions

3. Do current syntactic analyses account for its behavior with transitive bases?

As far as I know, the use of object *de*-PP has not been described or accounted for in the literature. My antipassive hypothesis of course does not cover this use, as it is based on a preference for agent *de*-PP.

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Appendix: Lexicalized infinitives

Lexicalized infinitives can violate the aspectual restriction:

- (27) a. el ir y venir de alguien
the go.INF and come.INF of somebody
- b. un abrir y cerrar de los ojos
a open.INF and close.INF of the eyes
“in the blink of an eye”

Result reading and process/manner reading:

<i>conocer</i> “know”	knowledge
<i>decir</i> “say”	saying
<i>comer</i> “eat”	eating habits
<i>beber</i> “drink”	drinking habits (alcoholism)
<i>crear</i> “create”	the creative process
<i>compartir</i> “share”	the sharing of knowledge, ideas, etc.

Appendix: Corpus quality

Many attested cases are found in religion-related texts. The data was annotated for whether they come from religious contexts or not, because I suspected that the corpus contained a big amount of religious texts machine-translated from English.

	Total	Agent <i>de</i>-PP	Patient <i>de</i>-PP
Religious	80	16 (20%)	65 (81.3%)
Non-religious	275	48 (17.5%)	230 (83.6%)

Some cases realize both arguments or the interpretation is unclear.

The difference is not significant.

Appendix: Corpus quality

In CORPES XXI (a high quality corpus maintained by RAE) *el compartir de* is also attested 14 times, mostly with *de*-PP patient:

- (28)
- a. Visto desde Libra, todos los seres cooperamos en **el compartir de la vida**, querrámoslo o no.
 - b. Una de los aspectos que captó mi interés en esta comunidad es **el compartir de los “vecinos virtuales”**[...]
 - c. En Jesucristo, **Dios comparte la finitud**, la experiencia de los hombres. **El compartir de parte de Dios de la finitud humana** quedó reflejado en sus atributos, claves experienciales de Dios[...]

REAL ACADEMIA ESPAÑOLA: Banco de datos (CORPES XXI) [online]. Corpus del Español del Siglo XXI (CORPES).
<<http://www.rae.es>> [20/10/2025]

Appendix: Types of object *de*-PPs

	Singular	Plural
Bare	15	80
Definite	99	56
Indefinite	23	4
Pronoun	5	
Proper name	8	
Other	7	
Total	297	

The total number of 297 is larger than the number of attested *de*-PP objects because “unclear” *de*-PPs were annotated as object.

Although the majority of the cases involve definite DPs, the reading of the N-Inf is still predominantly generic (as opposed to episodic), which agrees with Schirakowski’s (2017) results.

Appendix: Event-referring N-Inf

Specific, event-referring uses of N-Inf are also attested, albeit rare:

- (29)
- a. En este marco **iniciamos el desarrollar de** un gran proyecto de forestación, al que denominamos BOSQUE MUNDIAL.
 - b. Su charla **abrió paso a un compartir de** ideas con los invitados y leyendas de el surfing [...]
 - c. **Tras un breve compartir de** ideas y una pausa con refrigerio, Manuela Planas [...] nos ofreció indagar más en los aspectos teóricos necesarios para pasar un constructo mental de obra a el resultado final en pantalla.

Appendix: Types of subject expressions in N-Inf

	Singular	Plural
Bare	0	3
Definite	16	16
Indefinite	7	4
Pronoun	1	
Possessive pron	12	
Proper name	16	
Other	1	
Total	76	

The total number of 76 is larger than the number of attested *de*-PP agents because possessive pronouns are not *de*-PPs.

Appendix: Expression of both arguments

There are three attested ways to express both arguments.

1. Direct object with *de*-PP agent. (2 attested)

- (30) El pedir **perdón del presidente Piñera** al país por el escándalo del censo, no es razonable y es tironeo en puntos de prensa bajo la óptica del señor Hinzpeter, será contradicción?

2. Both as *de*-PPs. (5 attested)

- (31) Esa época también es llamada por Mari como la época de los dos Arbona [sic] por el compartir **de apellido** (no parientes) **de sus dos consecutivos dirigentes**: Eugenio Cuevas Arbona y Ramón Arbona [...]

Appendix: Expression of both arguments

3. Agent as possessive pronoun, patient as *de*-PP. (12 attested)

- (32) El evangelio es el mensaje de la obra consumada de Cristo y **nuestro** compartir con él **de su vida resucitada**.
- (33) ¿Recuerdas nuestras lágrimas, y **nuestro** compartir **de tu carga**?
- (34) Soy doramaniaca desde el año 2008 y en **mi** largo ver **de doramas** este es sin duda uno de los mejores que he visto.

