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Indefinite object drop is lexically constrained

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This paper discusses the lexical constraints regulating the occurrence of indefinite null objects in European Spanish in comparison to European Portuguese. Based on previous research and corpus data, we suggest that the distribution of indefinite null objects is determined by the lexical constraints governing the distribution of object bare nouns. We propose that a predicate's ability to allow for certain types of bare nouns predicts its capacity to permit corresponding indefinite null objects. Specifically, predicates that allow for object bare plurals and object mass nouns also allow for indefinite null objects referring to these types of bare nouns, while those permitting bare singulars allow for indefinite null objects referring to all types of bare nouns. Conversely, predicates that do not allow for any kind of object bare nouns do also not allow for indefinite null objects. The theoretical advantage of this proposal is that the distribution of indefinite object drop in Spanish is derived from the distribution of object bare nouns, not from a newly posited grammatical mechanism. Additionally, we propose a universal implicational hierarchy wherein languages with fewer restrictions on object bare nouns are more likely to allow for indefinite null objects. Our examination of European Portuguese data shows that EP is more permissive with regard to indefinite null objects and supports this hierarchy account, demonstrating its applicability to crosslinguistic patterns of different types of null objects and object bare nouns.

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1 Introduction

The occurrence of null objects varies across languages. Some languages, such as English, generally do not license object drop, while languages such as Japanese impose fewer constraints on object drop (see Cole 1987 for an overview). Spanish and Portuguese license null objects under specific conditions. While *European Portuguese* (henceforth, EP) allows for both definite null objects and *indefinite null objects* (henceforth, INO) (Raposo 1986; Cyrino 2001; 2016; Barbosa 2019; 2024), *European Spanish* (henceforth, ES) typically permits INOs, but not definite null objects (Campos 1986; 1999; Brucart 1999; Clements 2006), as illustrated in (1).¹

- (1) Indefinite object drop (ES)
 - a. A: ¿Compraste [el libro]? buy.IND.PRF.2SG the.MASC book 'Did you buy the book?'
 - B: *Sí, compré Ø. yes buy.IND.PRF.1SG 'Yes, I bought it.'
 - b. A: ¿Compraste [libros]?
 buy.IND.PRF.2SG book.PL
 'Did you buy books?'
 - B: Sí, compré Ø. yes buy.IND.PRF.1SG 'Yes, I bought some.'

(Campos 1986: 354)

Most of the research on ES focuses on factors related to the definiteness of the antecedent of the INO, its interpretation and the properties of the corresponding pronominal system. However, as pointed out in Martínez-García (to appear), the definiteness restriction on the antecedent cannot explain examples like the ones in (2), where even though the antecedents of each INO are indefinite, non-specific (concretely, bare nouns), the sentences are ungrammatical.

- (2) Problematic cases
 - a.??Buscamos[piso], yayercompramosØ.search.IND.PRS.1PLflatandyesterdaybuy.IND.PRF.1PL'We are looking for a flat and we bought oneyesterday.'

¹ Note that definite object drop is possible in specific dialects and contexts in Spanish. For instance, it is found in American Spanish (see Suñer & Yépez 1988 on Quiteño Spanish; Sánchez 1999 on Andean Spanish; Palacios 2000 on Paraguayan Spanish; Masullo 2017 on River Plate Spanish), in Basque Spanish, and in contexts where null objects are deictically identified (see Bosque 2015 for an overview). We leave aside these cases here.

b. *Teníamos seleccionador [buenos deportistas]. El have.IND.IPFV.1PL good.MASC.PL athlete.PL the.MASC coach.MASC adoraba Ø. love.IND.IPFV.3SG 'We had good sportsmen. The coach loved them.' c. *Ayer llevaba [corbata]. Compré Ø en la semana yesterday wear.IND.IPFV.1SG tie buy.IND.PRF.1SG at the.FEM week de la moda. of the.FEM fashion 'I wore a tie yesterday. I bought it at the fashion week.'

Considering the contrast between (1b) and (2), it seems that there should be an additional restriction affecting the occurrence of INOs in ES. Following intuitions in Martínez-García (to appear), in this paper we aim to show that cases like the ones in (2) can be accounted for if lexical constraints are taken into consideration. Additionally, we will show that the same lexical constraints govern the distribution of object bare nouns and INOs in ES.

Interestingly, a relation between the occurrence of bare nouns and null objects has been proposed for other languages, such as EP (Raposo 2004; Barbosa 2024), Hungarian and Polish (Ruda 2017), Japanese (Tomioka 2003) and ES (Martínez-García to appear). Concretely, Raposo (2004) proposes that the occurrence of null objects is less restricted in EP than in ES because the occurrence of object bare nouns is less restricted in EP. We will elaborate on this crosslinguistic difference and, based on corpus data, discuss the consequences for the analysis of null objects. Based on the correlation between the licensing of object bare nouns and INOs, we will propose an implicational hierarchy underlying the distribution of INOs crosslinguistically.

2 Indefinite object drop in Spanish

Let us first clarify what we refer to with the term *INO*. Crucially, INOs like the one in (3a) need to be distinguished from so-called cognate null objects in (3b), which also receive indefinite, non-specific readings. Unlike INOs, cognate null objects occur without discourse antecedents (i.e., they are non-anaphoric) and their interpretation is derived from the meaning of the root of the verb (Cummins & Roberge 2005). This paper focuses exclusively on INOs like the one in (3a).²

² As an anonymous reviewer correctly points out, two types of object drop are proposed in Armstrong (2014): elided objects and null operator objects. This distinction is basically based on the claim that INOs in Spanish are island-sensitive. However, in this paper, we argue against this, following recent claims in the literature (see Verdecchia 2022; Martínez-García 2025, to appear on this issue). Thus, we consider the so-called elided objects and null operator objects in Armstrong (2014) to be the same.

(3) INOs vs. cognate null objects

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- a. De pequeño coleccionaba [sellos], pero ya no from little.MASC collect.IND.IPFV.3SG stamp.PL but now not colecciona Ø. collect.IND.PRS.3SG
 'When he was a child, he collected stamps, but now he does not collect any.' (Brucart 1999: 2803)
- b. Pedro fumó Ø en un restaurante ilegalmente.
 Pedro smoke.IND.PRF.3SG in a.MASC restaurant illegally
 'Pedro smoked in a restaurant illegally.'

Based on the assumption that ES clitics are by default definite and receive specific readings (Leonetti 2006), it is assumed that INOs are used in place of clitics when referring to indefinite antecedents (Campos 1986; 1999), as in (4b), contrary to (4a). That is, INOs occur where clitics cannot appear (Dimitriadis 1994). This correctly predicts that INOs are not possible in languages with partitive clitics, like Catalan, Italian and French (Clements 2006) because these languages (in contrast to ES) show a corresponding clitic for indefinite, non-specific contexts.

- (4) Indefinite object drop (ES)
 - a. A: ¿Compraste [el libro]? buy.IND.PRF.2SG the.MASC book 'Did you buy the book?'
 - B: *Sí, compré Ø. yes buy.IND.PRF.1SG 'Yes, I bought it.'
 - b. A: ¿Compraste [libros]?
 buy.IND.PRF.2SG book.PL
 'Did you buy books?'
 - B: Sí, compré Ø. yes buy.IND.PRF.1SG 'Yes, I bought some.'

(Campos 1986: 354)

The generalization that clitics are restricted to definite antecedents and INOs to indefinite antecedents has been refined based on examples like the ones in (5), showing that an indefinite, non-specific antecedent is compatible with an INO (see 5a), while an indefinite, specific antecedent is not (see 5b).

(5) *Specificity condition*

- a. A: ¿Compraste [pañuelos]? buy.IND.PRF.2SG handkerchief.PL 'Did you buy a handkerchief?'
 - B: Sí, compré Ø. yes buy.IND.PRF.1SG 'Yes, I bought it.'
- b. A: Traigo [un pañuelo].
 bring.IND.PRS.1SG a.MASC a handkerchief
 'I bring a handkerchief.'
 - B: *¿Me das Ø? to-me bring.IND.PRS.2SG 'Would you give it to me?'

The difference is that the INO in (5a) is a *property anaphor*, as it refers back to the property denoted by any sum of individuals referred to by means of the antecedent, while the one in (5b) denotes an *object* anaphor that takes a particular object as its referent (Keller & Lapata 1998). The definition of *property anaphor* amounts to the claim in Laca (2013) that the INO denotes a property. When the INO refers to a bare plural, it denotes a property of pluralities. In Laca (2013), the property is interpreted as a restrictive modifier of the verbal predicate and the relevant variable is bound under Existential Closure. This is what gives us the indefinite interpretation. Thus, we assume that *type anaphor* (Keller & Lapata 1998), *property anaphor* (Tomioka 2003; Laca 2013) and *identity of sense anaphor* (Bresnan 1971) are synonymous.

Note that in languages like English there are indefinite individual anaphors, as shown in (6a), which is an English variation of (5b). Here, the indefinite 'one' is also a property anaphor, but it cannot be replaced by an INO. Similar examples can be also found in Spanish, like that in (6b), where the INO has been substituted by the indefinite *unos* 'some'.

- (6) Property anaphor and 'one'
 - a. A: I brought a handkerchief.
 - B: Do not worry, I will buy one myself.
 - b. A: ¿Compraste pañuelos? buy.IND.PRF.2SG handkerchief.PL
 - B: Sí, compré unos. yes buy.IND.PRF.1SG some.MASC.PL

Examples like the one in (6b) also display indefinite readings and can be genuinely considered to behave as property anaphors, like INOs in Spanish. However, the difference between (6b) and (5a) is that the former can display a specific reading due to the presence of an explicit D (i.e., *unos* 'some'), contrary to the latter, which can only display non-specific readings. Thus, INOs always refer to the property and never to the object level, contrary to the indefinite pronoun *uno* 'one', which refers to an object that has the property of the antecedent. In other words, the indefinite pronoun *uno* 'one' displays object reference, while INOs display property reference. To capture that semantic difference, Spanish grammar displays at least two kinds of property anaphors: INOs referring to bare nouns, like the example in (5a), and nominal ellipsis, where D must be stranded, like the example in (6b). Although both cases behave as property anaphors, they display different grammatical properties (i.e., they are different phenomena).

