SOME REMARKS ON THE SEMANTIC PROPERTIES OF *MÁS O MENOS*[1]

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Abstract

Following several lexicological works (García-Page 1991; García-Medall 1993; González Rodríguez 2008) and different papers on theoretical pragmatics (Sadock 1977; Channell 1980; Sauerland & Stateva 2007; Greenberg and Ronen 2013), the Spanish adverb *más o menos* 'more or less' has been considered an approximative adverb according to certain semantico-pragmatic features that it shares with other adverbs, such as *almost* or *barely*. Previous accounts for these adverbs relate to its pragmatic (Lakoff 1973; Sadock 1977) or discursive properties (Llopis Cardona 2016). Nevertheless, the meaning of *más o menos* has not been described from a semantic point of view, in opposition to semantic analyses for *almost* and *barely* (Hitzeman 1992; Sevi 1998), as well as for the Spanish *casi* and *apenas* (Aranovich 1992; Horn 2009, 2011). In order to carry out a first semantic description of *más o menos*, my starting point is the Sevi's (1998) account for the approximative adverbs *almost* and *barely*. The approximative *más o menos* is related to these two adverbs, since all three affect truth-conditions. However, an analysis of the involved implications reveals an inconsistency in the presuppositions triggered by *más o menos* which does not take place in *almost* or *barely*.

1. INTRODUCTION

In the first part of this paper, I deal with an introductory analysis of *más o menos*, according to its implications in propositional semantics. In section 2, I establish a relation between *almost*/*barely* and *más o menos* with respect to the vague nature of each. The different vagueness relations in each approximative suggest that, despite sharing some similarities with *almost*/*barely*, *más o menos* should receive a different treatment. In the third section, I outline some questions about the possible intensional analysis of *más o menos*. Finally, I conclude in section 4 by remarking on the necessity of further study on the semantics of approximatives of the type *más o menos*, outlining a categorial difference between prototypical approximatives and higher-order vagueifiers.

1.1. **The relation among *almost/barely* and the approximative *más o menos***

The presence of *más o menos* (English 'more or less') in a sentence can yield different semantic readings. As an approximative adverb, *más o menos* is related to the adverbs *almost/barely*, but there exist some semantic properties in which these two types of approximative adverbs differ. Following Sevi's work (1998), a proposition of the type 'almost-P' means 'very close to being true' but entails the negation of P (1), while a proposition of the type 'barely-P' means 'very close to being false' but entails P (2):

> (1) I almost got dirty (*almost*-P)
> > a. I was close to getting dirty (P)
> > b. ⇒(but) I didn't get dirty (¬P)
> (2) I barely got dirty (*barely*-P)
> > a. I was close to not getting dirty (¬P)
> > b. ⇒(but) I did get dirty (P)

According to Sevi (1998), there is a mirror image between the two approximatives: although *almost* denotes closeness to P (1a), it shows an inversion of the proposition this adverb has scope over (1b). The adverb *barely*, in turn, denotes a closeness to ¬P (2a), but no negative entailment is implied (2b). Semantico-pragmatic literature (Sadock 1981, Horn 2002, 2011, Schwenter 1999, Pons Bordería & Schwenter 2005, 2011) has identified this relation as the juncture of two meaning components; i.e., the Proximal Component and the Polar Component. On the one hand, the Proximal Component refers to the lexical meaning of an approximative expressing proximity to accomplish a predicate; on the other hand, as a formal meaning, the Polar Component does (or does not) entail the truth-values inversion of the involved proposition:

(3)

Approximative	PROXIMAL COMPONENT	POLAR COMPONENT
I almost got dirty	'I was very close to getting dirty'	⇒ I'm not dirty
I barely got dirty	'I was very close to NOT getting dirty'	⇒ I'm dirty

Furthermore, the Proximal Component is divided into two subcomponents (see Ducrot 1982, Pons Bordería & Schwenter 2011, Greenberg and Ronen 2013). If the Proximal Component denotes closeness to accomplish P, then the Proximal Component is UPWARDS. On the contrary, if Proximal Component denotes closeness to NOT accomplish P (i. e., closeness to ¬P), some kind of distance is connoted and then the Proximal Component is DOWNWARDS. Consequently, the meaning components of *almost* and *barely* are distributed as follows:

