# Semantics of lo-headed degree constructions in Spanish\*

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**Abstract:** Since Spanish does not have neuter nouns, in this language, the neuter definite article *lo* can be used to express entities without a gender, such as sets, propositional content and properties. This is known as the referential use of *lo* and has been explained through definiteness. However, this particle can also be used as the head of phrases denoting quantities or degrees. Needless to say, these phrases differ from the referential ones syntactically and semantically. However, this does not mean said phrases are not definite. In fact, the data shows they, most likely, are. How can we relate this definite article to definiteness theory if it is not operating over individual entities? In this paper, I review the semantic characteristics of *lo*-headed degree constructions, the *lo*-degree form itself, and the adjectives with which it combines, in order to understand its behavior as definite phrases with degree reference.

Keywords: definiteness, neuter gender, semantics, Spanish, definite article

#### 1 Introduction

Even though Spanish only has masculine and feminine nouns, this language has three definite articles: *el* with a plural counterpart *los*, as in (1), *la* with a plural form *las*, as shown in (2) and *lo*, an alleged neuter form that lacks a plural form, as in (3).

- (1) No leí el libro completo, solo los primeros capítulos. 
  no read.1SG.PST the.SG.M book.SG.M whole.SG.M only the.PL.M first.PL.Mchapters.PL.M 
  'I did not read the whole book, only the first chapters.'
- (2) Jamás uses la mentira para no hacer las cosas importantes. never use.2SG.PRS the.SG.F lie.SG.F to no do.INF the.PL.Fthings.PL.F important.PL.F 'Never use the lie to not do the important things.'
- (3) Yo hablé sobre lo del otro día.

  I speak.1SG.PST about the.N of other.SG.M day.SG.M
  'I spoke about the other day.'

While *el* and *la* refer to individual entities, the *lo* form does not. It seems to have branched out to different types of entities due to the lack of neuter nouns. So far, literature on this topic determines there are three types of *lo* particles. First, the referential use, known to make reference to entities in the discourse, working as a definite article (García Rodríguez 2018), as shown in (4), where *lo de madera* refers to the whole set of things that happen to be made out of wood. Then, the

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<sup>&</sup>lt;sup>1</sup> Most examples are inspired by content found in social media, especially in Twitter. For those that do not, I want to thank friends and family that come to me with new sentences, always asking about this research. All translations are my own.

emphatic *lo*, that denotes a property to a maximum degree (Gutiérrez-Rexach 1999:10) as in (5) in which *lo rápido* denotes the velocity property of the event of running to be at its maximum level. Finally, there is the degree particle which is the object of study of this document, and it is shown in (6), which describes the degree to which Jorge exercises.

- (4) Trae para acá todo lo de madera. bring.2SG.IMP to here everything the.N of wood.SG.F 'Bring everything that is made of wood over here.'
- (5) Me sorprende lo rápido que corren los niños.

  I.ACC surprise.1SG.PRS the.N fast.SG.M that run.3PL.PRS the.SG.M kids.SG.M

  'I am surprised at how fast the kids run.'
- (6) Jorge se ejercita lo suficiente.

  Jorge PRO exercise.3.SG.PRS the.N enough.ADV

  'Jorge exercises enough.'

This degree-lo particle—as it will be called from now on—differentiates itself from the referential form on its morphosyntactic behavior: it has a different syntactic distribution and the phrases headed by it have different syntactic functions. Besides, semantically, the degree-lo form does not refer to individuals, but degrees. Because of this, it is impossible not to wonder if this specific use can be explained by definiteness theory as its referential counterpart.

In this article, I present a semantic characterization for the degree-lo particle that, I believe, will help in understanding how the degree-lo particle works. Before diving into the semantics of this form, I show data from its morphosyntactic behavior, specifically, its syntactic distribution and its syntactic functions, both topics working as a base for its semantics. In the semantics section, first I review the interpretation of degree-lo headed phrases in order to understand its contribution to sentences. After that, I examine the nature of the adjectives with which this particle can be combined. Finally, I study the significance of the lo particle itself and how this impacts the meaning of the phrases it heads.