Hence, INOs in ES can only behave as property anaphors, while clitics and indefinite *uno* 'one' behave as *object* anaphors. In other words, correferentiality is involved in (5b), while identity of sense anaphora is involved in (5a) (Grinder & Postal 1971; Hankamer & Sag 1976; Büring 2005; see Bresnan 1971; Depiante 2000 for discussion). That is why a clitic is preferred in (5b).³

Since INOs behave as property anaphors, bare nouns emerge as the most suitable 'candidate' for a referent of INOs, given that they receive indefinite, non-specific, existential readings (Laca 1996; 1999; 2013; Dobrovie-Sorin & Laca 2003), as shown in (7). Crucially, in similar contexts, clitics are not adequate, as shown in (8).

- (7) BNs and indefinite object drop
 - A: ¿Compraste [pañuelos]? buy.IND.PRF.2SG handkerchief.PL 'Did you buy handkerchiefs?'
 - B: Sí, compré Ø. yes buy.IND.PRF.1SG 'Yes, I bought some.'
- (8) BNs and clitics
 - a. [Películas divertidas], pocas veces (*las) vemos.
 film.PL fun.FEM.PL few.FEM.PL time.PL them.FEM.PL watch.IND.PRS.1PL
 'Fun films, we hardly ever watch some.'
 - b.[Paísesde África], ya(*los)habíamosvisitado.country.PLofAfricaalreadythem.MASC.PLAUX.IND.IPFV.1PLvisit.PTCP'African countries, we have already visited some.'

(Leonetti 2011: 15)

³ As an anonymous reviewer points out, the literature on the semantics of bare nouns refers to properties and kinds (Krifka et al. 1995). Since bare nouns cannot refer to kinds in (European) Spanish, we assume that they can only refer to properties, and so INOs.

However, a deeper examination of additional data raises further questions. As stated in Leonetti (2011), both clitics and INOs can be found in (9) to refer to bare nouns. Thus, the question arises: what distinguishes the interpretation of clitics from that of INOs in (9)?

(9) (Apparent) problematic cases

a. Unos problemas tienen [solución], v otros some.MASC.PL problem.PL have.IND.PRS.3PL solution and other.MASC.PL no (la) tienen. not (it.FEM) have.IND.PRS.3PL 'Some problems have a solution, but others do not.' [bibliografía], y b. He buscado no (la) AUX.IND.PRF.1SG search.PTCP literature and not (it.FEM) hay. there-is.IND.PRS.3SG 'I have searched for literature, but there is none.'

(Leonetti 2011: 5)

Following Leonetti (2011), the occurrence of the clitic triggers a generic interpretation. As stated in Laca (1996), bare nouns provide this context, as they display a close association with generic contexts, like habits, attitudes, tendencies, or dispositions. The condition that the occurrence of clitics triggers generic interpretations predicts the ungrammaticality of the sequence with the clitic in (10), given that the context does not enable a generic interpretation (Leonetti 2011; see Espinal 2010: 992 for more data; see Laca 1996: 247 for further insights).⁴

(10) BNs and clitics
 [Tiburones ballena], no conseguimos ver(*los).
 shark.PL whale not be-able.IND.PRF.1PL see.INF(-them.MASC.PL)
 'Whale sharks, we could not see any.'

(Leonetti 2011: 16)

Examples like the one in (11a) pose a further challenge. Despite the context allowing for a generic reading, the use of the clitic remains prohibited. Leonetti (2011) addresses this apparent problem by appealing to the selectional properties of the predicate selecting the clitic. The predicate *proteger* 'protect' only licenses definite DPs. This selectional property is incompatible with the indefinite, non-specific interpretation of the topic selected by the clitic *los* 'them' (i.e., *tiburones ballena* 'whale sharks'). On the contrary, the example in (11b) is grammatical, since the verb *ver* 'see' can select object bare nouns.

⁴ Note that, according to Laca (1996), bare plurals can be related to generic contexts, but contrary to true generic DPs, cannot refer to the totality of representatives of a species, but only to a part of them. Thus, the quantification associated with bare nouns is the existential quantification, not the universal quantification, which is only associated with definite DPs in Spanish.

(11) (Apparent) problematic cases

- a. *[Tiburones ballena], es necesario protegerlos.
 shark.PL whale be.IND.PRS.3SG necessary protect.INF-them.MASC.PL
 'Whale sharks, it is necessary to protect them.'
- b. [Tiburones ballena], no es fácil ver(los).
 shark.PL whale not be.IND.PRS.3SG easy see.INF(-them.MASC.PL)
 'Whale sharks, in this part, it is not easy to see any.'

(Leonetti 2011: 16)

To sum up, INOs relate to indefinite, non-specific antecedents and behave as property anaphors. Their antecedents are indefinite, non-specific phrases, typically *bare nouns* (henceforth, BN). BNs are exceptionally related to clitics if a generic interpretation is available.

Crucially, the availability of object BNs can be determined by the properties of the predicate. In the next sections, we will have a closer look at the interpretive properties and distribution of object BNs in ES and establish a strict relation between the availability of object BNs and INOs.

3 Object bare nouns in Spanish

In this section, we focus on the interpretation and distribution of object BNs in ES. While BNs are prohibited in subject position in ES (under 'neutral' intonation patterns), as opposed to English (see Carlson 1977; Suñer 1982 for an overview), they can occur in object position. It has been mentioned in the literature that BNs receive indefinite, non-specific readings in ES, like INOs. Contrary to English BNs, Spanish BNs cannot receive kind readings (see Carlson 1977; Heim 1982; Krifka et al. 1995 on English; Laca 1996; 1999; 2013 on Spanish; Dobrovie-Sorin & Laca 2003 on Romance). Additionally, BNs have been said to refer to properties but not to individuals, as they do not refer to specific tokens in the world (see Dobrovie-Sorin & Laca 2003; McNally 2004 on BNs in Romance). This distinguishes BNs from indefinites in ES.

Some approaches analyze object BNs as incorporated nouns, given that they share properties with object BNs in incorporation languages, like Frisian and Greenlandic (Masullo 1996; Espinal & McNally 2010; Martí 2011). Following these approaches, object BNs are interpreted as modifiers of the verb. Predicates with BNs do not semantically select the object BN but rather allow it to modify the interpretation of the verb by restricting the properties of the object. Thus, object BNs are syntactic arguments but not semantic arguments. This analysis has been extended to cognate objects and INOs (see Martí 2011; Armstrong 2014 for details). We assume with Espinal & McNally (2008; 2010) that, firstly, bare singulars are different from bare plurals and mass nouns, since they display different grammatical properties and, secondly, that bare

singulars are semantically but not syntactically incorporated into the verb, given that dislocation is possible, contrary to expected (see section 3.1).

Although all object BNs share basic properties, they differ in the types of predicates that permit them (Dobrovie-Sorin & Laca 2003). Some predicates do not allow for BNs at all, while others only allow for a specific kind of object BN and still others allow for all types of object BNs. According to the literature (Laca 1996; 1999; 2013; Dobrovie-Sorin & Laca 2003), Spanish displays three types of BNs: *bare singulars* (henceforth, BS), *mass nouns* (henceforth, MN) and *bare plurals* (henceforth, BP), which will be discussed in this section.

3.1 Bare singulars

As noted in Espinal & McNally (2008; 2010) and Espinal (2010), BSs are complements of a restricted set of predicates. In contrast, BPs are allowed by a broader range of predicates. While predicates that select BSs also allow for BPs and MNs, the reverse is not necessarily true.

BSs display singular grammatical forms but do not always denote individuals. According to Espinal (2010), they are interpreted as entities that lack a specification of singularity or plurality (i.e., they do not commit the speaker to a particular number of entities). Some examples of BSs are given in (12). The proposition in (12a) describes a situation where the speaker is looking for apartments in a general sense (whether one or more). The same applies to (12b). That is why BSs have been claimed to be number neutral (Espinal 2010).

(12) Examples of BSs

- a. Estoy buscando piso.
 AUX.IND.PRS.1SG search.GER flat
 'I am looking for an apartment.'
- b. Juan necesitaba ayudante.
 Juan need.IND.IPFV.3SG assistant
 'Juan needed an assistant.'

(Bosque 1996: 35)

Regarding the selectional properties of the predicate, according to Espinal & McNally (2008; 2010), predicates allowing for object BSs belong to a restricted class of verbs that typically denote a 'have'-relation, where the subject possesses, contains, or experiences the object entity (see den Dikken 1997 on the syntax of possession). According to Espinal & McNally (2008; 2010), this class of predicates belongs to the so-called "characterizing 'have'-predicates".

Characterizing 'have'-predicates not only include verbs of having in a strict sense, such as *tener* 'have', as in (13c). They also include intensional transitive verbs that entail a relation

that could be expressed via a verb of having in the relevant possible world, such as *necesitar* 'need' and *buscar* 'look for', as in (13a) and (13d), and extensional transitive verbs that entail a possessive or locative relation, such as *llevar* 'carry', as in (13b).

- (13) Examples of BSs
 - a. Necesito canguro.
 need.IND.PRS.1SG babysitter
 'I need a babysitter.'
 - b. Lleva sombrero.
 wear.IND.PRS.3SG hat
 '(S)he wears a hat.'
 - c. Tiene apartamento. have.IND.PRS.3SG apartment '(S)he has an apartment.'
 - d. Busco piso. search.IND.PRS.1SG flat 'I am looking for a flat.'

(Espinal & McNally 2008: 3-4)

One could think that the examples in (13) are some kind of fixed expressions, since the BS and the verb must be adjacent (e.g., *??Busco por la mañana piso* 'I am looking for a flat in the morning'). Recall that, if this were the case, dislocation would not be possible, contrary to facts (e.g., *Canguro, me dijeron que necesitaban* 'As for a babysitter, they told me that they needed one', *Sombrero, parece que no llevaba* 'As for a hat, it seems (s)he did not wear any'). This also goes against the claim that BSs are syntactically incorporated into the verb, as stated in Masullo (1996). Thus, although the predicate and the BS stand in a close semantic relation, and not every noun can be used in this context, we claim that the sequences in (13) are not fixed expressions nor bear syntactically incorporated, since they are not semantic arguments but modifiers of the verb. The proposed semantics builds upon Dayal's (2003) pseudo-incorporation, composed of a lexical rule eliminating the internal argument of the relevant verbs while retaining participant-related entailments, and a compositional rule connecting the property signified by the BN with the verb to describe that participant.⁵

In addition to the restriction on the predicates that allow for BSs, there is a constraint on the interpretation of the resulting sentence. Specifically, the predicate must denote a characterizing property of the subject. A property is characterizing if it can be used to make "a significant

⁵ We refrain from delving into details, since it is tangential to our discussion (see Espinal & McNally 2010: 16–29 for further insights).

distinction in a particular context between individuals that have the property and those that do not" (Espinal & McNally 2008: 3). Predicates like *necesitar* 'need' and *buscar* 'look for' denote a relation between two individuals (the one who needs or seeks something and the one which is needed or sought). In this sense, the proposition of (13c) means '(S)he is an apartment-owner', the proposition of (13d) means 'I am an apartment-seeker', and so forth.

