Null Objects in English and Spanish Recipes

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Abstract

Even though English and Spanish are languages which do not usually allow null objects (NOs) in the general case, this phenomenon is possible in some special registers of the languages. English and Spanish speakers omit the objects in the written discourse in informal contexts such as in Diaries, Note-taking writing or in the Short Message Service –SMS– (contexts that belong to the Reduced Written Register); and in formal contexts such as Recipes. Despite the fact that several papers have been published analysing the phenomenon of null objects in recipes in English, little attention has been paid to null objects in recipes in Spanish. In this paper, I will focus on the phenomenon of null objects, or object dropping, in Recipes in both English and Spanish, aiming to test whether the analyses provided for the phenomenon of null objects in recipes in English are applicable to the phenomenon of null objects in recipes in a romance language, such as Spanish, by comparing both; taking into account some particularities of the phenomenon that seem to be similar in both languages (specific interpretation of the null object, the licensing of NOs with transitive verbs or the phenomenon being a result of the presence of an empty category among others). Through this comparison, it can be seen that the different analyses provided to explain the phenomenon of null objects in recipes in English are not appropriate to explain the licensing of missing objects in recipes in Spanish due to certain particularities of the Spanish language. The licensing of empty operators (OP), the mechanism used to assign definite interpretations or the construction of sentences containing truncated elements in Spanish differ from English; leading to conclude that the phenomenon of null objects in recipes in Spanish cannot be analysed as the phenomenon in English regardless of the similarities of the phenomenon in both languages.

Keywords: Null Object, Recipes, Object-Drop, Special Registers, Spanish, English

1. Introduction

An important difference between some natural languages such as Basque on the one hand and English and Spanish on the other is that the objects of transitive verbs can be omitted in the general case in Basque (1B’), but not in English and Spanish even in

contexts in which the linguistic context allows to recover the content of the null object (2B',3B').

(1) A: Egosi zenituen porruak?
Boil past-2nd p.pl.-aux. leeks
(Did you boil the leeks?)
B: Bai, porruak egosi nituen.
Yes, leeks boil past-1st p.sg.-aux
(Yes, I boiled them.)
B': Bai, __ egosi nituen.
Yes, boil past-1st p.sg.-aux
(Yes, I boiled)

(2) A: Did you boil the leeks?
B: Yes, I boiled them.
B': *Yes, I boiled __.

(3) A: ¿Cociste los puerros?
Boil-past-2nd p.sg. 3rd p.pl.-pron.leeks
(Did you boil the leaks?)
B: Sí, cocí los puerros / los cocí.
Yes boil-past-1st p.sg. 3rd p.pl.-pron. leeks / 3rd p.pl.-pron. boil-past-1st p.sg.
(Yes, I boiled the leaks/ them)
B': *Sí, cocí __.
Yes, boil-past-1st p.sg.
(Yes, I boiled)

Nevertheless, there are some special contexts that allow the licensing of null objects (NOs) in English and Spanish. One of those contexts that permits null objects is the context of recipes –(4), (5)–. In recipes, it is common to omit the direct object (DO) of a verb. The grammaticality of null objects in this register cannot be explained with the existing analyses of NOs in other special contexts in which they are allowed. As a result, this phenomenon has been analysed in recipes in English on numerous occasions; however, there is no literature regarding the phenomenon of object-dropping in recipes in Spanish.

(4) a. Cut the leeks in pieces and boil __ until tender.

b. Now, mash _ and add some butter.

(5) a. Cortar los puerros y cocer__ hasta que estén tiernos.

Cut pron. -3rd p.sg. leeks and boil until that be-3rdp.pl. tender

(Cut the leeks and boil until tender)

b. Ahora, aplastar __ y añadir mantequilla.

Now, mash and add butter

(Now, mash and add butter)

The purpose of this paper is to examine the phenomenon of missing objects in the recipe register in English and Spanish, which do not allow null objects in the general case; and to test whether the phenomenon in Spanish is licensed by the same factors as in English. In order to do so, I will firstly present other contexts where NOs are allowed in the general case in English and some of the main analyses proposed on this matter for the English language. Then, I will do the same for sentences in recipes in Spanish. After having presented these, I will compare the phenomenon in these two languages following the analyses previously presented for English. To conclude the dissertation, I will summarize the findings obtained through this comparison and I will, as well, answer the question formulated by this paper: are the explanations given for the null object phenomenon in recipes in English valid for the same phenomenon in recipes in Spanish?

In order to answer the question presented, fragments taken from recipes in Spanish –primarily from the internet– and examples from research papers on this matter in English are going to be used in order to exemplify or support the analysis.

2. Previous Research on Null Objects in Recipes in English

As previously mentioned, there are some contexts in English, other than the recipe register, that allow the omission of the object. One of those contexts is that of intransivization, also called the context of detransivization. In this context, a verb that normally needs to be accompanied by a complement appears without one. There are verbs in English that can behave either as transitive –(6a.)– or intransitive –(6b.)–. When these verbs behave as intransitive no nominal phrase (NP) complement is needed. Also, the transitive form is interpreted as being more specific, whereas the intransitive has a more general interpretation. The transitive verb of the example below –(6)a.– shows that the

speaker wants a specific interpretation –in this case that the speaker usually reads comics, not novels or poems–, whereas the intransitive form provides a general interpretation: –I have the habit of reading, sometimes comics, other times novels, or even poems–.

(6) a. I_i usually read $comics_r$ in my bedroom.
'read': $Agent_i$, $Theme_r$
b. I_i usually read __ in my bedroom.
'read': $Agent_i$.

This analysis of detransivization, however, is not suitable for the phenomenon of null objects in recipes since the interpretation given to the missing element is not general, but specific.

Another context in which the non-overt realization of the direct object is grammatical in the standard usage of English is relative clauses. On object relative clauses, as can be observed in (7)a., there is an empty category present. This empty category occupying the direct object's (DO) position is identified as a trace resulting from the movement of the relative pronoun 'which'. However, there are instances of relative clauses in which the element moved is not overtly realized either, as (7)b. shows. Cases such as (7)b. are analysed as instances of movement of non-overt or empty operators (OP); i.e. an OP behaves similarly like a *wh*-constituent moving from the verb-phrase (VP) internal position to [Spec,CP], leaving a trace in its original position. Therefore, the non-overt element in the complement position is a trace of an OP-movement.