## 2 Morphosyntax of degree *lo*-headed constructions

Before I enter the semantic analysis of degree-*lo* phrases, I will discuss some relevant data of its morphosyntax. This information will assist the future review of its semantics, under the assumption that any semantic piece of data will always be a reflection of the proper syntax of a construction.

### 2.1 Syntactic Distribution

The degree-lo particle can only be combined with adjective phrases with sufficiency-oriented heads. This means, for this form to have a degree meaning, it will only be combined with adjective phrases indicating a property that describes an amount of 'x' is enough. Because of this, the adjective inventory with which it can be merged is limited. It consists of three adjectives: suficiente, necesario and bastante and their adverbial counterparts: suficientemente, necesariamente and bastante as an adverb.

- (7) No duermo lo necesario para estar descansada. no sleep.1SG.PRS the.N necessary.SG.M to be.INFrested.SG.F 'I do not sleep enough to feel rested.'
- (8) La vida te golpea lo suficientemente fuerte. the.SG.F life.SG.F you.ACC hit.3SG.PRS the.N enough.ADV 'Life hits you hard enough.'
- (9) Corrió lo bastante para llegar. run.3SG.PST the.N enough.ADV to arrive.INF 'He ran away enough to get there.'
- (10) \*Corrió lo lejos para llegar. run.3SG.PST the.N far.ADV to arrive.INF 'He ran far to get there.'

Any other adjective in combination with *lo* will result in an ungrammatical sentence, such as (10), unless modified by an adverbial counterpart of these three adjectives. This is, any other adjective must be modified by *suficientemente*, *necesariamente* or *bastante* working as an adverb to be combined with degree-*lo*.

- (11) No somos lo suficientemente maduros. no are.3PL.PRS the.N enough.ADV mature.PL.M 'We are not mature enough.'
- (12) Por si no estaba lo necesariamente paranoica. for if no be.1SG.PROG the.N necessarily.ADV paranoid.SG.F 'In case I was not paranoid enough.'
- (13) Soy lo bastante inteligente para entender. be.1SG.PRS the.N enough.ADV smart to understand.INF 'I am smart enough to understand.'

There are other examples of lexical items joining the degree-lo form in phrases, such as requerido (required), permitido (allowed), prohibido (forbidden), etc. All of these adjectives seem to have a quantity notion in common, which probably makes them compatible with the degree-lo particle. I leave them out of this research for now. Since data shows suficiente, necesario and bastante are more common, I use them as a starting point in the way of understanding the degree-lo particle's behavior.

### 2.2 Syntactic Functions

Degree-lo headed phrases can have three different functions, all related to their modificational nature. To begin with, they can work as adjuncts as in (14) where lo suficiente modifies the event of living. In regard to this function, two observations must be made. First, when working as verbal adjuncts, these phrases will always have quantitative semantics. This means they can be used to answer a question such as *How much?* Second, the elision of a degree-lo phrase working as an

adjunct will not affect the grammaticality of a sentence, but it will modify its meaning, as shown in (14) and (15).

- (14) No quiero morir sin haber vivido lo suficiente. no want.1SG.PRS die.INF without have.INF live.PTCP the.N enough.SG.M 'I don't want to die without having lived enough.'
- (15) No quiero morir sin haber vivido. no want.1SG.PRS die.INF without have.INF live.PTCP 'I don't want to die without having lived.'

Moreover, degree-lo phrases can be predicative expressions, as in (16), where lo bastante interesante modifies el proyecto. Finally, they can be attributive expressions, as shown in (17), where lo suficientemente hombre is a comment on Diego through a linking verb.

- (16) Consideraron el proyecto lo bastante interesante. consider.3PL.PST the.SG.M project.SG.Mthe.N enough.ADV interesting.SG.M 'They thought the project to be interesting enough.'
- (17) Diego nunca va a ser lo suficientemente hombre. Diego never go.3SG.PRS to be.INFthe.N enough.ADV men 'Diego will never be man enough.'

When acting like predicative or attributive expressions, degree-lo phrases will predicate over subjects, direct objects, and indirect objects. To reflect this relation, the adjectives in the phrases will always agree in gender and number with the argument they are modifying, even though lo will remain the same, as one can see in (18) and (19).