Predicates that do not denote a relation between two individuals do not allow for BSs in ES, according to Espinal & McNally (2010). For example, predicates like *desear* 'desire' and *querer* 'want' denote situations, thus they do not allow for BSs (e.g., **Deseo piso* 'I desire a flat', **Quiero piso* 'I want a flat') (see Espinal & McNally 2008: 14–16 for further discussion).

Espinal & McNally (2008; 2010) also mention consumption or activity predicates (e.g., *escribir* 'write', *comprar* 'buy', *vender* 'sell', etc.) as predicates that do not allow for BSs. Thus, in spite of the fact that reading books or selling newspapers might be considered institutionalized activities, both predicates are ill-formed with BSs, as shown in (14).

- (14) Ungrammatical sentences with BSs
 - a. ??Juan leía libro.
 Juan read.IND.IPFV.3SG book
 'Juan read a book.'
 - b. ??María vende diario.
 María sell.IND.PRS.3SG diary
 'María sells a newspaper.'

(Espinal & McNally 2010: 13)

Regarding the ability of BSs to antecede referential expressions, they cannot appear as antecedents of *object* anaphors. Thus, the clitic *lo* 'it' cannot be used in (15) due to the fact that its number and definite features require a definite, singular antecedent, which *piso* 'apartment' does not provide (Espinal 2010).

(15)	Object anaphor						
	??Tengo	[piso].	Lo	tengo	en	Barcelona.	
	have.IND.PRS.1SG	flat	it.MASC	have.IND.PRS.1SG	in	Barcelona	
	'I have an apartment. I have it in Barcelona.'						

However, when an INO (i.e., a property anaphor) is used, the example is natural, as in (16). This shows that BSs serve as referents of property anaphors. The INO of *encontrar* 'find' in (16a) is interpreted as any sum of the individuals denoted by *piso* 'flat'. Specifically, the truth value of (16a) is satisfied if at least one flat was found, regardless of whether more flats were found. The same applies to (16b). Thus, INOs in (16) 'inherit' the interpretation of the BS.

- (16) *Property anaphor*
 - a. Buscamos [piso], y ayer encontramos Ø. search.IND.PRS.1PL flat and yesterday find.IND.PRF.1PL
 'We are looking for a flat and we found one yesterday.'
 - b. Tengo [piso], sí. ¡Tengo Ø en Barcelona! have.IND.PRS.1SG flat yes have.IND.PRS.1SG in Barcelona 'I have an apartment, yes. I have one in Barcelona!'

In sum, our view aligns with Espinal & McNally (2008; 2010) and Espinal (2010) regarding the lexical constraints on the occurrence of BSs in ES. Specifically, the basic lexical constraint operating on the licensing of BSs in ES is related to characterizing 'have'-predicates.

3.2 Bare plurals

In contrast to BSs, BPs display plural grammatical forms and are interpreted as plural entities. Specifically, they refer to sets of entities and denote domains or constraints of quantification (Laca 1996). Predicates allowing for object BPs typically denote sets of entities, reflecting the action or state described by the verb. Some examples of BPs are given in (17).

- (17) Examples of BPs
 - a. Pedro fuma puros.
 Pedro smoke.IND.PRS.3SG cigar.PL
 'Pedro smokes cigars.'
 - b. Juan se ganaba la vida lavando coches. Juan SE win.IND.IPFV.3SG the.FEM life wash.GER car.PL
 'Juan washed cars for a living.'
 - c. Pedro sabe arreglar relojes. Pedro know.IND.PRS.3SG fix.INF clock.PL 'Pedro knows how to fix watches.'

(Laca 1996: 246-247)

The occurrence of BPs is less restricted than that of BS (Espinal 2010). All the predicates mentioned in the previous section, which allow for BSs, also allow for BPs. Unlike BSs, BPs are not restricted to characterizing 'have'-predicates. However, this does not mean that object BPs are possible with all predicates. Interestingly, psychological predicates, such as those in (18), change-of-state predicates (especially when the subject is not agentive), such as those in (19), and animacy restricted predicates, such as that in (20), do not allow for BPs (Laca 1996).

(18) Psychological predicates

- a. *Pedro {admiraba/ despreciaba} deportistas.
 Pedro admire.IND.IPFV.3SG despise.IND.IPFV.3SG athele.PL
 'Pedro {admired/hated} athletes.'
- b. *María {adoraba/ detestaba} complicaciones.
 María adore.IND.IPFV.3SG loathe.IND.IPFV.3SG complication.PL
 'María {adored/loathed} complications.'

(Laca 1996: 263)

(19) Change-of-state predicates

- a. *El sol de agosto quema campos. the.MASC sun of August burn.IND.PRS.3SG field.PL 'The August sun burns fields.'
- b. *Las pesadillas asustan niños.
 the nightmare.PL scare.IND.PRS.3PL child.MASC.PL
 'Nightmares scare children.'
- c. *La sal absorbe manchas de vino. the.FEM salt absorb.IND.PRS.3SG stain.PL of wine 'Salt absorbs wine stains.'

(Laca 1996: 263)

(20) Animacy restricted predicates

*Los soldados pegan enemigos. the.MASC.PL soldier.PL hit.IND.PRS.3PL enemy.MASC.PL 'Soldiers hit enemies.'

BPs do not serve as objects of psychological predicates because these predicates select specific entities (e.g., *Pedro admiraba a los deportistas* 'Pedro admired the athletes'), due to the presupposition of the existence of individual entities that they entail (Carlson 1977; Laca 1996; Seres & Espinal 2018).

Additionally, BPs introduce non-delimited entities but change-of-state verbs must select delimited entities. Given that non-delimited entities cannot undergo a change of state, change-of-state verbs must select definite entities (e.g., *El sol de agosto quema los campos* 'The August sun burns the fields').

Finally, given that predicates like *pegar* 'hit' are restricted to occur with differential object marking (e.g., *Los soldados pegan a los enemigos* 'Soldiers hit enemies'), the occurrence of object BNs is not possible. Differential object marking is found in definite, specific contexts, while BNs receive indefinite, non-specific readings.

Contrary to BSs, BPs can serve as antecedents of *object* anaphors that represent "the maximal sum of plural individuals referred to by the BP" (Espinal 2010: 992). In (21), the clitic takes the *object* anaphor reading.

(21) Object anaphor

Tengo[pisos]. LostengoenBarcelona.have.IND.PRS.1SGflat.PLthem.MASC.PLhave.IND.PRS.1SGinBarcelona'I have apartments. I have them in Barcelona.'

Like BSs, BPs can also appear as antecedents of property anaphors. Provided that the two predicates allow for BPs, an INO in (22) is permitted and takes the property anaphor reading. Contrary to the reading obtained with clitics (i.e., *object* anaphors), like the one in (21), property anaphors do not represent maximal sums of individuals but existential interpretations.

- (22) Property anaphor
 - a. Buscábamos [pisos], y ayer encontramos Ø. search.IND.IPFV.1PL flat.PL and yesterday find.IND.PRF.1PL 'We were looking for potatoes and we found some yesterday.'
 - b. Buscábamos [patatas], y ayer compramos Ø. search.IND.IPFV.1PL potato.PL and yesterday buy.IND.PRF.1PL
 'We were looking for potatoes and we bought some yesterday.'

In sum, object BPs occur almost freely in ES, with the exception of psychological predicates, specific change-of-state predicates and animacy restricted predicates.

3.3 Mass nouns

MNs display singular grammatical forms, which might suggest similarity to BSs. However, despite their singular form, they cannot be interpreted as singular entities. As explained in Bosque (1996), MNs denote groups or constant sum of representatives. This means that MNs share more properties with BPs than with BSs. Some examples of object MNs are given in (23).

- (23) Examples of MNs
 - a. Quiero leche.
 want.IND.PRS.1SG milk
 'I want some milk.'
 - b. Guardé pan.
 keep.IND.PRF.1SG bread
 'I kept some bread.'
 - c. Compraré gasolina. buy.IND.FUT.1SG gas 'I will buy some gas.'

(Bosque 1996: 17)

Besides being interpreted as referring to plural entities, BPs and MNs exhibit further similarities. Notably, both accept comparative quantifiers (e.g., *más arroz* 'more rice', *menos puros* 'fewer cigars', *mucho arroz* 'many rice', *pocos puros* 'few cigars'), as opposed to BSs (e.g., **más mesa* 'more table', **menos libro* 'fewer book'). Additionally, both can function as predicates (e.g., *esto es agua* 'this is water', *aquello son puros* 'those are cigars'), as opposed to BSs (e.g., **esto es mesa* 'this is a table'). Finally, they can function as complements in nominal compounds (e.g., *guardapolvo* 'dust cap', *lavaplatos* 'dishwasher'), as opposed to BSs (e.g., **quitamancha* 'stain remover') (see Bosque 1996: 20–22 for further discussion). Regarding the selectional properties of the predicate, according to Bosque (1996) and Laca (1996; 1999), MNs are found within the same set of predicates as BPs (i.e., their occurrence is not possible in psychological, specific change-of-state and animacy restricted predicates either).

In sum, while all types of object BNs share certain properties, such as indefinite, non-specific readings, narrow scope, atelicity and property anaphora (Dobrovie-Sorin & Laca 2003), they crucially differ in their interpretation and the types of predicates that allow for them.

4 Correlating indefinite object drop and bare nouns in Spanish

In the previous chapters, we reviewed the basic conditions governing the occurrence of INOs according to the literature and the interpretation and distribution of object BNs in ES. This section aims to put object BNs and INOs together, showing that they share basic interpretive and syntactic properties in ES, thereby indicating a correlation between them.

From a semantic point of view, INOs and BNs share default indefinite, non-specific, existential readings. That is why INOs must refer to BNs and be interpreted as BNs. We follow Laca (2013), who offers a precise account of how INOs, which denote contextually salient properties, receive an existential interpretation. Essentially, the property is interpreted as a restrictive modifier of the verbal predicate and the relevant variable is bound under Existential Closure. This results in the indefinite interpretation, with mandatory narrow scope.