(7) a. Where are the papers [$which_i$ I read t_i on Monday]?
b. Where are the papers [OP_j I read t_j on Monday]?

The third context in which a missing direct object is grammatical in the standard usage of English is that of a parasitic gap. A parasitic gap is an empty category (*ec*) whose appearance is licensed by the occurrence of a previous empty *ec* within the same sentence. In example (8)a., the *wh*-phrase 'which papers' has moved from its base-position -DO position of the verb 'file'- leaving a trace there. This *wh*-phrase is interpreted not only as binder of the direct object of the verb 'file', but also as the element that allows the

licensing of the gap in the object position of the verb 'read', represented as *pg*. Parasitic gaps have been analysed as traces of empty operators which are part of an A'-chain –(8)b.–; i.e., for a parasitic gap to be licensed, there must be a trace of A-bar movement (t_1) in the main clause of (8)a. and (8)b. that will assign interpretation to the second gap by virtue of entering into a composed chain with it. If there is no empty category in the main clause of the sentence, the parasitic gap is impossible (Haegeman, 1994), as example (8)c. below shows.

(8) a. Which papers$_1$ did you file t_1 [without reading pg_1]?
b. Which papers$_1$ did you file t_1 [OP$_2$ without reading t_2]?
c. *Did you file those papers [OP$_1$ without reading t_1]?

However, the parasitic gaps' analysis is not suitable for the phenomenon of NOs in recipes in English either, since the presence of null objects in this context licence parasitic gaps. Therefore, these elements cannot be analysed likewise.

Another context that allows the omission of the DO in English is infinitival adjuncts. Null objects in infinitival adjuncts are grammatical in sentences such as (9). The gap in the adjunct clause in (9) is co-referential with, controlled by, the direct object of the main clause. This instance of missing object has, also, being analysed as a trace co-indexed with a moved empty operator that is referring to an element from the matrix clause. Since this analysis requires the null object to be in an adjunct clause, it is not suitable for the context we are focusing on either. The reason for this unsuitability is that NOs in recipes happen in the matrix clause too.

(9) I brought a couple of papers$_i$ [OP$_i$ for you to read t_i].

One more context in which the non-realization of the direct object is possible in the standard usage of the languages being considered in this paper is the right node raising (RNR) operation. RNR is an operation of reduction on coordinated clauses whose rightmost constituents –direct objects in this case– are identical. The shared or identical constituent –'the paper' in example (10)– is just realized in the right-most position. The object drop phenomenon in sentences like (10)c. has been analysed as involving deletion

at the phonetic level of the identical constituent in the left conjunct of the coordination. However, this analysis does not work for the phenomenon of NOs in recipes in English either. This is so since, as it is going to be argued later in this paper, NOs in recipes are not instances of the type of deletion mechanism involved in the right node raising operation.

(10) a. [John bought the paper] and [Mary uploaded the paper].
b. [John bought $_{\text{the paper}}$] and [Mary uploaded the paper].
c. [John bought __] and [Mary uploaded the paper].

None of these analyses regarding the grammaticality of NOs explain the phenomenon of missing objects in the recipe register in English. As a result, numerous papers have been done analysing the phenomenon in this register in English.

Haegeman (1987a) stated that the unrealized elements are those phrases contextually redundant; i.e. noun phrases, or determiner phrases, which are mentioned repeatedly in the discourse. She categorizes the phenomenon as a stylistic rule in order to low the redundancy of the discourse by deleting the constituents at the phonetic level. Therefore, she states that the phenomenon of missing objects in recipes in English is a *stylistic ellipsis.*

Nevertheless, the phenomenon of null objects in recipes in English has also been analysed as a phenomenon involving an empty category. Haegeman (1987a,b), and later Massam and Roberge (1989), provided evidence related to binding and control –in (11) the null object serves as the antecedent of the reflexive 'itself'–, constructions involving small clauses which are subject-predicate constructions without a finite verb –(12)– and the possibility of these null objects to act as controllers of PRO (pronoun without phonetic properties which is the subject of (e.g.) infinitivals) –(13)–. They also seem to license parasitic gaps, as has been previously mentioned –(14)–.

(11) Take a crepe. Cover one half with the jam. Fold __ over onto itself and springle with sugar.

(Massam and Roberge, 1989: 137)

(12) Take the cake mix, 1 cup of water, and 3 eggs. Mix __ well and beat __ for 5 minutes. Pour __ into a well-greased cake pan and bake __ for 20 minutes.

(Massam and Roberge, 1989: 135)

(13) Allow __ PRO to cool slightly.

(Ruda, 2014: 343)

(14) Add oil slowly to the yolks. Beat __ well in order to incorporate *pg.*

(Fior, 2006: 35)

Considering this, Haegeman (1987b) and Cole (1987) studied the phenomenon as NOs being variables bounded by a non-overt operator (OP); similarly to the cases of relative clauses with null *wh*-phrase, parasitic gaps and infinitival adjuncts constructions mentioned before. Thereafter, in Haegeman (1987b), she suggests that the NO is a trace similar to a *wh*-trace whose antecedent –referring to an element prominent in the discourse– is non-overt in topic position. In (15), the empty operator that has moved is referring to *'the cake'* that has been previously mentioned in the discourse.

(15) [OP_1 [Bake ec_1 in a hot oven, basting ec_2 regularly]]

(Haegeman, 1987a: 259)

Likewise, Massam (1992) posited that the null object is an empty category which is anaphoric and forms its own chain (similar to parasitic gaps). She explains that this is the reason why the non-realized objects are interpreted as a specific. As happens with parasitic gaps, by entering into a composed chain with an element previously mentioned in the discourse the null object is assigned an interpretation. She also addresses a factor of the phenomenon that all authors agree to be crucial for null objects to be licensed in recipes in English: the absence of an overt subject –(16)a.–. As can be seen in (16)b., when the object is realized but the subject is not, the sentence is acceptable. In the case of (16)c., when both the subject and the object are not null, the sentence is also grammatical. However, example (16)d. is unacceptable being the object null and the subject realized. Nevertheless, it is not clear yet if this correlation is due to syntactic terms or if it is triggered by other factors.