- (18) Las iglesias no son lo suficientemente limpias. the.PL.F churches.PL.F no be.3PL.PRS the.N enough.ADV clean.PL.F 'Churches are not clean enough.'
- (19) Jonathan rescató a un perro lo bastante enfermo. Jonathan rescue.3SG.PST to a dog.SG.Mthe.N enough.ADV sick.SG.M 'Jonathan rescued a sick enough dog.'

As it happens with verbal adjuncts, deleting degree-lo phrases working as predicative expressions changes the core meaning of sentences, as can be seen in the contrast between (20) and (21). Sometimes, these sentences will become ungrammatical.

- (20) Consideraron el proyecto lo bastante interesante. consider.3PL.PST the.SG.M project.SG.M the.N enough.ADV interesting.SG.M 'They thought the project to be interesting enough'
- (21) Consideraron el proyecto. consider.3PL.PST the.SG.M project.SG.M 'They considered the project'

- (22) Diego nunca va a ser lo suficientemente hombre. Diego never go.3SG.PRS to be.INF the.N enough.ADV men 'Diego will never be man enough.'
- (23) ? Diego nunca va a ser.

  Diego never go.3SG.PRS to be.INF

  'Diego will never be'

This is typical of degree-*lo* phrases working as attributive expressions since the linking verb will not have a second predicate to join with the first one. This is shown in the pair (22) and (23).

## 3 Semantics of degree *lo*-headed constructions

### 3.1 Degree *lo*-headed constructions

I believe these phrases denote a property that holds to a degree such as it is, at least, the minimal degree required in a context according to a standard of comparison, as proposed by Kennedy and McNally (2005). This is the standard to which a property is measured. This is shown in (24), where *lo suficientemente bueno* denotes a degree on the scale of optimality a boyfriend must have in order to be with a person. The same occurs in (25), in which *lo necesario* denotes a degree to which El Salvador has suffered. Finally, we have (26), where it is stated that the property of being dirty, possessed by the sea, holds to such degree so the sea is dirtier than it should be.<sup>2</sup>

- (24) Soy lo suficientemente bueno para ser tu novio. be.1SG.PRS the.N enough.ADV good.SG.M to be.INF your boyfriend 'I am good enough to be your boyfriend.'
- (25) El Salvador ya sufrió lo necesario con ustedes. El Salvador already suffer.3PL.PST the.N necessary.SG.M with you.PL 'El Salvador has already suffered enough with you.'
- (26) El mar ya está lo bastante sucio. the SG.M sea SG.M already be 3SG.PRS the N enough ADV dirty SG.M 'The sea is dirty enough.'

Now, an adjective scale has three parameters: a set of degrees, a dimension, and an ordering relation (Kennedy & McNally 2005:351). Because of this, the degree to which a property holds is found on the scale of said property, among the whole set of degrees the scale has.

As already stated, degree-*lo* phrases make reference to a degree on a scale, but it is important to notice this degree is not a single one. Since these phrases denote a property taken to a degree that is at least the minimal degree on the scale, they refer to a whole subset of degrees on the scale. This subset is constituted by the minimal degree proposed by the standard of comparison and then, all of the higher degrees that, by nature, contain this minimal degree.

So, for a standard like the one in (27), the sentence in (28) would be true if any of the contexts below in a), b) and c) were the description of reality. So, if Jorge exercises for two hours, he

<sup>&</sup>lt;sup>2</sup> While *bastante* can be translated as *a lot* in many instances, it must be noted that, when combined with lo its meaning is closer to *enough*. This is the interpretation I will be using.

exercises lo suficiente. This is also true if he exercises for four and even for eight hours, since by entailment, he would be exercising two hours.

- (27) Jorge is an average adult. Two hours a day is enough exercise for an average adult.
- (28) Jorge se ejercita 10 suficiente. Jorge PRO exercise.3.SG.PRS the.N enough.SG.M
  - 'Jorge exercises enough.'
  - a) Jorge exercises two hours a day.
  - b) Jorge exercises four hours a day.
  - c) Jorge exercises eight hours a day.