The first piece of evidence for the similarities between INOs and object BNs comes from their scopal properties. INOs are considered to be 'scopally inert' in ES (Martí 2011; Armstrong 2014). Concretely, they must take narrow scope with regard to other sentential operators, like negation. This is shown in (24), where the INO, preceded by negation, only takes narrow scope. The proposition in (24) means 'it is not the case that Juan took any part of the available fish' (*narrow scope*), but not 'there are some fish that Juan didn't grab' (*wide scope*).

(24) Scope relations

Había[pescado]enelbuffetlibre,peroJuannothere-is.IND.IPFV.3SGfishinthe.MASCbuffetfreebutJuannotcogióØ.grab.IND.PRF.3SG

'There were fish at the free buffet, but Juan did not grab any.'

- Narrow scope: 'It is not the case that Juan took any fish.'
- Wide scope: #'There are some fish that Juan didn't grab.'

Interestingly, the same restriction holds for object BNs (Laca 1996; 1999; Dobrovie-Sorin & Laca 2003). In (25), the BN only takes narrow scope with regard to negation. This suggests that there is a parallelism between INOs and object BNs regarding scope. Thus, in order to predict this property of INOs, they should be syntactically represented as BNs in ES.

(25) Scope relations
Juan no cogió pescado.
Juan not grab.IND.PRF.3SG fish
'Juan did not grab fish.'
- Narrow scope: 'It is not the case that Juan took any fish.'
- Wide scope: #'There are some fish that Juan didn't grab.'

There has been a large debate on the categorial nature of BNs. It has been claimed in the literature that BNs bear a null D (Longobardi 1994) or a null quantifier (Contreras 1996). Alternatively, they have been analyzed as nominal phrases without D (Dobrovie-Sorin & Laca 2003). We will pursue the latter account for the following reasons. The first piece of evidence comes from predication. With a full DP, as in (26b), the adjective can either modify the noun phrase or be interpreted as depictive. In (26a), with a BN, a depictive reading is not available.

- (26) Modification and predication
 - a. Me trajeron carne cruda.
 to-me bring.IND.PRF.3PL meat raw.FEM
 'They brought me raw meat.'
 - Me trajeron la carne cruda.
 to-me bring.IND.PRF.3PL the.FEM meat raw.FEM
 'They brought me the meat raw.'

This follows from the generalization that depictives are only possible with definite arguments (Demonte & Masullo 1999); i.e. when the argument they are combined with bears D (Landau 2010). Thus, BNs do not bear D in ES.⁶

Crucially, if INOs are not only interpreted but also syntactically represented as BNs, they should not be visible as subjects of predication, resembling cases like the one in (26a). Interestingly, the adjective *nuevos* 'new' in (27) cannot be interpreted as a depictive, but only as a modifier of the INO. Thus, the same grammatical restriction operates on ES BNs and INOs.

⁶ We abstain from addressing the issue of whether BNs are NPs or NumPs, as this is tangential to our discussion (see Espinal 2010: 986–991 for further insights). The crucial idea is that they lack D.

(27) Modification and predication
Pedí [libros] usados, pero solo tenían Ø ask-for.IND.PRF.1SG book.PL used.MASC.PL but only have.IND.IPFV.3PL nuevos.
new.MASC.PL
'I asked for second-hand books, but they only had new ones.'

In light of (27), it seems that INOs are not only interpreted but also represented as true object BNs. It follows that INOs do not bear D, just like BNs (see section 7).

In sum, object BNs and INOs share the following properties: (i) they receive indefinite, nonspecific, existential readings (related to property anaphors), (ii) they are not visible as subjects of predication (i.e., they lack D) and (iii) they take narrow scope with regard to operators. Thus, we conclude that the element filling the null object position is a BN, whose value is obtained from an antecedent via an identity condition. We assume that the identity condition is both syntactic and semantic in nature (see Merchant 2001; 2013 on this point).

Bearing the previous considerations in mind, it seems plausible to state that INOs essentially behave as object BNs in ES, the crucial difference being that INOs lack phonological content and must have an antecedent of the same type (see Laca 2013 on this issue). Hence, we suggest that the occurrence of INOs in ES must be subject to the same distributional restrictions reviewed for object BNs in previous chapters. Crucially, we propose that the same lexical restrictions of the predicate hold: for a given predicate to permit INOs in ES, it must be able to select object BNs. Given this proposal, we can now connect the occurrence of INOs and the occurrence of object BNs and formulate a first (tentative) hypothesis, illustrated in (28).

(28) Hypothesis (weak thesis)

If a predicate allows for object BNs, it will allow for INOs in Spanish.

Additionally, we suggest that, depending on the type of object BN that is permitted, there are three basic types of predicates permitting INOs in ES: (a) those that allow for INOs referring to all kinds of BNs, (b) those that exclusively allow for INOs referring to BPs and MNs and (c) those that do not allow for INOs. Hence, we suggest that there are three types of predicates in ES. Thus, a more fine-grained version of the hypothesis in (28) is given in (29).

(29) Hypothesis (strong thesis)

- a. If a predicate allows for BSs, it allows for INOs referring to any kind of BN.
- b. If a predicate allows for BPs and MNs, it allows for INOs referring to BPs and MNs.
- c. If a predicate does not allow for BNs, it does not allow for INOs.

Note that the hypothesis in (29) assumes, in line with claims in previous sections, that the occurrence of object BSs is highly restricted, while the occurrence of object BPs and object MNs

is almost free. This idea is illustrated in the scale in (30). The scale operates from left to right: if a predicate permits BSs, it will allow for BPs and MNs, since their occurrence is less restricted.

(30) Scale for BNs (ES)
Bare singulars > mass nouns / bare plurals
[+RESTRICTED] <----> [-RESTRICTED]

In the upcoming section, we explore the realization of INOs with the categories of predicates mentioned above and show a strict correlation between the occurrence of object BNs and INOs.

5 Towards a typology of predicates

In the previous sections, we showed that INOs and object BNs share basic interpretive and syntactic properties and suggested that there is a correlation between the occurrence of object BNs and INOs in ES.

In this section, we propose that there are three types of predicates regarding the licensing of object BNs. (i) Type A predicates are characterizing 'have'-predicates that allow for all kinds of object BNs (e.g., *encontrar* 'find', *llevar* 'carry', *necesitar* 'need', etc.). (ii) Type B predicates are essentially consumption and activity predicates that only allow for object BPs and object MNs (e.g., *comprar* 'buy', *comer* 'eat', *vender* 'sell', etc.). (iii) Type C predicates do not allow for any kind of object BNs. These include psychological predicates (e.g., *adorar* 'adore', *detestar* 'hate', etc.), specific change-of-state verbs (e.g., *quemar* 'burn', etc.) and verbs displaying animacy restrictions (e.g., *pegar* 'hit', etc.). This section illustrates each predicate type and correlates the occurrence of object BNs with the occurrence of INOs.

5.1 Type A predicates

There are predicates that permit any kind of object BNs, as shown above. Illustrative cases of this class of predicates are *encontrar* 'find', *llevar* 'carry', *necesitar* 'need'. As shown in (31), these predicates allow for BSs, BPs and MNs. These predicates, which are characterizing 'have'-predicates (Espinal & McNally 2008; 2010), belong to Type A predicates.

- (31) Examples of Type A predicates (ES)
 - a. Necesito {canguro/ leche/ cervezas}.
 need.IND.PRS.1SG babysitter milk beer.PL
 'I need a {baby-sitter/milk/beers}.'
 - b. Encontré {piso/ leche/ cervezas}.
 find.IND.PRF.1SG flat milk beer.PL
 'I found {a flat/milk/beers}.'

c. Llevo {coche/ leche/ cervezas} a la reunión. take.IND.PRS.1SG car milk beer.PL to the.FEM meeting 'I took {a car/milk/beers} to the meeting.'

Recall that, following the hypothesis in (29), we expect that these predicates allow for INOs freely, since they allow for all kinds of object BNs. Indeed, an exploratory corpus study using the oral subcorpus of *CORPES XXI* (Spanish Royal Academy) reveals that INOs can appear with the predicate *necesitar* 'need'. Specifically, INOs with this predicate can refer to BSs, as in (32a), BPs, as in (32b), and MNs, as in (32c).

(32) CORPES XXI examples of INOs with Type A predicates

- a. Podía salir a la calle sin [abrigo], ล AUX.IND.IPFV.1SG go-out.INF to the.FEM street without coat at cualquier hora. Eh, y no necesitaba Ø. whatever time eh and not need.IND.IPFV.1SG 'I could go outside without a coat, at any time. Hey, and I did not need any.'
- b. Los niños necesitan [espacios de tele y de the.MASC.PL child.MASC.PL need.IND.PRS.3PL space.PL of TV and of jugar]. Yo veo que necesitan Ø. play.INF I see.IND.PRS.1SG that need.IND.PRS.3PL 'Children need TV and play spaces. I see they need some.'
- c. Mi hermano cocina mucho con [arroz]. Es my brother.MASC cook.IND.PRS.1SG much with rice be.IND.PRS.3SG verdad que siempre necesita Ø. true that always need.IND.PRS.1SG 'My brother often cooks with rice. It is true he always needs some.'

Additionally, INOs can appear with the predicate *encontrar* 'find'. Specifically, INOs with this predicate can refer to BS, as in (33a), BPs, as in (33b), and MNs, as in (33c).

(33) CORPES XXI examples of INOs with Type A predicates

- a. Mi nuera no tenía [guardería] para la my daughter-in-law not have.IND.IPFV.3SG daycare for the.FEM niña. encontró Ø. v no child.FEM and not find.IND.PRF.3SG 'My daughter-in-law did not have a daycare for the child and did not find any.' b. Es necesario añadir [salchichas]. Menos mal que
- be.IND.PRS.3SG necessary add.INF sausage.PL less bad that al final encontré Ø. at-the.MASC end find.IND.PRF.1SG 'It is necessary to add sausages. Fortunately, I found some.'

c. Quería añadir [leche], pero no he encontrado want.IND.IPFV.1SG add.INF milk but not AUX.IND.PRF.1SG find.PTCP Ø.

'I wanted to add some milk, but I did not find any.'

INOs are also possible with the predicate *llevar* 'carry'. Specifically, INOs with this predicate can again refer to BS, as in (34a), BPs, as in (34b), and MNs, as in (34c).