(16) a. Take the cake mix, 1 cup of water, and 3 eggs. Mix __ well and beat __ for five minutes. Pour __ into a well-greased cake pan and bake __ for 20 minutes. Remove __ from oven and cool __.

b. First, take two eggs, ½ cup of flour, and 3 tsp. sugar. Beat them well and you cook the mixture for 5 minutes. Serve it while still warm.

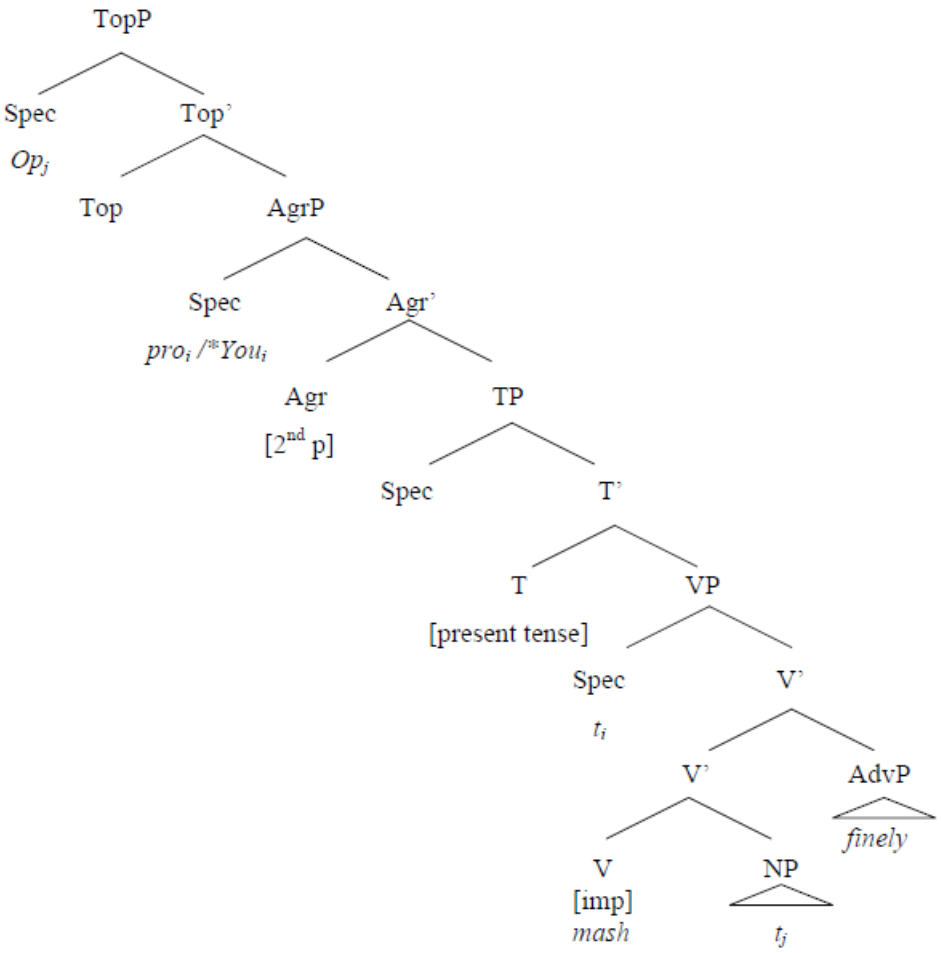
c. First you take two eggs, ½ cup of flour, and 3 tsp. sugar. You beat them well and cook the mixture for 5 minutes. Then you serve it while it is still warm.

d. First you take two eggs, ½ cup of flour, and 3 tsp. sugar. *You must beat __ well and cook __ 5 minutes. *You then serve __ while still warm.

(Massam, 1992:131)

Later, Cummings and Roberge (2004) adopt an analysis considering null objects being null constants licensed by an anaphoric operator. In addition, they state that the existence of null objects is determined by the Transitivity Requirement (TR). According to their paper, this requirement predicts cross-linguistic variation mostly in the recoverability mechanisms particular grammars use, leading to conclude that there are three types of null objects: bound variables or null constants, discourse-linked null pronominals and internally-licensed cognate null objects or bare nouns predicted by the TR. From these three types of null objects, NOs in recipes seem to be null constants.

Fior (2006), agrees with Cummings and Roberge about NOs in recipes being null constants as the trace is bounded by a non-quantificational empty OP. Furthermore, she states that the preceding sentence usually fixes the discourse topic for the interpretation of the NO, and when the recovery of the information needed is not pragmatically or lexically possible, then the element to which the *ec* is referring to must be the discourse-topic. Likewise, Fior proposes that, since the recipe register is a crystallized context –a context that has significant and recognizable linguistic features known by any speaker–, the presupposed addressee represented as [AddreseeP] can be replaced by a ReaderP containing [2nd p] features. She concludes that recipe null objects (RNOs) are null constants bound by non-quantificational null topic operators in [Spec, TopP]:



(Fior, 2006: 42)

Imperative clauses are associated with the addressee's 'To-do' List –a set of properties that are assigned to the individuals taking part in the conversation–. Recipes consist of a list of steps that have to be followed in order to make, in this case, a dish; ergo, a recipe can be considered a 'To-do' list. Besides, this register facilitates the identification of the referents of the objects as the possible referents are restricted and, additionally, because the topical status of the missing objects makes their content recoverable (Ruda, 2014). All things considered, Ruda (2014) states that the recipe register seems to provide an ideal environment for null objects to happen since the dominant verb forms used in recipes (written discourse) are either infinitive or imperative forms.

However, this theory states that the specific interpretation of non-realized objects is due to the fact that there is a suitable element –an element from the restricted number of possible referents– in the previous discourse that behaves as the antecedent of the missing object. As can be seen in (17)a., taking into consideration previous information and context, we can interpret that the missing object is referring to the potatoes. Nevertheless, this constraint alone is not enough to explain the phenomenon of NOs in recipes in English, since it would not explain the ungrammaticality of NOs in the general case –(17)b.–.

(17) a. Now, mash ∅ and add some butter.
(Previous information: *Recipe of mashed potatoes, the previous steps were boiling and peeling the potatoes.)*
b. A: What do I do with these potatoes?
B: *Mash __ and add some butter.