This means, for degree-lo phrases, there is not just a single degree being pointed out in the scale, but an interval. Said interval starts at the minimal degree required by the standard of comparison and ends at the end of the scale, this is, its higher degree. This entails said interval has no end if we assume the scale is infinite.

Now, rightfully, if Jorge exercises for eight hours, that is a lot more than two hours. Because of this, if Jorge exercises eight hours, we can say he exercises more than enough, but the fact that he exercises enough remains true, since two hours are entailed in eight hours. This yields a pragmatic dilemma that can be related directly to Grice's Maxim of Quantity, specifically to the second submaxim that states the importance of making a contribution as informative as possible. This means a contribution must not be less nor more than necessary. This is why a sentence like (28) results non-informative in a context where Jorge exercises more hours, even though it is entailed in the actual number of hours exercised.

Another way of understanding this is through what Roberts (1996) calls the *Question Under* Discussion or QUD. A QUD is an implicit question in discourse that must be resolved via utterances in conversation. Any declaration that does not answer the QUD of a conversation may be judged as pragmatically inadequate. This is what happens in (28).

Now, back to its interpretation. The set of degrees pointed out by the degree-lo headed phrases depends entirely on the context given for its interpretation. In this sense, degree-lo phrases are evaluative constructions, as proposed by Jessica Rett (2018:3). This means their meaning depends on exceeding—or at least reaching—a contextual standard.

In (29), lo suficientemente abrigada will mean different things depending on the circumstances, specifically if we consider weather variation. This is, if Yolanda is only wearing a light cardigan, a sentence like (29) will be true if she is enjoying a day in the park in the beginning of autumn, but it will not be true if Yolanda is currently traveling around Antarctica.

(29) Yolanda sale suficientemente abrigada de su casa. Yolanda leave.3SG.PRS the.N enough.ADV cover.SG.F of her house 'Yolanda leaves her house covered enough.'

In this sense, *sufficiente* means that according to a context, x is *enough*, and also that x remains enough in contrast with its comparison class. This comparison class "is the subset of the universe of discourse which is picked out relative to a context of use" (Klein 1980:13), and it refers to the subset of degrees with which a degree of a property is contrasted to decide its adequacy. Because of this, a sentence like (29) is true if the degree to which Yolanda is covered is enough in the context when compared to a comparison class of events where x is covered enough.

Now, even though the first reading for this kind of phrases tends to be related to quantity notions, in reality, the interpretation for degree-*lo* phrases can be either quantitative or qualitative. As an example, a degree-*lo* phrase like the one in (29), *lo suficientemente abrigada* can be interpreted in different ways. One could think Yolanda is wearing enough layers, this is a quantitative interpretation. But also, there is a qualitative interpretation if we consider this sentence would also be true if Yolanda was wearing only one layer of a very expensive and thick anti-cold exotic fabric. To sum up, degree-*lo* phrases can either be measured in numbers or in more abstract concepts.

On the same note, there are some observations that must not be ignored. First, it must be noted that the quantitative interpretation can include the qualitative one. This means they are not necessarily mutually exclusive: qualitative sentences can be quantitative by nature. In this sense, there are sentences that have both readings. For example, in (29), *lo suficientemente abrigada* could be referring to the amount of layers Yolanda is wearing at the same time it says something about the quality of the fabric she is using.

I believe the dual nature of interpretation of these degree-*lo* phrases sheds some light into its gradable nature since both the quantitative and the qualitative aspects can be measured on a gradable scale, brought by the property denoted.

A possible motivation for the quantitative-qualitative nature of these phrases comes from their range. This is the set of elements these phrases can modify. The range of degree-*lo* phrases includes objects and events. This means they can predicate over objects and also over events, as one can see in (30) and (31). In (30), the degree-*lo* phrase modifies Jocelyn by stating how fast she is as a person. In (31), *lo suficientemente rápido* modifies the event of Jocelyn running said race, not her nature.