(34)CORPES XXI examples of INOs with Type A predicates [coche]? Yo creí a. ¿Llevabas llevabas que no take.IND.IPFV.2SG car Ι think.IND.PRF.1SG that not take.IND.IPFV.2SG Ø. 'Did you take the car? I thought you did not take it.' dijo: [fotografías]». Yo le b. Y «traed and say.IND.PRF.3SG bring.IMP.2PL photo.PL Ι to-him.MASC llevé Ø. bring.IND.PRF.1SG 'And (s)he said: "bring some photos". I brought some for him/her.' c. Llevamos [comida]. A mi marido v al take.IND.PRS.1PL food to my husband and to-the.MASC otro chico les gusta, llevamos y other.MASC guy.MASC to-them.MASC.PL like.IND.PRS.3SG and take.IND.PRS.1PL Ø. 'We took food. My husband and the other guy like it, so we took some.'

As illustrated in the examples above, Type A predicates demonstrate the ability to allow for any kind of INOs, since they permit any kind of object BNs. Consequently, it is quite improbable to find ungrammatical cases of INOs with these predicates.

5.2 Type B predicates

Certain predicates permit BPs and MNs but reject BSs (35). Illustrative cases are predicates that cannot behave as characterizing 'have'-predicates, such as consumption and activity verbs like *comprar* 'buy', *comer* 'write' and *vender* 'sell'. These Type B predicates cannot be interpreted as characterizing, thus they allow for BPs and MNs but are incompatible with BSs (Espinal & McNally 2008; 2010).

(35) Examples of Type B predicates (ES)

 a. He comprado {cervezas/ leche/ *corbata}.
 AUX.IND.PRF.1SG buy.PTCP beer.PL milk tie
 'I have bought {beers/milk/a tie}.'

- comido {lentejas/ cebolla/ *patata}.7 b. He AUX.IND.PRF.1SG eat.PTCP lentil.PL onion potato 'I have eaten {lentils/onion/a potato}.'
- c. Vendo {cervezas/ leche/ *diario}. sell.IND.PRS.1SG beer.PL milk diary 'I sell {beers/milk/a diary}.'

Following the hypothesis in (29), we expect that these predicates only allow for INOs referring to BPs and MNs. Indeed, only some INOs appear with the predicate *comprar* 'buy'. In the corpus, we find INOs referring to BPs, as in (37a), and MNs, as in (37b). We illustrate the incompatibility of this predicate with BSs in (36), based on introspective judgment.

- (36) Ungrammatical sentence *Ayer llevaba [corbata]. Compré Ø en la semana yesterday wear.IND.IPFV.1SG tie buy.IND.PRF.1SG the.FEM week in de la moda. of the.FEM fashion 'I wore a tie yesterday. I bought it at the fashion week.'
- (37)CORPES XXI examples of INOs with Type B predicates a. Durante el año, no quiero [boletos]. Compro during the.MASC year not want.IND.PRS.1SG ticket.PL buy.IND.PRS.1SG Ø en Navidad. Christmas in 'During the year, I do not want tickets. I buy some at Christmas.' b. Ahora no se lleva ir por [pescadito fresco]. Pues vo not SE carry.IND.PRS.3SG gO.INF for fish.MASC fresh.MASC so now
 - compré Ø para hoy. buy.IND.PRF.1SG for today 'Nowadays it is not common to take fresh fish. But I bought some for today.'

This holds true for the predicate *comer* 'eat' as well. Specifically, INOs with this predicate cannot refer to BSs, as in (38), but can refer to BPs, as in (39a), and MNs, as in (39b).

Ι

⁷ Some native speakers might think that the example with the bare singular is natural in Spanish. In fact, it is common to find utterances like Hoy he comido patata 'Today I ate potato'. However, the BN patata 'potato' is not interpreted as a singular count noun in this example, but as a MN (see Espinal 2010). Thus, the sentence is parallel to those like Hoy he bebido vino 'Today I drank some wine'. That is why it is possible in this sentence. Hence, it is necessary to distinguish between the bare singular interpretation of this noun (which is impossible with the predicate comer) and its MN interpretation (which is possible with this predicate).

(38) Ungrammatical sentence

*Tenía [patata], pero he comido Ø. have.IND.IPFV.1SG potato but AUX.IND.PRF.1SG eat.PTCP 'I had a potato, but I have eaten it.'

(39) CORPES XXI examples of INOs with Type B predicates

- a.
 Había
 [filetes]
 en
 el
 frigorífico, así que

 there-is.IND.IPFV.3SG
 steak.PL
 in
 the.MASC
 fridge
 so
 that

 comí
 Ø.
 eat.IND.PRF.1SG
 eaters one steaks in the fridge, so I ate some.'
 in
 the some.'
 - b. Antes comían [carne], pero ya hace un tiempo que before eat.IND.PRF.3PL meat but already ago a.MASC time that no comen Ø.
 not eat.IND.PRS.3PL
 'Before, they used to eat meat, but they have not eaten any for some time now.

Similarly, the predicate *vender* 'sell' follows the same pattern. INOs with this predicate cannot refer to BSs, as in (40), but can refer to BPs, as in (41a), and MNs, as in (41b).

(40) Ungrammatical sentence
*Antes llevaba [abrigo], pero luego vendí Ø.
before wear.IND.IPFV.1SG coat but later sell.IND.PRF.1SG
'Before I used to wear a coat, but I sold it later.'

(41) CORPES XXI examples of INOs with Type B predicates

- a. No me dijeron si quedaban [entradas] o no, pero yo not to-me tell.IND.PRF.3PL if be-left.IND.IPFV.3PL ticket.PL or not but I vendo Ø.
 sell.IND.PRS.1SG
 'They did not tell me if there were some tickets left, but I sell some.'
- b. Si quieres [oro], dímelo. Yo vendo Ø. if want.IND.PRS.2SG gold tell.IMP.2SG-me-it.NEUT I sell.IND.PRS.1SG 'If you want some gold, let me know. I sell some.'

Additionally, example (42) illustrates that BSs only serve as an antecedent of an INO if both predicates (e.g., *buscar* 'look for' and *encontrar* 'find' in this case) are characterizing 'have'-predicates. If the second verb does not belong to this class of predicate, an INO cannot occur, as in (42). The example in (42) is ungrammatical because *reservar* 'book' belongs to Type B predicates (i.e., it cannot allow for BSs), thus the INO cannot be interpreted as *piso* 'flat'.

(42)	Ungrammatical sentence					
	*Buscábamos	[piso],	у	ayer	reservamos	Ø.
	search.IND.IPFV.1PL	flat	and	yesterday	reserve.IND.PRF.1PL	
	'We are looking for a flat and we found one yesterday.'					

Thus, Type B predicates allow for INOs referring to BPs and MNs, since they only permit BPs and MNs. Hence, it is conceivable that ungrammatical instances may arise with INOs referring to BSs with this kind of predicates.

5.3 Type C predicates

Finally, there are predicates that do not permit object BNs. These predicates are psychological predicates like adorar 'adore', detestar 'hate', change-of-state verbs like quemar 'burn' and asustar 'scare' and animacy restricted predicates, such as pegar 'hit'. For the reasons mentioned in the preceding chapters, these predicates do not allow for object BNs, as shown in (43).

book

- (43) Examples of type C predicates (ES) a. *Pedro detestaba {deportistas/ leche/ libro}. Pedro loathe.IND.IPFV.3SG athlete.PL milk 'Pedro loathed {athletes/the milk/a book}.'
 - b. *El sol de agosto quema campos. the.MASC sun of August burn.IND.PRS.3SG field.PL 'The August sun burns fields.'
 - c. *Las pesadillas asustan niños. the.FEM.PL nightmare.PL scare.IND.PRS.3PL child.MASC.PL 'Nightmares scare children.'
 - d. *Los soldados pegan enemigos. the.MASC.PL soldier.PL hit.IND.PRS.3PL enemy.MASC.PL 'Soldiers hit enemies.'

Following the hypothesis in (29), we expect that these predicates do not allow for any kind of INOs, since they do not permit any kind of object BN. Indeed, INOs with this kind of predicate do not occur in the corpus and, according to introspective judgment, cannot refer to BSs, as shown in (44a), BPs, as in (44b), and MNs, as in (44c).

(44) Ungrammatical sentences

> a. *Teníamos [buenos deportistas]. El seleccionador have.IND.IPFV.1PL good.MASC.PL athlete.PL the.MASC coach.MASC adoraba Ø. love.IND.IPFV.3SG

- b. *María no [compró zanahorias], porque detesta Ø. María not buy.IND.PRF.3SG carrot.PL because hate.IND.PRS.3SG 'María did not buy carrots, because she hates them.'
- c. *Teníamos [campos maravillosos], pero el sol de agosto have.IND.IPFV.1PL field.PL great.MASC.PL but the.MASC sun of August quemó Ø.
 burn.IND.PRF.3SG
 'We had great fields, but the August sun burned them.'

Thus, the predicted correlation emerges between indefinite object drop and the distribution of object BNs in ES: Type A predicates allow for INOs referring to any kind of BN, Type B predicates permit INOs referring to BPs and MNs, while ruling out INOs referring to BSs, and Type C predicates do not allow for any kind of INOs.

We propose that the variation found with regard to INOs and object BNs in ES reflects a universal implicational hierarchy. Concretely, languages with less restricted distribution of BNs would be more likely to allow for INOs. This will be illustrated for EP in the upcoming section.

6 Extending the proposal to indefinite object drop in Portuguese

As mentioned in section 1, EP differs from ES with regard to definite object drop, which is licensed in EP but not in ES. The question arises, whether EP is also more permissive than ES with INOs and whether these differences can be related to the licensing of BNs in EP.

According to previous literature, EP differs in two respects from ES when it comes to object BNs (Barbosa, Müller & Oliveira 2001). First, it is claimed that BNs in EP can be interpreted as kinds, in contrast to ES (Barbosa et al. 2001; Raposo 2004), as shown in (45) and (46).

(45) Kind readings of BNs (EP)
Adoro gatos (siameses).
love.IND.PRS.1SG cat.MASC.PL (Siamese.MASC.PL)
'I adore (Siamese) cats.'

(Barbosa et al. 2001: 4)

(46) Kind readings of BNs (ES)
*Adoro gatos (siameses).
love.IND.PRS.1SG cat.MASC.PL (Siamese.MASC.PL)
'I adore (Siamese) cats.'

Note that examples (45) and (46) include psychological predicates, which are incompatible with BNs in ES (see section 5.3). In section 6.3, we will argue that the crucial difference between EP and ES concerns the availability of BNs with this type of predicates in EP.