Weir (2017) has examined the phenomenon of object drop concluding that it is an instance of a combination of a null determiner and a silent NP, thus a missing argument. He argues that the null determiner (only present in the Reduced Written Register (RWR) and, thus, a feature of the register according to Weir) gets the value of a choice-function variable –the simplest case of a choice function–. This proposal explains why articleless NPs cannot have generic readings or receive a reading bounded by quantification adverbs (*usually*); since the choice function will always pick a particular referent resulting in an only possible reading, a specific one –(18)b. Furthermore, he indicates that this element is in complementary distribution with quantificational and cardinality expressions and, this being an expression of the same syntactic type as *some* or *five*, for example. Pronouns belonging to that syntactic class, such as *some*, license silent complements –(18)a.–, ergo, it is plausible that $\emptyset_D$ also licenses silent NP complements –$[_{DP}\ [_D\ \emptyset_D\ [_{NP}\ \Delta]]]$–. If such structures are possible in RWR, then he predicts that null arguments should be possible in that register, which are indeed –(25)b–.

(18) a. Take water and pour some$[_{NP}\ \Delta]$. (where Δ = water)
b. Take two eggs and beat ∅ thoroughly.
Syntax: $[_{VP}$ beat $[_{DP}\ \emptyset_D\ [_{NP}\ \Delta]]]$ (where Δ= eggs)

> Semantics: Beat *f*(eggs), where *f* is a choice function picking out an individual in the extension of *eggs*: here, most plausibly, picking out the (plural) individual which *two eggs* has introduced to the discourse.
>
> (Weir, 2017: 24)

Withal, Ruda (2017) argues against Weir's proposal since, in her opinion, it will add complexity to the phenomenon, and to the understanding of Universal Grammar (UG). On the other hand, she proposes a minimalist analysis for the null object phenomenon. Ruda analyses the missing object as a result of the overt representation of the object being truncated; i.e. a sentence is shortened by omitting an understood word or phrase, in this case an NP or a DP fulfilling the position of the DO, but it does not alter the meaning of the sentence. This truncated object is minimally represented as *n* –nominalizing head– and maximally as structures containing all interpretable nominal heads –[$_{DP}$ D [$_{PersP}$ Pers [$_{NumP}$ Num [$_{nP}$ *n*]– which are independently null elements that undergoes a type-shifting operation –the process that modifies the semantic type of a grammatical category–. This type-shifting operation to which *n* is subjected to is necessary due to the aforementioned specific interpretation, since a sentence lacking an overt object is obligatorily interpreted as general or unspecific –in (19) the interpretation is that no matter what you are cutting (vegetables, meat, fish…) you must do it slowly–, but in recipes in English the interpretation of the complement-NP is interpreted as a specific element previously mentioned in the discourse –in (20) what it has to be cut carefully are the octopus' tentacles–. This operation deviates the unspecific reading of the sentence into a specific one, making the definite interpretation of the NO possible. That definite interpretation is possible considering that the *n* is referring to an element previously mentioned in the discourse (21). Yet, Ruda claims that, in the recipe register, the availability of ι is extended beyond the lexically determined contexts, making it available for interpretation of objects of any verb used within the register. Additionally, she claims that the recoverability or the interpretation of the non-overt element is more restricted since there is a limited number of elements that can work as antecedents for *n* in the context of a recipe –ingredients, tools, mixtures, etc.–, and the way in which the referent is identified is largely dependent on discourse factors.

(19) You should cut slowly, or you will hurt yourself!

(20) Now, take the octopus' tentacles. Cut __ carefully in small slices.

(21) To make the tomato bruschetta: drizzle most of the olive oil over each piece of toast and top n_1 with the chopped tomatoes. Season n_2 with salt and pepper n_2 to taste, before drizzling the remaining few drops of oil on top, and you're done.
(n_1 = the olive oil ; n_2 = the chopped tomatoes)

(Ruda, 2017: 175)

3. Null Objects in Recipes in Spanish

As has been previously indicated, there is no paper on the matter of null objects in recipes in Spanish. Therefore, a language such as English whose NOs in recipes have been analysed could be used to test if null objects in recipes in Spanish have some similarities with the phenomenon in recipes in English. In this section, we are doing that comparison to show the apparent similarities and differences of the phenomenon between the aforementioned languages.

It is worthy to mention that Spanish does not only allow null objects in special registers such as recipes, unlike English, but it also permits the dropping of the direct object in other discourse circumstances. According to the manual *Nueva Gramática de la Lengua Española* –a manual containing the morpho-syntactic rules of the Spanish language–, there are several environments in which a direct object can be dropped in the standard usage of the language, e.g., depending on the transitivity and the type of the verbs –e.g., causative as in (22b)–, the type of construction –e.g., infinitive subordinates as in (22c)– and the interpretation of these –e.g., unspecific or generic as in (22a)–. However, the possibility of eliding is, also, restrained by the aforementioned recoverability constraint.

(22) a. El buen tiempo invita ∅.
The good weather invite-3rd p.sg. ∅
(?Nice weather invites)

(Brucart, 1999: 2853)

b. Esta música pone ∅ nervioso.
This music make-3rd p.sg. ∅ nervous
(This music makes anyone nervous)

(Brucart, 1999: 2853)

c. Este es todavía un asunto por resolver ∅.
This be-3rd p.sg. still an issue to solve ∅
(This issue is still a matter to solve)

(Brucart, 1999: 2854)

Regarding transitivity, detransivization in Spanish operates the same as in English. There are verbs that can be either transitive or intransitive and the absence of an object results in a generic interpretation, whereas the presence of it results in a specific one. Likewise, the detransivization analysis is not suitable for null objects in the recipe register in Spanish as null objects appear as the objects of transitive verbs too –(23)–.

(23) a. Yo_i generalmente leo $comics_r$ en mi habitación.
I usually read-1st p.sg. comics in my bedroom.
(I usually read comics in my bedroom)
'leer': $Agent_i$, $Theme_r$
b. Yo_i generalmente leo __ en mi habitación.
I usually read-1st p.sg. in my bedroom
(I usally read in my bedroom)
'leer': $Agent_i$.