- (30) Jocelyn es lo bastante rápida para ganar la carrera. Jocelyn is.3SG.PRS the.N enough.ADV fast.SG.F to win.INF the.SG.F race.SG.F 'Jocelyn is fast enough to win the race.'
- (31) Jocelyn ganó la carrera porque corrió lo suficientemente rápido. Jocelyn win.3SG.PST the.SG.F race.SG.F becauserun.3SG.PST the.N enough.ADV fast.SG.M 'Jocelyn won the race because she ran fast enough.'

Jessica Rett proposes that a verbal-nominal duality nature like this indicates a lexical item or phrase does not work as an adjective or as a quantifier, but as a quantity word (2018:6). Rett states that this type of word actually ranges over sets of degrees and then, their interpretation extends into individuals. Jenny Doetjes proposes this type of phenomena does not take a specific category, but it just brings a scale, and it can simply modify any element that allows a scalar interpretation (Doetjes 2004:91).

## 3.2 Suficiente, necesario and bastante

As previously stated, the degree-lo particle can form phrases when joining other adjective phrases headed by adjectives with sufficiency-oriented semantics such as *suficiente*, *necesario* and *bastante*. These three adjectives are quantity adjectives, because they express a measure operating over any object they modify. For these three adjectives, this quantity notion also conveys the idea of it being enough.

For *suficiente* and *necesario*, my proposal is that these adjectives express the degree of a property such as it is, at least, the minimal degree required or ideal for a standard of comparison,

that derives from a normative scale given by a context. In the case of *bastante*, this adjective denotes a degree on a scale such as it is higher than the minimal degree required or ideal according to a standard of comparison brought by the context.

For example, in (32), *sufficiente* modifies *talento* and indicates such talent is enough for someone to become a solo artist. In (33), *bastantes* modifies *fresas* and it expresses the quantity of procured strawberries as a quantity that must be more than enough. Finally, in (34), *necesarios* modifies *azotes* and determines the amount of hits as the amount needed for the context.

- (32) Ella tiene suficiente talento para ser solista sin la banda. She have.3SG.PRS enough.SG.M talent.SG.M to be.INFsoloist without the.SG.F band.SG.F 'She has enough talent to go solo without the band.'
- (33) Le pido comprar bastantes fresas y trae como cinco. he.ACC ask.1SG.PRS buy.INF enough.PL.F strawberries.PL.F and bring.3SG.PRS like five 'I ask him to buy enough strawberries and he brings like five.'
- (34) Le daré los deberes necesarios para aprender. he.ACC give.1SG.FUT the.PL.M homework.PL.M necessary.PL.M for learn.INF 'I will give him as much homework as needed for him to learn.'

These two definitions relate directly with the evaluativity concept. This happens because *suficiente*, *necesario* and *bastante*, refer to a degree that exceeds a standard contextually valued (Rett 2018:74). In this sense, in (32) the amount of talent said person has exceeds or at least equals the amount needed to become a solo artist.

These three adjectives are absolute adjectives as proposed by Kennedy and McNally (2005). This means they are adjectives whose arguments must possess the property denoted taken to a specific degree. There are two types of absolute adjectives.

First, the minimum standard adjectives. These require their arguments to possess only some minimal degree of the gradable property they introduce. An example would be an adjective such as *wet* in a sentence like the one in (35). The second type are the maximal standard adjectives, whose arguments are required to possess a maximal degree of the property in question, such as in (36) with *flat*.

- (35) It is only a couple of drops, but this towel is already wet.
- (36) The road is flat, so it does not have a single bump on it.

Suficiente and necesario are minimal standard adjectives since they demand their arguments to possess a minimal degree of a property. This means a given object will be suficiente or necesario as long as it is, at least, barely suficiente or necesario. That is shown in (37), where six is the minimal number of sides needed to build a cube and thus, any number higher will suffice, but never a lower one. The analysis is the same for necesario in example (38), where 18 years and any higher age is enough for one to drink alcohol legally at least in Mexico, but never less. Bastante, on the other hand, is a maximal standard adjective. For something to be considered as bastante it must be found in a higher degree than the standard, as shown in (39).