Second, some authors claim that EP does not allow for BSs, concluding that EP "would never license a singular count noun in a bare form in argument position" (Brito & Lopes 2016: 268). This is illustrated in (47). However, example (47b) includes a perception verb like *ver* 'see', which, according to our typology of predicates, belongs to Type B predicates and is therefore expected to not occur with BSs. Hence, the ungrammaticality of (47b) does not necessarily exclude that EP does allow for BSs with characterizing 'have'-predicates (see section 6.1).

(47) BSs in EP

a. *Baleia é mamífero. whale be.IND.PRS.3SG mammal 'Whale is a mammal.'

b. *Vimos baleia.see.IND.PRF.1PL whale'We saw a whale.'

(Oliveira & Silva 2007: 227)

In the next sections, we will explore the distribution of BNs and INOs in EP, in order to ascertain whether the correlation established for ES is true for EP as well. We expect that INOs in EP are less constrained compared to those in ES, based on examples like (45).

6.1 Type A predicates

As explained in the preceding section, characterizing 'have'-predicates belong to the category of Type A predicates. These predicates take BSs, BPs and MNs as objects in ES. The same holds true for EP, as shown in (48). Some EP corpus examples are given below with the verbs *levar* 'take', *procurar* 'look for' and *trazer* 'bring'.

(48) Examples of Type A predicates (EP)

a.	Se quiseres	levar	[guitarra]	hoje,	leva		
	if want.SUBJ.FUT.2SG	take.INF	guitar.MASC.SG	today	take.IMP.2SG		
	[disquete]. (DI_61LM23b)						
	disk						
	'If you want to take a guitar today, take a floppy disk.'						
b.	Levavam [qu	eijo],	levavam	[]	oananas],		
	take.IND.IPFV.3PL che	ese.MASC.S	G take.IND.IPFV	.3pl ba	ananas.FEM.PL		
	levavam [doce]. (CDR31-3)						
	take.IND.IPFV.3PL jam.MASC.SG						
	'They took some cheese, they brought bananas, they brought jam.'						
c.	Eu procuro	[empre	ego]. (DI_55LF23b)			
	I look-for.IND.PRS.1SG job.MASC.SG						
	'I am looking for a job.'						

- d. E depois foi a partir daí que eu comecei a and later be.IND.PRF.3SG from-there that I begin.IND.PRF.1SG to procurar [médicos]. (DI_147BF03ab) look-for.INF doctor.MASC.PL
 'And then it was from there that I started looking for doctors.'
- e. E nesta altura já estamos a procurar [roupa] and in-this.FEM time already be.IND.PRS.1PL to look-for.INF clothes.FEM.SG fora de Nova Iorque. (DI_46LM35a) outside of New York
 'And by now we are looking for clothes outside New York.'
- f. Porque ele vinha estafado fim-de-semana ao because he come.IND.IPFV.3SG tired.MASC at-the.MASC weekend às tantas ainda trazia [trabalho] com sometimes yet bring.IND.IPFV.3SG work.MASC.SG with ele. (DI_122BF23ab) him 'Because he would come home tired at the weekend and sometimes even bring some work with him.'
- g. Eu trouxe [medicamentos] para seis meses. (DI_144BM05a)
 I bring.IND.PRF.1SG medicine.MASC.PL for six month.PL
 'I brought medicine for six months.'

As previously discussed, EP is generally thought not to allow BSs in object position. However, corpus data reveal instances where this is indeed possible (48a, c, f). Leaving aside the question of whether these BS objects have a singular interpretation, as proposed in Soares (2018: 142) for EP, or whether they are interpreted as MNs, as proposed for Brazilian Portuguese in Pires de Oliveira & Rothstein (2011), the examples show that this type of predicates allows for BSs, in a comparable way as in ES (see section 5.1.). Note that, although expressions like *procurar emprego* 'search for a job' can be viewed as fixed expressions, the same is not true for *levar guitarra* 'bring a guitar' or *trazer trabalho* 'bring some work'. Even if some of the BSs are part of so-called fixed expressions, this does not explain why this kind of expressions with BSs typically or only involves this specific type of predicates.

In line with the hypothesis proposed in (29), we expect that these predicates in EP also readily permit the use of INOs, mirroring the findings in ES. Indeed, an examination of corpus data collected from the *Museu de Pessoa* (Almeida et al. 2000), *Cordial Sin* (Martins 2000) and *DILeB* (Rodrigues 2022) corpora supports this assertion, revealing INOs with the verb *procurar* 'look for'. Our data show that they can take a BS (49a) and a BP (49b) as an antecedent (see Kerezova 2024 for a comprehensive corpus analysis of null objects in EP).

(49) EP corpus examples of INOs with Type A predicates

[A]ndei à procura de [emprego] em Lisboa, por a. go.IND.IPF.3SG to-the.FEM search of job.MASC.SG in Lisbon for vários sítios do país [...] lembrei-me various.MASC.PL place.PL of-the.MASC country remember.IND.PRF.1SG altura de procurar Ø nas universidades cá na em in-the.FEM time of search.INF in-the.FEM university.PL here in Portugal. (E083-PT-94) Portugal 'I looked for jobs in Lisbon, in various places in the country [...] I remembered at

'I looked for jobs in Lisbon, in various places in the country [...] I remembered at the time looking for a job in universities here in Portugal.'

b. E ela ainda os ajudou, ainda aleitou them.MASC.PL help.IND.PRF.3SG yet and she yet suckle.IND.PRF.3SG -também nunca mais então deu [porcos], nunca mais never more then give.IND.PRF.3SG pig.MASC.PL never more also Ø. (CDR16-4) procurou look-for.IND.PRF.3SG 'And she still helped them, she still suckled them —she never gave any more pigs, she never looked for any pigs.'

Additionally, the use of INOs extends to the verb *trazer* 'bring'. As in the previous cases, the INOs of this verb can refer to BSs, BPs and MNs, as shown in (50).

(50) EP corpus examples of INOs with Type A predicates

- a. Mas ah isso traz [precariedade] vida de tantas na but ah this bring.IND.PRS.3SG precariousness.FEM.SG in-the.FEM life of many pessoas que é... Sim traz... Traz Ø people that be.IND.PRS.3SG yes bring.IND.PRS.3SG bring.IND.PRS.3SG porque não faz bem a ninguém. (DI 51LM12b) because not do.IND.PRS.3SG good to none 'But this brings precariousness to the lives of so many people... Yes, it does... It brings precariousness because it does not do anyone any good.'
- b. Não faz [rabanadas], não faz [aletria], é not do.IMP.2SG sweet-toast.FEM.PL not do.IMP.2SG vermicelli.FEM.SG be.IND.PRS.3SG naquele tempo. [...] Esta minha nora lá só me only in-this.MASC time this my daughter-in-law there to-me traz Ø [...]. (E065-PT-229) bring.IND.PRS.3SG

'Do not make French toast, do not make sweets, it is just in that time. [...] This daughter-in-law of mine brings me some there.'

andava c. 0 meu pai aí nas fragatas, a ir the.MASC my father go.IND.IPFV.3SG there in-the.FEM frigate.PL to go.INF Ø para cá buscar [carga] a Lisboa, a trazer a levar е take.INF cargo.FEM.SG in Lisbon to bring.INF to here and to take.INF Ø para lá. (E107-PT-14) to there

'My father was out there on the frigates, picking up cargo in Lisbon, bringing some here and taking some there.'

The corpus data also reveal instances of INOs with the verb *levar* 'take'. The cases of INOs with this predicate refer to BPs, as in (51a), and MNs, as in (51b).

(51) EP corpus examples of INOs with Type A predicates

a. Se tiver um sachador, pegam no if have.SUBJ.FUT.3SG a.FEM weeder take.IND.PRES.3PL in-the.MASC sachador, levam-o; se tiver [vasos], levam weeder take.IND.PRS.3PL-it if have.SUBJ.FUT.3SG pots.MASK.PL take.IND.PRS.3PL Ø; se tiver uma limpadeira, levam Ø; if have.SUBJ.FUT.3SG a.FEM cleaner take.IND.PRS.3PL levam tudo. (FIS07-40) take.IND.PRS.3PL all.NEUT 'If there is a weeder, they take the weeder, they take it; if there are pots, they take pots; if there is a cleaner, they take it; they take everything.'

b. Em vinte quilos de milho, eu tiro cinco quilos de [maquia in twenty I take-out.IND.PRS.1SG five kilos of starch kilos of corn de milho] para mim, não é? [...] E lá levo Ø of corn.FEM.SG for me not be.IND.PRS.3SG and then take.IND.PRS.1SG cliente. (FIS01-54) outra vez ao other.FEM time to-the.MASC client 'Out of twenty kilos of corn, I take out five kilos of corn starch for myself, right? [...] And then I take some back to the customer.'

Although INOs with BP and MN antecedents are more frequently observed in the corpus data, instances of INOs with BS antecedents are possible. According to native speakers' judgments, the examples in (52) illustrate that INOs in EP can have a BS antecedent with Type A predicates such as *precisar* 'need', *encontrar* 'find' and *levar* 'take'.

(52) EP examples of INOs with Type A predicates

 a.
 Podia
 sair à
 rua sem [casaco], a qualquer

 AUX.IND.IPFV.1SG go-out.INF to-the.FEM street without coat.MASC.SG at any
 hora. Nunca precisava
 Ø.

 hour never need.IND.IPFV.1SG
 'I could go out without a coat at any time. I never needed one.'
 Intervent of the street of the stree

b. Estou procura de [apartamento], à mas não be.IND.PRS.1SG to-the.FEM search of apartment.MASC.SG but not Ø. encontro find.IND.PRS.1SG 'I am looking for an apartment, but I cannot find one.' c. Tenho [guitarra], mas nunca levo Ø have.IND.PRS.1SG guitar but never take.IND.PRS.1SG para a escola. the.FEM school to 'I have a guitar, but I never take it one to school.'

The results presented in section 5.1 revealed that Type A predicates allow for various types of BNs and INOs in ES. As expected, a parallel pattern emerges in EP. This lends further support to the hypothesis of the broad acceptance of BNs and INOs within this predicate category.

6.2 Type B predicates

As shown in sections 4 and 5.2, Type B predicates in ES are compatible with BPs and MNs. This is also true for EP. The following examples of the verbs *comer* 'eat', *vender* 'sell' and *comprar* 'buy' contain BPs, as in (53a, b, c), and MNs, as in (53d, e, f, g), in object position.