Parasitic gaps and right node raising are also contexts that involve NOs in Spanish, as examples (24) and (25) below show respectively. However, the analyses provided for these phenomena are not suitable for the case of recipes in Spanish for the same reasons that they are not suitable for the case of recipes in English (NOs in recipes license parasitic gaps, and the phenomenon is not an instance of the type of deletion in RNR).

(24) a. ¿Qué $artículos_2$ archivaste t_2 [sin leer pg_2]?
Which papers file-past-2nd p.sg. t without read pg
(Which papers did you file without reading?)
b. ¿Qué $artículos_2$ archivaste t_2 [OP_3 sin leer t_3]?
c. *¿Archivaste los artículos [OP_1 sin leer t_1]?
File-past-2nd p.sg. pron-3rd p.pl. OP without read t
(Did you file those papers without reading?)

(25) a. [Jon quiere el artículo] y [María odia el artículo].
Jon wantt-3rd p.sg. pron.-3rd p.sg. masc. paper and María hate-3rd p.sg. pron.-3rd p.sg. masc. paper

(John wants the paper and Mary hates the paper)

b. [Jon quiere $_{\text{el artículo}}$] y [María odia el artículo].

c. [Jon quiere __] y [María odia el artículo].

Jon want-3rd p.sg.and María hate-3rd p.sg. pron.-3rd p.sg. masc. paper

(John wants and Mary hates the paper)

However, the other contexts in which NOs are allowed in English are not possible in Spanish. In relative clauses in Spanish the *wh*-constituent cannot be omitted. Thus, in Spanish the antecedent of the trace in relative clauses cannot be an empty operator –(26)– . Likewise, infinitival adjuncts in Spanish do not permit the omission of the direct object of the verb as in the case of English. This is so since Spanish requires the presence of the basic grammatical features of the object, normally with a clitic, in order to interpret it as example (27) displays.

(26) a. ¿Dónde están los papeles [que$_j$ leí t_j el lunes]?

Where be-present-3rd p.pl. which read-past-1st p.sg. t on Monday

(Where are the papers which I read in Monday?)

b. *¿Dónde están los papeles [OP$_j$ leí t_j el lunes]?

Where be-present-3rd p.pl. pron-3rd p.pl. papers OP read-past-1st p.sg. t on Monday

(Where are the papers I read on Monday?)

(27) Traje un par de artículos$_j$ para que [OP$_j$ *leas t_j]/ los$_j$ leas.

Bring-past-1st p.sg. a couple of articles for OP read-2nd p.sg. t / pron.3rd p.pl. read-2nd p.sg.

(I brought a couple of papers for you to read)

Having stated the contexts in which NOs are normally allowed in Spanish and the contexts in which the licensing of null objects differs from English, we now can start testing whether the analyses previously mentioned are suitable for NOs in recipes in Spanish.

In Brucart's (1999) paper on ellipsis in Spanish, it is claimed that the ellipsis phenomenon has fundamental characteristics that must be gathered in order to be licensed. The first one refers to the nature of null objects being that of a lexical redundancy

restrictor; i.e. missing objects refer to lexical elements that has been already mentioned in the discourse. The non-realization of these helps to avoid repetition and, thus, redundancy; since the content of the empty category is accessible through the context. This first factor agrees with the idea of *stylistic ellipsis* proposed by Haegeman (1987a). So, until this point it could be possible to affirm that Haegeman's (1987a) analysis seems to be applicable to the phenomenon in Spanish. Nevertheless, null objects in the context of recipes in Spanish seem to be a result of the presence of an empty category, as in recipes in English; thus, the analysis of NOs in recipes in Spanish as a phonetic deletion has to be discarded. The possibility of the element elided to serve as the antecedent of a reflexive –(28)–, the aforementioned licensing of parasitic gaps –(29)–, and the possibility of this element to control PRO–(30)– prove that the element fulfils a role in the syntax of the sentence, as in English. Thus, the missing objects in recipes seem to be an empty category.

(28) Colocar el hojaldre extendido sobre la mesa. Enrollar __ sobre sí mismo.
Place the puff pastry spread out over the table. Fold __ over itself.
(Place the puff pastry spread out over the table. Fold __ over itself.)

(29) Verter los gnocchi en agua salada hirviendo, escurrir __ en cuanto suban a la superficie y condimentar *pg*.
Pour the gnocchi in water salty boiling, strain __ when rise-3rd p.pl. to the surface and season pg.
(Drop the gnocchi in boiling saltwater, strain as soon as (they) rise to the surface and season)

(Fior, 2006: 43)

(30) Dejar __ que PRO hierva.
Allow __ that PRO boil-3rd p.sg.
(Allow to boil)

Up to this point, it seems that the phenomenon of null objects in recipes in Spanish is parallel with null objects in recipes in English. Therefore, it would not be seen unsuitable to think that this phenomenon in Spanish can also be a result of NOs being variables –*wh*-trace type variables– bounded by an empty operator that is related to the element elided as Haegeman (1987b) and Cole (1987) stated. Furthermore, Massam's (1992) analysis of null objects as empty categories being anaphoric and forming its own chain

would also explain the specific interpretation of null objects in recipes in Spanish. As mentioned before, in Spanish the sentences containing null objects are also given a general or unspecific interpretation in the general case. Nevertheless, the interpretation of the non-realized object in a recipe is that of a specific element previously mentioned in the discourse. In example (31)b., if we interpret the sentence containing the NO isolated, the interpretation would be that the person following the recipe has to cook for 45 minutes since a whistle is heard, which can be interpreted as cooking the whole recipe in that time. In (31)a., considering the previous discourse, we know that what must be cooked for 45 minutes since a whistle is heard are the ingredients inside the pot, nothing else. If this is the case, then, in the representation of example (31a.) the object position of the verb 'cocinar' (to cook) would be filled by an empty category bounded by an OP that is related to the previously mentioned NP 'los ingredientes' (the ingredients). However, it must be taken into account the unsuitability in Spanish of the analyses for NOs in relative clauses and RNR that in English involve OPs. Considering this, we can say that empty operators are not licensed equally in Spanish and English; thus, this analysis of null objects in recipes being empty categories bounded by an empty operator could not be suitable for recipes in Spanish.

(31) a. Introducir los ingredientes en la olla a presión con agua. [OP_1 [Cocinar ec_1 45' desde que empiece a pitar]].