- (37) Seis caras son suficientes para hacer un cubo. Siete también, pero cinco no. six sides.PL.F be.3SG.PRSenough.PL.F to do.INF a cube seven too but five no 'Six sides are enough to build a cube. So are seven, but not five'
- (38) 18 años son la edad necesaria para beber. 17 no, pero sí 19. 18 years be.3PL.PRS the.SG.F age.SG.F necessary.SG.F to drink.INF 17 no, but yes 19 '18 years are enough to buy cigarettes. Not 17, but 19 are [enough too].'
- (39) Dice que use 4 peras, pero usaré 10, usaré bastantes. say.3SG.PRS that use.2SG.IMP four pear.PL.M but use.1SG.FUT en use.1SG.FUT enough.PL.F 'It says to use four pears, but I will use ten, I will use plenty'

The absolute nature of these adjectives can be verified by entailments used to differentiate their behavior from other adjectives behavior. Kennedy and McNally (2005:358) give the following denotations for these adjectives, where  $S_A$  is the scale associated with the adjectival head while  $m_A$  is the measure function introduced by the adjective.

$$(40) [[AP_{\min}]] = \lambda x. \exists d[d > \min(S_A) \land m_A(x) = d]$$

(41) 
$$\lceil AP_{\text{max}} \rceil = \lambda x. \exists d \lceil d = \max(S_A) \land m_A(x) = d \rceil$$

These denotations make predictions about their entailment patterns. For minimum standard adjectives, (40) predicts that a denial such as *a is not adj* should entail that *a* possesses no amount of given property at all. This entailment is true for *sufficiente* and *necesario*.

- (42) ? La madera no era suficiente, pero bastó para the.SG.F wood.SG.F no be.3SG.PST enough.SG.F but be-enough.3SG.PST to construir la cabaña build.INF the.SG.F cabin.SG.F

  'The wood was not enough, but it was enough to build the cabin.'
- (43) ? La madera no era la necesaria, pero bastó
  the.SG.F wood.SG.F no be.3SG.PST the.SG.F necessary.SG.F but be-enough.3SG.PST
  para construir la cabaña
  to build.INF the.SG.F cabin.SG.F
  'The wood was not enough, but it was enough to build the cabin.'

For maximal standard adjectives, (41) indicates that the assertion of *a is adj* should entail that *a* has a maximal amount of the property. This entailment is true for *bastante* with a *sufficiency* reading.

(44) La comida era bastante, aunque no todos alcanzaron a comer. the SG.F food SG.F be 3SG.PST enough SG.F although no everyone get 3PL.PST to eat.INF 'The food was enough, although not everyone got to eat.'

Now, as stated at the beginning of Section 2.1, to combine with degree-lo, other adjectives lacking sufficiency semantics must be modified by the adverbial counterparts of *suficiente*, necesario and bastante, these are the quantity adverbs suficientemente, necesariamente and

bastante as an adverb. This way, the *enough*-ness notion remains. Otherwise, the sentence is ungrammatical, as seen in (45) and (46). This is because, by nature, these lexical items will always signal measure on a scale (Real Academia Española 2010:259).

- (45) Este auto viejo va a llegar lo suficientemente lejos. This.SG.M car.SG.M old.SG.M go.3SG.PRS to arrive.INF the.N enough.ADV far.ADV 'That old car will get far enough.'
- (46) \*Este auto viejo va a llegar lo lejos.

  This.SG.M car.SG.M old.SG.M go.3SG.PRS to arrive.INF the.N far.ADV

  'This old car will get the far'

These adverbs can be analyzed in the same way as their adjective forms. This means they denote a degree to which a property holds, such as this degree is at least the minimal required according to a standard of comparison. For example, (47) states that there is a minimal degree of blackness a cup of coffee must reach to be drunk by the speaker.

- (47) Tomo café suficientemente negro o no tomo. drink.1SG.PRS coffee.SG.M enough.ADV black.SG.M or no drink.1SG.PRS 'I drink coffee black enough or I don't drink it'
- (48) La clínica de mi tía es bastante nueva. the SG.F hospital SG.F of my aunt BE.3SG.PRS enough ADV new SG.F 'My aunt's hospital is new enough.'
- (49) Voy a conseguir un PC lo necesariamente fuerte para jugar. go.1SG.PRS to get.INF a computer.SG.M the.N necessary.ADV strong.SG.M to play.INF 'I am gonna get a computer strong enough to play'

It is important to mention that the only adjectives that can be modified by the adverbs in degreelo phrases are the gradable ones. This is expected. If we consider the degree-oriented nature of these adverbs, it makes sense they cannot function properly with non-gradable adjectives.