- (53) Examples of Type B predicates (EP)
 - a. Fomos lá comprar [ovelhas]. (COV24-7)
 go.INF.PRF.1PL there buy.INF sheep.PL
 'We went there to buy sheep.'
 - b. Toda a gente comia [papas]. (AAL20-8) all.FEM the.FEM people eat.IND.IPFV.3SG porridge.FEM.PL 'Everyone was eating pap.'
 - c. Ele vem aí um senhor aqui vender [roupas] he come.IND.PRS.3SG there a.MASC man here sell.INF clothes.FEM.PL —é lá de Vilar Formoso. (COV07-1) be.IND.PRS.3SG there from Vilar Formoso 'A man comes here to sell clothes —he is from Vilar Formoso.'
 - d. Vêm para aqui comer [caranguejo].⁸ (CLC07-21)
 come.IND.PRS.3PL to here eat.INF crab.MASC.SG
 'They come here to eat crab.'
 - e. Como quem come [açúcar]! (COV29-44) like who eat.IND.PRS.3SG sugar.MASC.SG 'Like someone who eats sugar!'

 $^{\rm 8}\,$ Note that what appears to be a BS in (53d) (caranguejo 'crab') is indeed interpreted as MN.

- f. Levam 0 leite para a fábrica e depois take.IND.PRS.3PL the.MASC milk to the.FEM factory and later fazem queijo, trazem almeice, 0 0 make.IND.PRS.3PL the.MASC cheese bring.IND.PRS.3PL the.MASC whey repartem pessoas por as que vendem distribute.IND.PRS.3PL for the.FEM.PL people.FEM.PL that sell.IND.PRS.3PL [leite]. (CLH23-4) milk 'They take the milk to the factory and then they make the cheese, they bring the whey, they distribute it to the people who sell milk.'
- g. Pedia a Deus que Deus me desse vinho para não ask.IND.IPFV.1SG to God that God me give.SUBJ.IPFV.3SG wine for not andar a comprar [vinho]. (COV30-30) go.INF to buy.INF wine.MASC.SG
 'I asked God to give me wine so I wouldn't buy wine.'

However, unlike in ES, Type B predicates in EP are not as restricted regarding the occurrence of BS objects. We found some instances of BSs in object position of the verb *comprar* in the corpus data, as illustrated in (54a, b).

- (54) Examples of Type B predicates (EP)
 - a. [...] e depois resolvemos comprar [casa], não é? (DI_124BF33ab) and later decide.IND.PRF.1PL buy.INF house.FEM.SG not be.IND.PRS.3SG 'And then we decided to buy a house, right?'
 - b. Depois ah assim que comprei [carro] e comprei carro later ah so that buy.INF.PRF.1SG car.MASC.SG and buy.INF.PRF.1SG car já bastante tarde. (DI_168BM21a) already enough late
 'Then I bought a car and I bought a car quite late.'

If BSs are indeed compatible with Type B predicates in EP, based on hypothesis (29), we predict the occurrence of INOs with BS, BP and MN antecedents in EP. This is illustrated with the verbs *comprar* 'buy', as in (55), *vender* 'sell', as in (56), and *comer* 'eat', as in (57). The example in (55a) is the only example found in the corpus data where an INO has a BS referent (*máquina de esmagar* 'a crushing machine').

(55) EP corpus examples with comprar

a.	Eu	nem	ainda	tenho	[máquina de esmagar].	Elas
	Ι	not	yet	have.IND.PRS.1SG	crushing machine.FEM.SG	they

têm Ø lá, mas eu ainda não comprei Ø. (GRJ47-8) have.IND.PRS.3PL there but I yet not buy.IND.PRF.1SG 'I do not even have a crushing machine yet. They have one, but I have not bought one yet.'

b. Quem punha [materiais] lavrador maior era 0 who put.IND.IPFV.3SG materials.MASC.PL be.IND.IPFV.3SG the farmer big e 0 pequenino, é claro. não podia and the.MASC small.MASC be.IND.PRS.3SG clear.MASC not AUX.IND.IPFV.3SG comprar Ø. (EXB02-25) buy.INF

'The bigger farmers were the ones who put in the materials and the small ones, of course, could not buy some.'

- c. Ela até nem sabia preço, como eu também 0 she even not know.IND.IPFV.3SG the.MASC price like Ι too desconhecia ainda o preço do [vinho]. Oue not-know.IND.IPFV.1SG yet the.MASC price of-the.MASC wine.MASC.SG that ainda este ano lá comprei Ø. (GRC38-1) yet this.MASC year there buy.IND.PRF.1SG 'She did not even know the price, just as I did not know the price of the wine. I bought one there just this year.'
- (56) EP corpus examples with vender
 - Relativamente preços, por exemplo, um quilo de aos a. with-regard to-the.MASC price.PL for example one.MASC kilo of [batatas] quanto é que custava antigamente potatoes.FEM.PL how-much be.IND.PRS.3SG that cost.IND.IPFV.3SG previously e quanto é que custa agora? Vendi be.IND.PRS.3SG that cost.IND.PRS.3SG now and how-much sell.IND.PRF.1SG Ø ali em Vila Nova de Gaia. (E047-PT-29) Vila Nova de Gaia there in

'With regard to prices, for example, how much did a kilo of potatoes cost in the past and how much does it cost now? I sold potatoes in Vila Nova de Gaia.'

b. Eram levar as pessoas que iam be.IND.IPFV.3PL the.FEM.PL people.FEM.PL that go.IND.IPFV.3PL take.INF [leite]. [...] Eles gostavam mais de vender Ø era milk.MASC.SG they.MASC.PL like.IND.IPFV.3PL more to sell.INF be.IND.IPFV.3SG cooperativas. (CLH27-7) para as the.fem.pl cooperative.PL to

'It was the people who brought milk. [...] They liked to sell some more to the cooperatives.'

(57) EP corpus examples with comer

- a. Q: [...] quantas vezes assim por semana poderia aparecer how-many.FEM.PL time.PL so for week AUX.COND.3SG appear.INF [peixe] na mesa? A: Aqui não era 0 the.MASC fish on-the.FEM table here not be.IND.IPFV.3SG todos dias eles não queriam, **OS** que all.MASC.PL the.MASC.PL day.PL that they.MASC.PL not want.IND.PF.3PL meus homens. Mas eu comia Ø. (CRV15-11) **OS** the.MASC.PL my man.PL but I eat.IND.IPFV.1SG 'Q: [...] How many times a week could fish appear on the table? A: Sir, I do not know. It was not every day here, they did not want it, my men. But I ate some.'
- fins-de-semana temos b. Aos aqui [papas de sarrabulho] at-the.MASC.PL weekend.PL have.IND.PRS.1PL here blood porridge.FEM.PL de muitos e vem gente lados comer Ø and come.IND.PRS.3SG people of many.MASC.PL side.PL eat.INF aqui. (E007-PT-172) here 'At weekends, we have blood porridge here and people come from all over to eat some here.'

Although INOs with BS antecedents are rare in the corpus data, instances with INOs referring to BSs are grammatical in EP. The examples in (58), containing Type B predicates such as *comprar* 'buy', *comer* 'eat' and *usar* 'use' plus INOs with BS antecedents, are judged as grammatical by native speakers of EP.

- (58) EP examples of INOs with Type B predicates
 - a. Ontem usei [gravata]. Comprei Ø na yesterday use.IND.PRF.1SG tie buy.IND.PRF.1SG in-the.FEM semana da moda.
 week of-the.FEM fashion
 'I wore a tie yesterday. I bought a tie at fashion week.'
 - b. Tinha [batata cozida] no meu prato, mas já have.IND.IPFV.1SG potato boiled in-the.MASC my dish but already comi Ø.
 eat.IND.PRF.1SG
 'I had a boiled potato on my plate, but I ate some already.'
 - c. No inverno levava [cachecol] mas agora deixei
 in-the.MASC winter took.IND.PRF.1SG scarf but now stop.IND.PRF.1SG
 de usar Ø.
 of use.INF
 - 'In winter I wore a scarf, but now I do not wear any.'

The possibility of Type B predicates to be combined with BSs and INOs with BS antecedents shows that EP is more permissive than ES in this regard.

6.3 Type C predicates

Type C predicates do not allow for object BNs in ES. However, as already shown in (45), verbs like *adorar* 'to adore' can be combined with BNs in EP. According to Raposo (2004) this is also true for psychological verbs like *detestar* 'loathe' and *odiar* 'hate'. In (59a), *detestar* is followed by an object BP and in (59b), a MN object (*café* 'coffee') is combined with *odiar* 'hate'.

- (59) Psychological predicates and BNs (EP)
 - A Maria detesta cenouras.
 the.FEM Maria hate.IND.PRS.3SG carrot.PL
 'Maria loathes carrots.'
 - b. Odeio café.
 hate.IND.PRS.1SG coffee
 'I hate coffee.'

(Raposo 2004: 51)

The corpus examples in (60) confirm that psychological verbs like *adorar* 'adore' and change-ofstate verbs like *matar* 'kill' and *queimar* 'burn' can occur with BPs and MNs.

- (60) Examples of type C predicates (EP)
 - a. Eu adoro [situações estranhas]. (E051-PT-78)
 I love.IND.PRS.1SG situations.FEM.PL strange.FEM.PL
 'I love strange situations.'
 - b. [E] na altura eu adorava [roupa] e achava and in-the.FEM time I love.IND.IPFV.3SG clothes.FEM.SG and think.IND.IPFV.3SG que era impossível não se ter aquela that be.IND.IPFV.3SG impossible not SE have.INF this.FEM roupa. (DI_29LM24a) clothes 'And at the time, I loved clothes and thought it was impossible not to have those clothes.'
 - Não deixam matar [ouriços]! (AJT25-13) not let.IND.PRES.3PL kill.INF hedgehogs.MASC.PL 'They do not let you kill hedgehogs.'
 - d. Aqui há pouca ou nenhuma casa que não here there-is.IND.PRS.3SG few.FEM or none.FEM house that not mate [porco]. (CRV17-2) kill.SUBJ.PRS.3SG pig.MASC.SG 'There are few or no houses here that do not kill pigs.'

e. Queimávamos [roupas]. (E006-PT-48)
 burn.IND.IPFV.1PL clothes.FEM.SG
 'We used to burn clothes.'