Introduce the ingredients$_1$ in the pot at pressure with water. OP$_1$ Cook ec$_1$ 45' since start-3rdp.sg. to whistle

(Introduce the ingredients in the pressure cooker with water. Cook for 45' since it starts whistling)

b. Cocinar __ 45' desde que empiece a pitar.

Cook __ 45' since start-3rdp.sg. to whistle

(Cook for 45' since it starts whistling)

Regarding the specific interpretation, Ruda's (2014) analysis would be suitable for the Spanish phenomenon of null objects in recipes. She stated that the possibility of NOs in recipes having a specific interpretation is a result of the nature of the register. She stated that the NOs in recipes refer to a previously mentioned element, and as there is a restricted number of possible antecedents in the discourse that are suitable to behave as antecedents, the specific interpretation is granted by the context. However, as happens in English, this

constraint alone would not explain the ungrammaticality of NOs in other discourse circumstances.

In addition, the distribution of empty categories in Spanish is subject to strict conditions of recoverability (Brucart, 1999), as previously mentioned, and the basic grammatical features of the element have to be traceable from the elements that remain in the sentence. The grammatical features can be recovered through an element such as a clitic or an article; elements that, in the case of infinitival adjuncts, block the OP analysis.

Additionally, the absence of an overt subject in recipes seems to be an important factor in the licensing of NOs in recipes in Spanish too. Similar to the case of recipes in English, the infinitive tense –(32)a– is the most common to appear in the context –sentences in which the appearance of the subject is not necessary–. Nevertheless, the imperative –(32)b– is not so common since it is not perceived as suitable as in the case of English, and the use of declarative sentences is considered preferable in recipes in Spanish (Garrido, 1999) –(32)c–.

(32) a. Cuando esté listo incorporar los guisantes y la patata laminada. Salpimentar __, verter un litro de agua y cocinar a fuego medio unos 15 minutos.

When be-3rd p.sg. ready incorporate the peas and the potato laminated. Season __ pour a litre of water and cook at fire medium about 15 minutes.

(When it is ready, incorporate the peas and the laminated potato. Season, pour a litre of water and cook on medium heat for 15 minutes.)

b. Introduce todo en la sartén, sazona __ a tu gusto y fríe __ a fuego suave durante 25-30 minutos.

Introduce all in the pan, season __ at your liking and fry __ at fire smooth for 25-30 minutes.

(Introduce everything in the pan, season to your liking and fry on a slow burn for 25-30 minutes.)

c. Una vez infusionada la mezclamos con 3 yemas de huevo blanqueadas con azúcar, lo llevamos a 82 grados, colamos__ , y dejamos __ dentro de un sifón de cocina con 2 cargas, el sifón en frío.

One time infuse-past pron-2nd p.sg.fem. mix-2nd p.pl. with 3 yolks of egg whitened with sugar, pron-3rd p.sg. bring-2nd p.pl. to 82 degrees, strain-2nd p.pl., and let-2nd p.pl. inside of a siphon of kitchen with 2 loads, the siphon in cold.

(Once infused, we mix it with 3 egg yolks whitened with sugar, we bring it to 82 degrees, we strain it, and we let it inside a cooking siphon with 2 loads, the siphon being cold.)

The common usage of infinitives, and the fact that declaratives appear without an overt subject in recipes in Spanish, may be related to the factor that has been argued to be crucial for the licensing of NOs in recipes in English: the absence of an overt subject. It is worthy to mention that in recipes in Spanish overt subjects are not common; the example (33)a. is completely grammatical in terms of syntax, but it feels odd in the context of a recipe. Therefore, it is not unreasonable to think that this feature is compelling for NOs to be licensed in recipes in Spanish too. Nevertheless, in Spanish the dropping of the subject in numerous cases and scenarios is allowed, provided that the information needed to interpret that element is recoverable either from the context –contextual recoverability– or from the subject-verb agreement. Additionally, as the subject dropping in standard Spanish does not always license NOs –(33)c–, the idea that the licensing of the latter is possible due to the first one has to be discarded; even so, it can be considered to be a stylistic feature of the register of recipes.

(33) a. #Nosotros cortamos 4 lomos de sardina o caballa y los curamos en sal durante 40 minutos.

We cut-2nd p.pl. 4 filets of sardine or mackerel and pron.3rd p.pl. cure.2nd p.pl. in salt for 40 minutes.

(We cut 4 filets of sardine or mackerel and we cure them in salt for 40 minutes)

b. Cortamos 4 lomos de sardina o caballa y los curamos en sal durante 40 minutos.

cut-2nd p.pl. 4 filets of sardine or mackerel and pron.3rd p.pl. cure.2nd p.pl. in salt for 40 minutes

(We cut 4 filets of sardine or mackerel and we cure them in salt for 40 minutes)

c. *Cortamos 4 lomos de sardina o caballa y __ curamos en sal durante 40 minutos.

cut-2nd p.pl. 4 filets of sardine or mackerel and cure.2nd p.pl. in salt for 40 minutes

(*We cut 4 filets of sardine or mackerel and we cure in salt for 40 minutes)

Since we have already dismissed the analysis of NOs in recipes as variables bounded by an empty operator in Spanish, then we have to dismiss Cummins and Roberge's (2004) and Fior's (2006) analyses of the phenomenon, because these theories postulate empty operators too.

According to Weir (2017), the dropping of the direct object in recipes can be explained as the direct object's omission being the combination of a null determiner –$\emptyset_D$– and a silent NP, which is referring to an entity from the discourse, that the first element has licensed. As explained in section 2, Weir states that the $\emptyset_D$ is a determiner that behaves as expressions such as *some* that license silent complements. Additionally, he affirms that the specific interpretation assigned to the NOs in recipes is due to the value of the choice-function variable they get –the choice-function will always pick a particular referent–. In his paper, he concludes that this can be a possible explanation since the $\emptyset_D$ is available in writing, more specifically in contexts such as recipes as example (34) shows, even when there is not an omission of the object. Nevertheless, the availability of the $\emptyset_D$ in Spanish seems to be unsuitable for the explanation of the phenomenon of NOs.