(4)

Approximative	PROXIMAL COMPONENT	POLAR COMPONENT
almost-P	Proximity to P (closeness)	¬P (activated)
barely-P	Proximity to ¬P (distance)	P (deactivated)

This distribution changes if this proximal-polar pattern is followed to analyze *más o menos*:

(5) *_Más o menos_ me manché ('more or less I got dirty')
    a. #I was (not) close to getting dirty
    b. **??**I got dirty/I didn't get dirty

In this sense, an analysis in terms of proximity and polarity cannot be applied to a sentence like (5). In opposition to the examples (1-2), where the predicate is modified by _almost/barely_, _más o menos_ cannot denote any (upwards nor downwards) determinate proximity because of certain readings depending on its syntactical positions as a negative or positive polarity item (see González Rodríguez 2008_a_, 2008_b_). Moreover, the Polar Component is not activated (i.e., negative entailment) nor deactivated (i.e., positive entailment), but rather it is ambiguous whether an affirmative or a negative reading takes place (5b). This difference between _almost/barely_ and _más o menos_ can be better exemplified using quantified predicates:

(6)   a. Devon earns almost $1000 per month
      b. Devon earns barely $1000 per month
      c. Devon earns 'más o menos $1000' per month
      ('Devon earns about $1000 per month')

The approximatives _almost/barely_ present an upwards (6a) or downwards (6b) proximity: a quantity of the type 'almost-$1000' entails 'close-to-$1000' but not $1000, and a quantity of the type 'barely-$1000' entails 'close-to-not-$1000' but $1000. A hypothetical Proximal Component in _más o menos_ would yield (in an indefinite way) a sort of neutral or bidirectional proximity:

(7)
  almost/barely —— Devon earns _almost_ $1000 per month   ($\uparrow$P)

                  Devon earns _barely_ $1000 per month   ($\downarrow$P)

  más o menos —— Devon earns 'más-o-menos-$1000' per month   ($\uparrow\downarrow$P)
                    ('Devon earns about $1000 per month')

An adverb like _más o menos_ does not present a clearly defined proximity. This difference with _almost/barely_ is made more evident by considering the polarity of a proposition containing _más o menos_ (8):

(8)   a. almost-$1000 $\rightarrow$ $_{<...\$900, \$950, \$990, \$999\ but>}$ NOT-$1000
      b. barely-$1000 $\rightarrow$ 1000_{or\ \$1010,\ \$1050,\ \$1100...>}$
      c. 'más-o-menos-$1000' $\rightarrow$ $_{<...\$950, \$990\ but>}$ NOT-$1000/$1000$_{<or\ \$1050,\ \$1100...>}$

In this sense, a sentence containing _más o menos_ yields two possible polar readings: 'más-o-menos-P' can be read either as implying the negation of its propositional content ('más-o-menos-P $\rightarrow \neg$P') or as keeping its truth-conditions unmodified ('más-o-menos-P $\rightarrow$ P'). Setting aside the role of proximity, the polarity of the proposition in which an approximative appears reveals a key difference between _más o menos_ and _almost/barely_. Both possible polar readings can be described

in the former adverb but only a negative/positive polarity in the latter ones. This so to speak bipolarity in *más o menos* arises, in a parallel way, in non-quantity predicates as well:

(9)   a. In Indiana, in December it's *almost* winter
        b. In Indiana, in December it's *barely* winter
        c. In Indiana, in December it's 'más-o-menos-winter'
        ('In Indiana, in December it's more or less winter')

A proposition of the type 'almost-winter' entails a negative polarity reading (→'it is not winter [yet]'), although it does mean a very narrow closeness to the fact that 'it is winter' (e.g., for a Mexican exchange student). On the contrary, 'barely-winter' entails an affirmative polarity reading (→'it is winter (indeed)'), although it is far from the fact of being considered winter as such (December has just 11 winter days, what is less than a half). Finally, a proposition of the type 'más-o-menos-winter' does not only entail the possibility of a negative ('más-o-menos-winter' → 'actually not-winter') or a positive polarity reading ('más-o-menos-winter' → 'winter (after all)'), but rather a combination of both readings at the same time:

(10)   a. In Indiana, in December it's *almost* winter
            Proximity: 'closeness to be winter'
            Polarity: ⇒'(but) it isn't winter'
        b. In Indiana, in December it's *barely* winter
            Proximity: 'distance from being winter' ('closeness to not be winter')
            Polarity: ⇒'(but) it's winter'
        c. In Indiana, in December it's 'más-o-menos-winter'
            Proximity: **??**closeness to be / to NOT be winter
            Polarity: 'it's winter and it isn't winter'

Hence, a proposition as 'más-o-menos-winter' (10c) also implies (in some way) 'it is winter' and 'it is not winter' (e.g., for a student from Indiana who, strictly speaking during winter, could have expected a colder December).

A first approach suggests that *más o menos* cannot be analyzed in terms of the proximity-polarity pattern, inasmuch as this approximative does not encode a dichotomous formulation of proximity in the likes of *almost/barely*: *más o menos* does however share some polar properties with *almost/barely*. According to Sevi (1998), polarity is key for tackling the three characteristics of *almost/barely* that do not map neatly onto the semantic structure of the propositions of the type 'más-o-menos-P'. These three characteristics are the following: (a) combination with gradable adjectives, (b) comparison constructions, and (c) counterfactuality.

a. COMBINATION WITH GRADABLE ADJECTIVES–. Following Lewis' account (1972) for the truth-conditions of a gradable adjective, Sevi (1998: 45) makes use of the concept of standard of precision for the propositions of the type 'almost/barely-P'. A STANDARD OF PRECISION is a concept from the theories of linguistic vagueness (Lewis 1970, Fine 1975),

which is meant as a parameter that "determines a precisification of the predicate". By analyzing a proposition containing a vague predicate:

(11)   Bruce Willis is *bald*.

It is difficult to determine to what extent (11) is true or false, since it is difficult to determine to what extent a predicate as 'bald' is still 'bald' or no longer 'bald' (i.e., the classic problem of *sorites* paradox; see Keefe and Smith 1997, Williamson 1994[2]). This problem has been defined in terms of the so-called paradox of *the heap of sand*. To progressively remove grains from a heap of sand precludes us from determining at what point the heap stops to be a heap or continues to be so. Let us also consider a gradable predicate like 'tall'. If a proposition like (12) is assumed to be truth according to a Premise α, then the same proposition is also assumed to be truth according to a Premise β; which makes it likewise possible to assume a Premise like γ for the truth of (12):

(12)   LeBron James is tall
          - Premise α: height = 2,03 m.
          - Premise β: height = 1,90 m.
          - Premise γ: height = 1,80 m.

For the truth of (12), Premise α does not seem to be in contradiction with Premises β and γ. The paradox, though, arises when this logical sequence of premises is developed until the last consequences:

(12')   LeBron James is tall
          - Premise α: height = 2,03 m.
          - Premise β: height = 1,90 m.
          - Premise γ: height = 1,75 m.
          - ??Premise δ: height = 1,30 m.
          - ??Premise ε: height = 0 m.

This development leads to counterintuitive (Premise δ) or even absurd (Premise ε) conclusions. This constitutes a paradox resulting from the fuzzy boundaries of the same predicate 'tall'. To resolve this epistemological problem (Williamson 1994), sentences containing gradable adjectives such as 'tall' or 'bald' require a standard of precision *s* as an argument of its propositional structure (Kamp 1975, Klein 1982):

(11')   BALD(*s*, Bruce Willis)

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[2] Following Williamson (2007: 33), it is possible to define the problem of the *sorites* paradox as follows: "The classical sorites paradox depends on just such a finite series: a heap of sand consists of only infinitely many grains, but when they are carefully removed one by one, we have no idea how to answer the question *When did there cease to be a heap?*"

The standard of precision *s* is working here as a regimentation device (see Ebbs 2009)[3] that allows a true evaluation of the proposition (11'). Vague predicates are related to gradable adjectives. If degree adjectives are conceived as a set of objects in a *continuum* (Cresswell 1976), "[p]recisifications are ways of drawing borders between positive and negative extensions" (Sevi 1998: 45-49 (4'-4'')). A degree predicate such as 'tall' (12'') depends on the standard of precision *s* from which its extension is evaluated:

(12'') a. LeBron James is *tall*
　　　　b. TALL(*s*, LeBron James)
　　　　c. The standard *s* determines a precisification according to which LeBron James is tall

The extension of borderline predicates such as 'tall' is epistemically fuzzy in referring to a truth or falsehood value. For this reason, "there must be an intimate relation between precisifications and degrees" (Sevi 1998: 49). Accordingly, a more accurate formulation for gradable adjectives can be postulated:

(13)　　(Sevi 1998: 49 (13))
　　　　Let P be a gradable predicate which is associated (lexically, contextually or both) with a comparison dimension, D, Let x, y be two objects on a comparison set, X, let f_D^M be the measure function that maps every element in X to its degree of D-ness, let < be a linear order on these degrees, S_D is a suitable set of precisifications for the predicate P iff for every s in S the following conditions hold:
　　　　I.　　$[[\neg P(x)]]^s = 1$ iff $[[P(x)]]^s = 0$
　　　　II.　　if $f_D^M(x) < f_D^M(y)$ and $[[P(x)]]^s = 1$ then $[[P(y)]]^s = 1$
　　　　III.　　if $f_D^M(x) > f_D^M(y)$ and $[[\neg P(x)]]^s = 1$ then $[[\neg P(y)]]^s = 1$

The function of measure f^M is taken from Bartsch and Vennemann's work (1972) and it is implemented by the notion of dimension D-ness, such that f_D^M. Condition I, as the starting point, stipulates the fact that a degree predicate cannot be P and ¬P at the same interval (say, it is not possible to assign 'tall' and 'not-tall' or 'bald' and 'not-bald' to the same precisification *s*). Conditions II and III, in turn, "assure continuations to the right and to the left" (Sevi 1998: 49). The interval corresponding to Condition II describes a predicate P that is true if the intervals $f_D^M(x)$ are over the standard of precision *s*, to the extent that the lower interval $f_D^M(y)$ is false. The interval corresponding to Condition III describes a predicate that is true if there is no interval $f_D^M(x)$ over the standard of precisification, to the extent that $f_D^M(y)$ is true. If these two continuations are related to the scope of *almost/barely* with regards to threshold(s) over which both approximatives have scope:
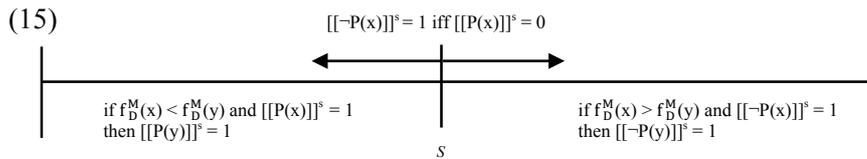
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[3] This philosopher suggests that a "linguistic policy" is prior to any formal analysis, i.e.: an utterance cannot be described if those parameters for its analysis are not previously stipulated. The analysis of borderline vagueness-phenomena requires some operative axioms. The notion of regimentation is defined as follow: "we may define a *regimented language* as an artificial language whose sentences a person has decided to use for various purposes *in place of* his or her natural languages." (Ebbs 2009: 17)
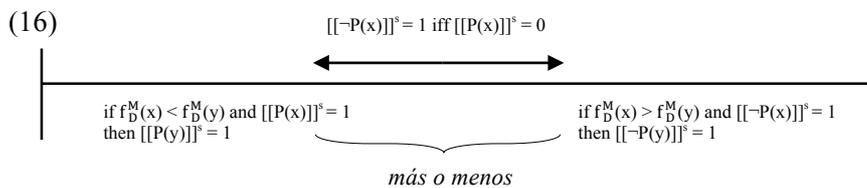
(14) (Sevi 1998: 23, following Hitzeman 1992)

not-human"   *human"*

Frankenstein's monster
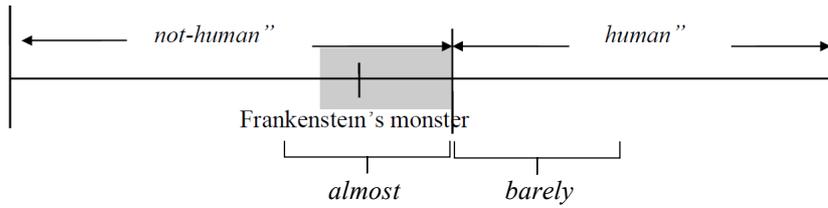
almost   *barely*

then it is possible to establish Conditions II and III as two connected extensions, Condition I being the cut-point between them:

(15)

$$[[\neg P(x)]]^s = 1 \text{ iff } [[P(x)]]^s = 0$$

if $f_D^M(x) < f_D^M(y)$ and $[[P(x)]]^s = 1$
then $[[P(y)]]^s = 1$

if $f_D^M(x) > f_D^M(y)$ and $[[\neg P(x)]]^s = 1$
then $[[\neg P(y)]]^s = 1$

s

The approximatives *almost* and *barely* share the standard of precision *s* either in a negative or in a positive way respectively. I propose that *más o menos* must lack this standard of precision *s*, allowing a predicate P to have two possible extensions (P' and ¬P'), not only to gradable predicates but also to non-vague ones (as (9-10) show above):

(16)

$$[[\neg P(x)]]^s = 1 \text{ iff } [[P(x)]]^s = 0$$

if $f_D^M(x) < f_D^M(y)$ and $[[P(x)]]^s = 1$
then $[[P(y)]]^s = 1$

if $f_D^M(x) > f_D^M(y)$ and $[[\neg P(x)]]^s = 1$
then $[[\neg P(y)]]^s = 1$

más o menos

b. COMPARISON–. Vague predicates show a comparison between the different degrees contained in a gradable adjective. According to Sevi (1998: 50-51 (14)), there is "a set of degrees, which are linearly ordered by <, and a set of precisifications that determine vague predicates' extensions". This LINEARITY poses that precisifications are ordered one after the other and this order allows to stipulate a given extension at some standard *s*. For the comparison of the type $s_i < s_j$ between a given standard and the following one, a relation of RELAXATION is introduced:

(17)   a precisification s_i for a predicate P is more relaxed than a precisification s_j for P iff the extension of P relative to s_j is a proper subset of the extension of P relative to s_i

In this sense, a predicate P is true according to a given precisification and, consequently, P is true according to the relaxation involving the two precisifications which distinguish P from its negative extension ¬P. There are, for gradable predicates (18), three possible extensions (19) (Sevi 1998: 51 (15-15')):

(18)   John is tall
(19)   a. True, if John is tall according to every precisification of *tall*
         b. False, if John is tall according to no precisification of *tall*
         c. Neither, otherwise

Regarding the semantic possibilities of (19), Sevi (1998: 52 (15''')) claims that the truth conditions of (18) can be stated as follows:

(20)   John is tall relative to a certain strict enough precisification *s*

Extensions in (19a) and (19b) would correspond respectively to Condition II and Condition III in (13), otherwise the Condition I cannot apply to vague predicates (19c). Now, what does work for gradable adjectives (20), does not work for non-gradable adjectives if these are modified by *más o menos*:

(21)   In Indiana, in December it's 'más-o-menos-winter'
(22)   a. ??True, if it is winter according to every precisification of *being-winter*
         b. ??False, if it is winter according to no precisification of *being-winter*
         c. Neither, otherwise

In this case, relaxation takes place without reference to any standard of precision. In opposition to a vague predicate itself, *más o menos* hinders a (non-gradable) predicate P to be compared with the precisification of a given extension. For this reason, *más o menos* can be conceived as what some philosophers (Eklund 2001, 2005) call "vagueifiers" (see section 2.2).

c. COUNTERFACTUALITY–. Following Lewis' theory on *would*-counterfactuals (Lewis 1973), a counterfactual utterance is not so distinct from a common indicative conditional: a counterfactual reading does not depend on the speaker's belief about the prejacent, but it is a "material implication under the scope of a necessity operator: $\Box(\phi \rightarrow \psi)$" (Sevi 1998: 53 (20)). In Sevi's words:

(23) $\Box(\phi \rightarrow \psi)$ is true at a world w_i iff $\phi \rightarrow \psi$ is true in every possible world accessible from w_i

This formulation for conditionals does not necessarily apply to counterfactuals: $\Box(\phi \rightarrow \psi)$ entails $\Box(\phi_1 \wedge \phi_2 \rightarrow \psi)$; and, in principle, $\Box(\phi_1 \wedge \phi_2 \rightarrow \psi)$ is contradictory to $\neg\Box(\phi_1 \wedge \phi_2 \rightarrow \psi)$. Nevertheless, in a counterfactual relation, both $\Box(\phi_1 \wedge \phi_2 \rightarrow \psi)$ and $\neg\Box(\phi_1 \wedge \phi_2 \rightarrow \psi)$ are not necessarily contradictory:

(24)   If it had snowed in December in Indiana, it would have been a Mid-West winter $_{\Box(\phi\rightarrow\psi)}$; but if it had snowed and rained, it would have been a Californian winter $_{\Box(\phi1\wedge\phi2\rightarrow\psi)}$; but if it had snowed, rained and frozen as well, it would have been a Mid-West winter $_{\neg\Box(\phi1\wedge\phi2\rightarrow\psi)}$

To solve this problem on entailments, Lewis' (1973) proposal of SPHERES (S) sets those worlds which resemble the evaluation world w to some extent. The worlds contained in a system of spheres are the factual worlds in which P is true and the worlds resembling the worlds in which ¬P fails to contradict:

(25)   W

spheres
factual world
possible world(s) in which $w_i : 1$
world(s) resembling w_i in which $w_j : 0$, such that $w_i : 1$
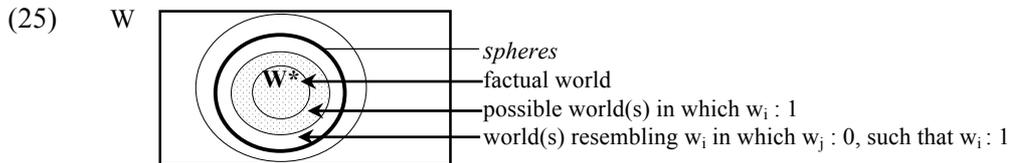
In other words: those worlds contained in a system of spheres are, on the one hand, the real world in which P is true and, on the other hand, the worlds resembling a possible real world in which ¬P is not in contradiction with P. The notion of SYSTEM OF SPHERES is consistent with the notion of relaxation between the different degrees to a given standard of precision *s*. I argue that a parallelism can be drawn between Sevi's explanation for counterfactuality and the distinction between the approximatives *almost/barely* and *más o menos*. For instance (Sevi 1998: 59 (25)):

(26) A *would-counterfactual* $\phi\Box\rightarrow\psi$ is true at a world w_i iff ψ holds in the closest ϕ-world

A sentence of the type 'almost-P' entails 'almost-$\phi\rightarrow\neg\phi$': 'almost-$\phi\rightarrow\psi$' is true iff ψ holds in closest ϕ-world; i. e., ¬ϕ is true (ϕ is false) iff ¬ϕ is *very close to be true* in a ϕ-world (but not true). Conversely, 'barely-P' entails 'barely-$\phi\rightarrow\phi$': this means (in a tautological sense) that ψ is true inasmuch as $\psi\rightarrow\phi$, but it fails to explain (according to the Proximal Component described for these adverbs) the fact that $\psi\rightarrow\phi$ is *very close to be false* if $\psi\rightarrow\phi$ is in ϕ-world. The formula ϕ (containing the formula ψ) and the formula ψ (containing the formulae $\phi/\neg\phi$) remain in an interdependent reciprocity. Hence, while (26) can apply for *almost* if a biconditional implication $\psi\leftrightarrow\neg\phi$ is considered, (27) can apply for *barely* insofar as a biconditional implication $\psi\leftrightarrow\phi$ incorporates the nuance of *being very close* to the ϕ-world in which $\psi\rightarrow\phi$. Thus:

(27) A *would-counterfactual* $\phi\Box\rightarrow\psi$ is true at a world w_i iff ψ holds in the furthest ϕ-world

Leaving apart the involvement of (26) in a material implication $\psi \leftrightarrow \neg \phi$ (what would better apply to an adverb like "at least")[4], (27) can complete the system of spheres for the pair *almost/barely*:
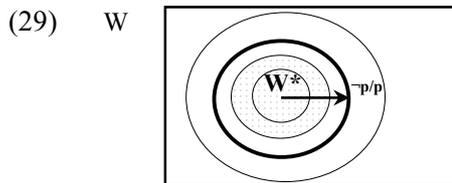
(28)   a. W
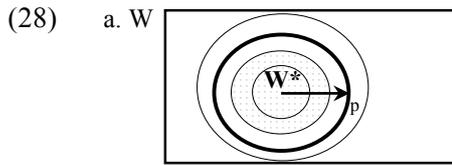
'almost-P': $\phi \square \rightarrow (\psi \leftrightarrow \neg \phi)$ is true at a world w_i in a system of spheres S such that $S \notin \{s_i <_{s*} s_j\}$, otherwise ψ is false at standard s_j in w_i

b. W
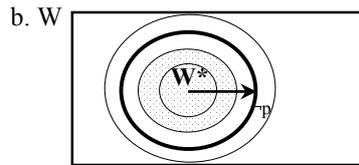
'barely-P': $\phi \square \rightarrow (\psi \leftrightarrow \phi)$ is true at a world w_i in a system of spheres S such that $S \in \{s_i \geq_{s*} s_j\}$, otherwise ψ is false at standard s_j in w_i

Although it is out of this work to refine the counterfactual connections between *almost/barely* (which description is properly outlined by Sevi), the overview in (28) exemplifies a relation among systems of spheres *S* which does not take place in a proposition like 'más-o-menos-P'. An approximative like *más o menos* is not ordered by *S* because no precisification is scoped, what yields no possible description in terms of (27) for this adverb:

(29)   W

??'más-o-menos-P': $\phi \square \rightarrow (\psi \leftrightarrow (\phi^{\vee} \neg \phi))$ is true at a world w_i in a system of spheres S such that $S \in \{s_i <_{s*} s_j\}$ or $S \in \{s_i >_{s*} s_j\}$, otherwise ψ is false at standard s_j in w_i

Regarding this, 'más-o-menos-P' would cover all the possible standards of precision, yielding a classical contradiction which cannot be solved (in a counterfactual way) by any relaxation between *s*. At first sight, 'más-o-menos-P' would intuitively mean an intersection between those possible worlds in which a predicate P is true and those possible worlds in which ¬P:

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[4] $\psi \leftrightarrow \neg \phi$: ψ is true insofar as $\psi \rightarrow \phi$ is very close to be true and, indeed, $\psi \leftrightarrow \phi$ is true.

(30)　　W
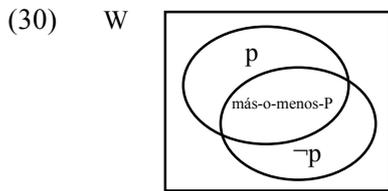
Such an illustration, however, is not compatible with an entailment relation (30c), since the necessity modal operator □ should be denied in order to maintain the two truth-conditional readings (30d):

(30)　a.　　It is 'más-o-menos-winter'
　　　　b.　　$\Box\phi \rightarrow (\psi \leftrightarrow (\phi^V \neg \phi))$
　　　　c.　　**?**$(\exists w.Dw. \rightarrow Winter) \leftrightarrow (\exists w.Dw. \rightarrow \neg Winter)$
　　　　d.　　$((\exists w.Dw. \rightarrow Winter) \leftrightarrow (\exists w.Dw. \rightarrow \neg Winter)) \rightarrow (\exists w.\neg Dw. \rightarrow Winter)$

That is not consistent with a predicate P in a possible world in which P is necessarily true intersected with a possible world in which necessarily ¬P (as in (30)).