In line with the hypothesis in (29), we predict that type C predicates permit INOs in EP. Examples of INOs taking BN antecedents with the verbs *gostar* 'like', a psychological verb, and *matar* 'kill', a change-of-state verb are provided in (61) and (62) to illustrate this point. Psychological verbs such as *amar* 'love', *adorar* 'adore', *admirar* 'admire' and *detestar* 'loathe' were scarcely found in the corpus and there were no instances of null objects with them.

(61) EP corpus examples of INOs with Type C predicates

- a. Eu cá boto-lhe [cebola] porque teu pai gosta
 - Ihereput.IND.PRS.1SG-himonionbecauseyourfatherlike.IND.PRS.3SGØmuito!(TRC56-29)
 - a-lot 'I will put onions on it because your father likes onions a lot!'
- [rojões]. b. Q: A gente cá faz A senhora the.FEM people here make.IND.PRS.3SG pork-dish you sabe rojões? A: Sei. 0 que é know.IND.PRS.3SG the.MASC what be.IND.PRS.3SG pork-dish know.IND.PRS.1SG Gosto Ø muito. (COV07-121) like.IND.PRS.1SG a-lot 'Q: We make rojões [Portuguese fried pork dish] here. Do you know what rojões are? A: Yes. I like rojões very much.'
- Ø c. Ε bebem [vinho] OS que gostam and drink.IND.PRS.3PL wine.MASC.SG those.MASC.PL who like.IND.PRS.3PL que não gostam Ø comem e os and those.MASC.PL who not like.IND.PRS.3PL eat.IND.PRS.3PL biscoitos. (GRC28-24) cookie.PL

'And those who like wine drink wine and those who do not like wine eat cookies.'

(62) EP corpus examples of INOs with Type C predicates

- a. Não sei trabalhar nada em [porco]. (Ele) até não not know.IND.PRS.1SG work.INF nothing in pig.MASC.SG he yet not gosto de ver matar Ø. (MIG10-62)
 like.IND.PRS.1SG to see.INF kill.INF
 'I do not know how to work with pigs. (He) does not even like to see some killed.'
- b. [A] nossa casa era uma delas— que the.FEM our.FEM house be.IND.IPFV.3SG one of-these.FEM.PL that

matava era sempre [porcos] de quatro anos. kill.IND.IPFV.3SG be.IND.IPFV.3SG always pig.MASC.PL of four year.PL [...] Agora não. É de ano, é de meses, now not be.IND.PRS.3SG of year be.IND.PRS.3SG of month.PL Ø... (MIG10-59) já matam Ø e comem already kill.IND.PRS.3PL and eat.IND.PRS.3PL 'Our house was one of them- that always slaughtered four-year-old pigs. [...] Not now. It is a year old, it is months old, they kill and eat some...'

These observations indicate that EP and ES differ with regard to the distribution of BNs and INOs as objects of type C predicates. Again, ES appears to impose stricter restrictions on the realization of BNs and INOs with these types of predicates.

7 Conclusions: Crosslinguistic implications and theoretical consequences

We have shown that the distributional properties of INOs can be essentially derived from the distributional properties of object BNs in ES (Laca 1996; 1999; 2013; Dobrovie-Sorin & Laca 2003; Espinal & McNally 2008; 2010). This is an elegant proposal that avoids introducing additional, unnecessary constraints on the occurrence of INOs. In the remainder of this section, we summarize our key findings concerning the interpretation, the syntactic analysis, the lexical restrictions determining their distribution and the typology of INOs.

First, concerning their interpretation, we assume that INOs can be described as *type anaphora* (Keller & Lapata 1998), *property anaphora* (Tomioka 2003; Laca 2013) or *identity of sense anaphora* (Bresnan 1971). Assuming that the three terms are basically synonymous in this sense, this view is based on Laca (2013), who argues that BNs and INOs denote properties and are interpreted as restrictive modifiers of the verbal predicate. BNs are the most suitable antecedent for INOs, who represent a copy of the antecedent expression, given that both receive indefinite, non-specific, existential readings (Laca 1996; 1999; 2013; Dobrovie-Sorin & Laca 2003).

INOs cannot be analysed as null pronominals because pronouns can only be definite in Spanish, as there are no partitive clitics available (contrary to Catalan, Italian and French). This also sheds light on the difference between null subjects and null objects: while the former are typically considered to behave as a null pronominal (*pro*) in consistent null-subject languages like Spanish, the latter behave as a full NP (but see Martínez-García 2023, to appear on null subjects in internal argument positions; Duguine 2013 for criticism on null subjects as *pro*).

Second, concerning their syntactic analysis, we assume that INOs are elided NPs, representing BNs without phonological content (see Laca 2013; Martínez-García 2023; 2025, to appear for further insights; Cyrino 2019 for an alternative perspective). Specifically, the operation deriving NP-ellipsis deletes the phonological features at PF. PF-deletion relies on the deletion of where

the phonological features of the NP at PF is deleted and assumes that the ellipsis site remains syntactically projected and visible at the syntactic structure and LF. This idea is based on the fact that INOs show sensitivity to syntactic operations, like modification and scope. Additionally, although we do not delve into this topic in this paper, the fact that INOs can be antecedents of the same anaphoric expressions that refer to BNs suggests that INOs are elided BNs in Spanish.

Third, concerning the lexical restrictions determining the distribution of INOs and BNs, we showed that three types of predicates can be distinguished. Type A predicates are so called characterizing 'have'-predicates (Espinal & McNally 2008; 2010). They are the most permissive predicates, allowing for BSs, BPs and MNs and INOs relating to these types of BNs. The reason they allow for BSs is that they denote a relation between two individuals, allowing for predicate + BN to express a characterizing property of a subject (e.g. 'someone seeking an appartment' as being an 'apartment-seeker'). Type C predicates, like desear ('desire') or querer ('want'), are psychological predicates. They cannot refer to BSs because they denote situations and not a relation between two individuals. BPs and MNs also cannot serve as objects of Type C predicates because these predicates select specific entities, due to the presupposition of the existence of the individual entities that they entail (Carlson 1977; Laca 1996; Seres & Espinal 2018). Similarly, change-of-state verbs, like quemar ('burn') and verbs selecting animate objects, like pegar ('hit') select definite entities, therefore they cannot combine with non-delimited entities introduced by BPs. Type B predicates like consumption and activity predicates are in-between type A and type C as they do not allow for BSs because they cannot behave as characterizing 'have'-predicates, but as they do not impose a definiteness restriction on their object, they license BPs and MNs and INOs referring to this type of BNs.

Fourth, concerning the typology of INOs and building upon Raposo (2004) and Barbosa (2024) for EP, Ruda (2017) on Hungarian and Polish and Tomioka (2003) for Japanese, we suggested that the variation observed in the distribution of INOs and object BNs reflects a universal implicational hierarchy. Concretely, from a typological perspective, languages with fewer restrictions on the occurrence of object BNs are predicted to allow for INOs more freely.

Concerning the occurrence of BNs and INOs, ES and EP show similarities and differences. Crucially, EP is more permissive in two respects. First, Type B predicates do allow for BSs, BPs and MNs in EP (and INOs related to these types of BNs) and second, Type C predicates allow for BPs and MNs and INOs related to this kind of antecedents.

We claim that the asymmetry concerning the distribution of BNs can be partially related to the different ways of assigning kind readings in ES and EP. While such readings are impossible for object BNs in ES, they are possible for object BSs in EP. Specifically, kind readings in ES require the presence of a determiner (e.g., *María detesta las zanahorias* 'María hates carrots'), contrary to EP. Hence, kind readings materialize with DPs in ES, while in EP they can appear with NPs. This underscores a significant crosslinguistic difference in the distribution of object BNs in EP and ES, aligning with predictions made by Raposo (2004) regarding the broader availability of object BNs in EP.

We have shown that, in accordance with our hypotheses in (29), EP displays less restrictions on indefinite object drop than ES and can be positioned on the right side of ES on a scale like (63). For languages utilizing partitive clitics, like Italian, Catalan and French, we assume that they impose the most restrictions on indefinite object drop, as they require the use of partitive clitics. Thus, our generalization applies primarily to Romance languages lacking partitive clitics.

(63) Romance indefinite object drop
 Italian, Catalan and French > ES > EP
 [+RESTRICTED] <----> [-RESTRICTED]

In sum, our generalization correctly explains the distribution of INOs in ES and the crosslinguistic differences between ES and EP with regard to the availability of object BNs and INOs. However, further research should be conducted to better understand whether the predictions of our proposal apply to other languages as well. For example, it is well-known that Modern Greek and ES share core properties concerning indefinite object drop and their pronominal systems (see (64) from Dimitriadis 1994; Giannakidou & Merchant 1997 on Modern Greek). This suggests that our proposal could be extended to Modern Greek INOs as well. If Modern Greek and ES are truly similar regarding indefinite object drop, they should allow BNs and INOs with similar predicates and occupy similar positions on the scale in (63).

(64) Modern Greek indefinite object drop
 A: Foras palto?
 wear.IND.PRS.2SG coat

'Are you wearing a coat?'

B: (*To) forao.it wear.IND.PRS.1SG'I am wearing one.'

(Dimitriadis 1994: 5)

Furthermore, our generalization entails that languages without articles, such as Russian, Polish and Czech, would freely allow for indefinite object drop, since these languages only display BNs. This correlation between INOs and BNs seems to hold true for these languages (see McShane 2002 on Russian and Czech; Ruda 2017 on Polish).

At the other end of the scale are languages without BNs for which we predict that they are not able to allow for indefinite object drop. However, Basque as a language that lacks BNs (with the exception of French loanwords) challenges this expectation by permitting indefinite object drop even more freely than ES (Duguine 2013). A tentative way of solving this issue is

to propose that the generalization made above applies primarily to languages not displaying object agreement. In languages like Basque with object agreement, the mechanism of agreement between the verb and the object may be responsible for a general licensing of (definite and indefinite) null objects. In this way, these languages circumvent the restrictions imposed by other languages like ES and EP without agreement. But further research is needed to shed light on these issues.

In conclusion, this paper suggested reconsidering the need for lexical restrictions for allowing indefinite object drop in ES and EP and offered a critical perspective against viewing indefinite object drop as only dependent on referential and definiteness factors. By emphasizing the fundamental grammatical properties shared by these phenomena across languages, we highlighted the correlation between the distribution of object BNs and INOs.

Abbreviations

EP: European Portuguese BN: bare noun BP: bare plural BS: bare singular ES: European Spanish INO: indefinite null object MN: mass noun

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Competing interests

The authors have no competing interests to declare.

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