Also, these adverbs cannot be combined with maximal standard adjectives. This happens because maximal standard adjectives, such as *full*, describe complete processes or events, while *suficiente*, *necesario* and *bastante* do not. By nature, something *suficiente* is something not complete.

#### 3.3 The degree-lo form: a definite article

Even though it has been confirmed that the referential use of *lo* is a definite article, since it can be explained through definiteness theory (García Rodríguez 2018), the degree-*lo* particle does not share its behavior. This happens because phrases headed by this form do not refer to entities. Because of this, it is necessary to review the contribution of the degree-*lo* form to the meaning of its phrases.

My proposal is that the degree-lo particle's semantic contribution remains a matter of definiteness, but in these phrases, it is expressed in a different way: not over individuals, but over degrees. Just as it happens in standard definiteness theory, definiteness is expressed via two presuppositions in degree-lo phrases.

First, the presupposition of maximality. According to definiteness theory, definite articles denote a function that selects the greatest element of any subset which possesses the denoted property (Ojeda 1993:172). This means, in any given set, the definite article phrase referring to "the x" will refer to the subset of elements with the property of being x. This is also true for degree-lo phrases expressing a set of degrees, as I mention in Section 3.1.

Given a context where the average amount of exercise for a healthy adult is two hours, a sentence like (50) will be true in any context where Jorge exercises for at least two hours.

(50) Jorge se ejercita lo suficiente. Jorge PRO exercise.3.SG.PRS the.N enough.SG.M 'Jorge exercises enough.'

This means the degree-*lo* phrase includes the whole subset of degrees on a scale that point to an enough amount. This subset, as stated before, includes the minimal degree on the scale and any degree higher. This behavior is also shown in the semantic inadequacy of sentences like (51), where the assertion of sufficiency of a property cannot entail the assertion of less than that sufficiency.

(51) ? Es lo suficientemente inteligente para trabajar con nosotros, be.3SG.PRS the.N enough.ADV smart to work.INF with us pero menos que eso. but less than that 'He is smart enough to work with us, but less than that.'

A hypothesis for this behavior would be the following: as a definite determiner, the degree-lo form can refer to all the degrees on a scale, this is, the maximal set of degrees on the scale of a property. This is how it works for certain determiners in Swedish (Coppock & Engdahl 2016) or even, the emphatic form of lo (Gutiérrez-Rexach 1999:10). Said ability combined with the

sufficiency semantics of sufficiente, necesario and bastante, would result in a restriction of the degrees being referred. This is, by now, an area pending further research.

The second notion expressed by the definite article in these phrases, thus expressing definiteness, is the presupposition of existence (Hawkins 1978). In this sense, degree-lo phrases assume the existence of the scale of degrees for a property and its key elements. This means that when said *out of the blue*, sentences like the ones in (52) and (53) prove infelicitous.

- (52) ? Pamela come lo suficientemente sano.
  Pamela eat.3SG.PRS the.N enough.ADV healthy.ADV
  'Pamela eats healthy enough.'
- (53) ? Pamela juega beisból lo suficientemente seguido.
  Pamela play.3SG.PRS baseball the.N enough.ADV often.ADV
  'Pamela plays baseball often enough.'

Also, these sentences seem to need a pre-stated context for them to not be confusing. For example, in (52), there is a general convention for reasons to eat healthy, let's say, to stay healthy, but we do not have a convention for how often is considered often enough. If someone were to utter a sentence like the one in (53), it would prompt its addressee to ask *What for?* That is, *What do you play enough baseball for?* 

This requirement for a context that allows its meaning to be interpreted reflects on a natural compatibility degree-lo phrases have with certain phrases headed by the preposition para and the phrase como para. I choose to name these phrases purpose phrases, since their meaning revolves around a motivation for something.