According to Laca (1999), the absence of an article or determiner in the Spanish language always results in an unspecific interpretation of the noun phrase. She argues that there is no context or structure in which the noun phrase without a determiner can be interpreted as a specific element, no matter if the element has been previously mentioned. Therefore, the Spanish version of example (34) represented in (35) is not grammatical. Thus, as the appearance of a non-overtly realized determiner results in ungrammaticality in the Spanish language, the analysis proposed by Weir has to be ruled out for the phenomenon of null objects in recipes in Spanish.

(34) Mix butter and sugar. Add eggs to $\emptyset_D$ mixture.

(Weir, 2017: 21)

(35) b. Mezcla mantequilla y azúcar. *Añade huevos a $\emptyset_D$ mezcla.

Mix butter and sugar. Add eggs to $\emptyset_D$ *mixture.*

(Mix butter and sugar. Add eggs to $\emptyset_D$ mixture.)

Furthermore, Spanish does not accept a nominal phrase lacking a determiner to be a referential expression. The obligatory general interpretation that is assigned to phrases without a determiner opposes the anaphoric behaviour. As example (36) shows, there is nothing in the sentence providing the information to understand whether the water that has to be boiled twice is the same –it can be two different steps of a recipe meaning two different quantities of water–.

(36) a. Hervir agua dos veces.

Boil water two times

(Boil water twice)

(Laca, 1999: 898)

b. Hervir agua dos veces (antes de tomártela).

Boil water two times (before of drinking-2nd p.sg.)

(Boil water twice (before you drink it))

c. Hervir agua dos veces (primero una cazuela para la pasta y después otra para el arroz).

Boil water two times (first one pot for the pasta and then another for the rice)

(Boil water twice (first a pot for the pasta and then another one for the rice))

Taking into account these incompatibilities between Spanish and Weir's (2017) analysis, mostly with the ungrammaticality of the sentences appearing with a non-overt determiner, it has to be stated that Weir's analysis is not suitable for the Spanish NOs phenomenon in recipes, since the availability and grammaticality of the null determiner is the main point of his theory.

Ruda's (2017) explanation of missing objects in recipes is that those elements which are elided are truncated direct objects. The truncated constituent is represented as *n*, and via a type-shifting operation, the non-over element's indefinite interpretation turns into a

definite one, referring, then, to a specific element from the discourse. This hypothesis is lexically constrained, since not every verb licenses *ı.*

Nonetheless, this hypothesis is not suitable for the Spanish null objects either. This is so since, as mentioned before, one of the requisites for object drop to be allowed in this language is that the element elided must be understood via the remaining items in the sentence. In truncated constructions in Spanish, every constituent of an indirect interrogative phrase is elided but the head –(37)–. The content of the empty category is interpreted through a previous sentence that matches the characteristics of the interrogative element remaining in the sentence. In example (37) below, the element '*adónde*' (where) indicates that the elided constituent is '*ha de viajar*' (has to travel); without that element it would not be possible to know what exactly has been elided: the person traveling, the place or even the time when that person is travelling. Also, truncated elements are incompatible with specific interpretation in truncated sentences as it would be impossible to assign an interrogative variable value to them (Brucart, 1999). Likewise, this type of sentences does not occur in the recipe register.

(37) a. Sé que ha de viajar, pero no sé adónde ∅.
Know-1st p.sg. that have-3rd p.sg. to travel, but no know-1st p.sg. where ∅
(I know that it has to travel, but I don't know where to)
(Brucart, 1999: 2843)

b.*Vino, pero no sé quién ∅.
Come-past-3rd p.sg, but no know-1st p.sg. who ∅
(It came, but I don't know who)
(Brucart, 1999: 2844)

In addition, Ruda (2017) states that in languages in which the definite interpretation is available only via mediation by an overt lexical item, the possibility of *n* being interpreted as definite by undergoing a type-shifting operation is not possible. She states that the obligation of an overt element to appear in order to provide a specific or definite interpretation on the object blocks the availability of the type-shifting operation to occur, as in the case of Spanish. Furthermore, truncated sentences in Spanish are argued to be

instances of contextual ellipsis, a type of ellipsis in which the omission of the element is purely phonetic, therefore, there is no empty category present in the sentence.

As has been mentioned when testing Weir's analysis in Spanish, the presence of an overtly realized determiner is obligatory in order to get a definite interpretation. The obligatoriness of this, and being the determiner the element that expresses the definiteness makes impossible (as Ruda explains) the licensing of the type-shifting operation to occur.

Therefore, the analysis provided by Ruda (2017) for the phenomenon of missing objects in recipes in English is not applicable to analyse the same phenomenon in recipes in Spanish.

4. Conclusion

In this paper, I offered a comparison between the English and the Spanish languages focused on the aforementioned phenomenon of null objects in recipes. Having displayed the null object phenomenon and having presented contexts in which this phenomenon seems to be possible in the standard usage of the languages (intransitivity, relative clause, parasitic gaps, infinitival adjuncts and ride node raising operation in the case of English; and intransivization, parasitic gaps and RNR in the case of Spanish). Concluding that the analyses provided for these NOs do not explain the phenomenon in recipes, I presented the analyses of the phenomenon in that special register in the case of English done by several authors. I stated that, according to these papers, missing objects in recipes in English are instances of empty categories. Furthermore, the interpretation of these empty categories is specific and denotes a definite element, contrary to the common general and indefinite interpretation that is usually given to sentences with non-overt objects. Also, it has been mentioned that the phenomenon appears to be licensed only when the subject is not overtly realised too; even if there is not an explanation for this feature yet. Next, I presented the analysis of the null objects in recipes in English being variables, along with the analyses done by Ruda (2017) and Weir (2017). The first analyses the phenomenon as an instance of a truncated sentence whose missing element –the direct object–, represented as *n* is interpreted as a definite and specific element previously mentioned in the discourse by undergoing a type-shifting operation; the latter analyses the missing objects in recipes as a combination of a null determiner and a silent NP licensed by the determiner itself.

In section 3, I contrasted the licensing of NOs in recipes in both languages and I tested the analyses regarding the phenomenon in English with the phenomenon in Spanish. In the first part of the comparison, I stated that the phenomenon of null objects in recipes in Spanish seems to be, also, an empty category that usually happens when there is an absence of an overt subject.

Then, I dismissed the analysis that postulates an empty operator since, apparently, this element behaves differently in Spanish.

At the end, I have put into the test Weir's analysis' applicability for the phenomenon in Spanish. Taking into account Laca's (1999) paper on the presence and absence of determiners in Spanish, I concluded that the presence of the $\emptyset_D$ that Weir proposes is not possible for the Spanish null objects phenomenon in recipes, as the absence of a determiner in Spanish implies obligatorily an unspecific interpretation. The absence of this, also, prevents the referential behaviour of the constituent. Being the availability of this null determiner the main idea of Weir's analysis, and the impossibility in the Spanish case to license this element with a definite value, I concluded that this analysis cannot be applied to explain missing objects in recipes in Spanish.

Finally, Ruda's theory has been tried in order to explain the phenomenon in recipes in Spanish. Nevertheless, this hypothesis does not suit Spanish either. The truncated construction theory in Spanish behaves differently from the one in English. According to Brucart, Spanish ellipsis requires the basic grammatical characteristics –number, gender– of the element elided to appear within the sentence it belongs to, differently from English where the element is just deleted. Being this the case, the Spanish language allows the ellipsis of the constituent, but the element showing those grammatical features of gender and number, being this an interrogative pronoun. Also, an elided complement cannot be interpreted with a specific value, since the specificity is incompatible with the presence of a truncated phrase. Furthermore, in Ruda's paper it is stated that her analysis cannot be applied to languages that obligatorily provide definite value via the presence of an overt element. Spanish is a language that requires the presence of an element to provide definiteness. Consequently, Ruda's analysis is not suitable to explain missing objects in recipes in Spanish either.

All in all, after assessing the similarities of null objects in recipes in both languages and the applicability of the analyses done on the matter in the special register of a recipe

in English for the phenomenon in Spanish, I have to conclude that none of the theories postulated for the phenomenon of null objects in recipes in English can be applied to Spanish. Therefore, I may confirm that the phenomenon of null objects in special registers such as recipes, in the case of English and Spanish, behaves differently. Therefore, it is not possible to use the same analyses to explain the phenomenon in recipes in English and in recipes in Spanish.

5. Bibliography

Brucart, José M. (1999). 'La Elipsis' in *Gramática Descriptiva de la Lengua Española* (1999) conducted by Ignacio Bosque and Violeta Demonte, Vol. 2, pp. 1787-1866, Espasa.

Cole, Peter (1987). 'Null Objects in Universal Grammar' in *Linguistic Inquiry*, Vol. 18, nº4 (Autumn, 1987), pp. 597-612, The MIT Press.

Fior, Virginia M. (2006). 'Non-overt Arguments in the Instructional Register of English', Universitá Cá Foscari Venezia.

Garrido, Joaquín (1999). 'Los Actos del Habla. Las Oraciones Imperativas' in *Gramática Descriptiva de la Lengua Española* (1999), conducted by Ignacio Bosque and Violeta Demonte, Vol. 3, pp. 3879- 3928, Espasa.

Haegeman, Liliane (1987a). 'Complement Ellipsis in English: Or How to Cook Without Objects' in *Studies in Honour of René Delorez*, pp. 248-261, Seminarie voor Engelse en Oud-Germaanse Taalkunde R.U.G.

Haegeman, Liliane (1987b). 'Register Variation in English: Some Theoretical Implications', *Journal of English Linguistics*, Vol. 20, pp. 230-248.

Haegeman, Liliane (1994). 'Introduction to Government and Binding', 2nd edition, Blackwell Publishers, Section 8, pp. 431-479.

Laca, Brenda (1999). 'Presencia y Ausencia de Determinantes' in *Gramática Descriptiva de la Lengua Española* (1999) conducted by Ignacio Bosque and Violeta Demonte, Vol. 1, pp. 892-928, Espasa.

Massam, Diane & Roberge, Yves (1989). 'Recipe Context Null Objects in English' in *Linguistic Inquiry*, Vol. 20, nº1 (winter, 1989), pp. 134-139, The MIT Press.

Massam, Diane (1992). 'Null Objects and Non-Thematic Subjects' in *Journal of Linguistics*, Vol. 28, nº1, pp. 115-137, Cambridge University Press.

Real Academia Española (2009). *Manual de la Nueva Gramática de la Lengua Española*, Asociación de Academias de la Lengua Española, Espasa, 22nd edition.

Ruda, Marta (2014). 'Missing Objects in Special Registers: The Syntax of Null Objects in English', *Canadian Journal of Linguistics*.

Ruda, Marta (2017). 'In the Syntax of Missing Objects. A Study with Special Reference to English, Polish, and Hungarian', *Linguistics Today*, nº 244, John Benjamin's Publishing Company.

Weir, Andrew (2017). 'Object Drop and Article Drop in Reduced Written Register', in *Linguistic Variation*, Vol. 17, Issue 2, pp. 157-185 *NTNU Norwegian University of Science and Technology*.

PRIMARY SOURCES

Cocina abierta, Karlos Aguiñano, *Tortilla de Patatas o Tortilla Española, Receta Fácil*

Last accessed: May 15th, 2022

https://www.hogarmania.com/cocina/recetas/huevos/tortilla-patatas-8684.html

Le Cordon Bleu, *Chipirones Rellenos con Ajos Confitados y 'Coulis' de Pimiento*

Last accessed: May 15th, 2022

https://www.cordonbleu.edu/news/madrid-receta-chipirones-rellenos-ajos-confitados-coulis-pimiento/es

Masterchef Recetas, *Coca de Recapte 'Campo' de Arnau*

Last accessed: May 15th, 2022

https://www.rtve.es/television/20210712/receta-coca-recapte-campo-arnau/2127261.shtml

Masterchef Recetas, *Crema Catalana "Luna" de Arnau*

Last accesed: May 11th, 2022

https://www.rtve.es/television/20210712/receta-crema-catalana-luna-arnau/2127341.shtml

Masterchef Recetas, *Mar y Montaña de pichón y carabinero 'Bosque' de Arnau*

Last accessed: May 9th, 2022

https://www.rtve.es/television/20210712/receta-mar-montana-pichon-carabinero-bosque/2127320.shtml

Nestlé Cocina, *Crema de Guisantes*

Last accesed: May 15th, 2022

https://www.nestlecocina.es/receta/crema-de-guisantes?b=ideal