- (54) Dormiré lo necesariamente mal para que mi gata se sleep.1SG.FUT the.N necessary.ADV bad.ADV for that my cat.SG.F PRO quede en la cama. stay.3SG.PRS.SBJV in the.SG.F bed.SG.F 'I will sleep as badly as needed for my cat to stay in bed'
- (55) No duermo lo suficiente para estar descansada. No sleep.1SG the.N enough.SG.M to be.INF rested.F.SG 'I don't sleep enough to feel rested.'

In (54), for example, para que mi gata se quede en la cama indicates a reason to sleep poorly in these specific circumstances. In (55), para sentirme descansada indicates the motivation of sleeping enough is to be rested. Both purpose phrases restrict the context of the sentence and because of that, they delimit the scale and the standard of comparison for its interpretation. For example, in (54), the scale where the enough-ness of the quality of sleep is calculated does not just convey sleeping, but the quality of sleep that allows the cat to stay in bed.

This way, both the presupposition of maximality and the presupposition of existence are notions contributed directly by the definiteness of the phrases headed by the degree-*lo* particle.

#### 4 Conclusions

I started this paper with an introduction about definite articles in Spanish that soon diverged into a quick review of the *lo* particle and its uses. Once I stated the object of study for this research is the degree-*lo* form, I began a characterization for this particle.

In Section 2, I did a fast evaluation of its morphosyntax. I observed its syntactic distribution (2.1) and concluded that the degree-*lo* particle can be combined with adjective phrases whose heads are adjectives with a semantic contribution oriented to sufficiency, or, at least, modified by adverbs carrying this notion. Also, in Section 2.2, I stated that degree-*lo* phrases can work as verbal adjuncts, predicative expressions, and attributive expressions, and while doing so, they behave just as other phrases of the same kind.

In the Section 3, I developed a semantic characterization for this particle. I started with the complete degree-lo phrases in Section 3.1. Here, I reviewed the interpretation for these phrases, stating they denote an interval that includes a subset of degrees from a scale going from the minimal degree up until the higher degree on the scale. I also included information on its contextual nature, and I studied its range over objects and events and the dual nature of its interpretation, sometimes found in between a quantitative and a qualitative dimension. After that, in Section 3.2, I reviewed the semantic nature of the adjectives with which the degree-lo particle can be combined and their adverbial counterparts, their nature as absolute adjectives and some arguments to support this.

Finally, in Section 3.3, I studied the notions contributed by the degree-lo particle to the meaning of the phrases it heads and its relationship to the standard definiteness theory. The conclusion of this section is that this use of lo can convey two basic presuppositions for definiteness, which are maximality and existence. This means degree-lo phrases signal the pre-existence of the scale in which the degrees lo refers to are found. These phrases also convey a measure that includes the

whole subset of degrees selected by the standard of comparison as appropriate in a context. Because of this, it is possible to state this particle remains a definite article like the referential use. I believe this is one of two central points worthy of mentioning as final remarks, since it is a conclusion that affects the current literature on the neuter definite article in Spanish directly. Besides it adds relevant information for the understanding of the particle itself, allowing us to equate this use's behavior with the behavior of the referential form.

The second remark I would like to make is one concerning the degree-lo phrases. I believe an appropriate way of defining the semantics of degree-lo phrases comes from understanding it as a sum of the semantics of the degree-lo particle itself with the notions brought by *suficiente*, necesario and bastante.

On one hand, the *lo* particle refers to a degree held to the upmost point, since it selects the maximal set of degrees on said scale. This is also true for the emphatic form, as we stated in Section 3.3. On the other hand, the adjective phrase with which this particle can be combined restricts the nature of said set of degrees and reduces it, modifying the interval referred to by the whole phrase and differentiating this degree particle from the emphatic one. This, of course, is a preliminary hypothesis that will be reviewed under a more theoretical approach, using compositional semantics.

Another topic in need of study when it comes to the so called neuter definite article in Spanish *lo* is its diachronic evolution, which would probably show new data about the possible branching out that *lo* underwent once neuter nouns disappeared in Spanish. Also, the semantics of the emphatic form need to be examined in more depth, as do other adjectives that seem to join the degree-*lo* form less frequently, as stated in Section 2.1. All of these remain as possible future research topics.

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