To sum up, the impossibility of applying this formal approach to a proposition 'más-o-menos-P' is due to the fact that the modal necessity operator is a structural component in the counterfactual relation. For this reason, the implications *más o menos* can trigger correspond, in any case, to a modal relation in terms of possibility rather than in terms of necessity. A description assuming entailments is not pertinent, since it is a contradictory description. This kind of true and false reading in 'más-o-menos-P' can be explained by a relation of inconsistent presuppositions.

1.2. The implications of *más o menos*

A sentence of the type 'más-o-menos-P' implies, in a certain way, one possibly-true reading (P) and one possibly-false reading (¬P). Recalling (8), *más o menos* can modify a quantity predicate implying an excessive or a defective reading in respect with its exact denotation:

(8)　　a. almost-$1000　　　　$\rightarrow$ $_{<...\$900, \$950, \$990, \$999\ but>}$NOT-$1000
　　　　b. barely-$1000　　　　$\rightarrow$ 1000_{<or\ \$1010, \$1050, \$1100...>}$
　　　　c. 'más-o-menos-$1000'　　$\rightarrow$ $_{<...\$950, \$990\ but>}$ NOT-$1000/$1000$_{<or\ \$1050, \$1100...>}$

In opposition to the approximatives *almost* (8a) and *barely* (8b), *más o menos* (8c) does not determine a negative or positive polarity for the proposition this adverb has scope over. In a relation of possible worlds, 'almost-P' (31) entails a negation of P in a possible world w_i in which ¬P, and 'barely-P' (32) entails an affirmation of P in a possible world w_j in which P:

(31)　　Devon earns almost $1000
　　　　a. EARN(s, $1000, Devon)
　　　　b. [[almost-$1000]]$^{w^*}$ = λw. Dw.1 iff Devon earns almost-$1000 in W ∈ S,
　　　　such that $1000 at s_i is true in w_i, otherwise $1000 at s_j and therefore false in w_i

(32)   Devon earns barely $1000
        a. EARN(s, $1000, Devon)
        b. [[barely-$1000]]$^{w^*}$ = λw. Dw.1 iff Devon earns barely-$1000 in W $\in$ S,
        such that $1000 at s_j is true in w_j, otherwise $1000 at s_i and therefore false in w_j

However, 'más-o-menos-P' does not imply a negative entailment nor a positive one. This difference between *almost/barely* and *más o menos* also persists by vague predicates:

(33)   a. Devon is almost bald   –> Devon is not bald
        b. Devon is barely bald   –> Devon is bald
        c. Devon is 'más-o-menos-bald'   –> <u>Devon is bald/Devon is not bald</u>

Although it is difficult to determine to what extent a predicate like BALD(x) is enough 'bald' (see Williamson 2007), it is possible to stipulate a standard of precision such as BALD(s, x) in order either to deny (33a) or to not deny (33b) the propositional content. As explained above (see section 1.1-c), this solution based on the negative/positive polarity does not apply to *más o menos*:

(34)   a. Devon is almost bald   : BALD(s, d)
        b. Devon is barely bald   : BALD(s, d)
        c. Devon is 'más-o-menos-bald'   : BALD(??, d)

The polarity of 'más-o-menos-P' (34c) remains relaxed for vague predicates. In contrast to a standard of precision *s*, let us introduce by default the relaxation *r* for vague predicates that are not related to any *s*:

(35)   a. 'bald'   : BALD(r, x)
        b. 'almost/barely-bald'   : BALD(s, x)
        c. 'más-o-menos-bald'   : BALD(r, x)

According to *r*, the concomitancy of positive and negative understatements follows from the lack of a precisification for a given polar entailment in a proposition 'más-o-menos-P' (35c). In addition, *más o menos* rather undetermines not only the assignment of *s* for a vague predicate (36c), but even involves non-vague predicates in a relaxation relation (36d):

(36)   a. 'bald'   : BALD(r, x)
        b. 'almost/barely-bald'   : BALD(s, x)
        c. 'más-o-menos-bald'   : BALD(r, x)
        d. 'más-o-menos-winter'   : WINTER(r, x)

Since 'más-o-menos-P' involves a relaxed predicate, P and ¬P cannot be entailed in a necessity relation. On the contrary, negative and affirmative readings are two contingent readings, either in a possible world w_i in which P is true or in a possible world w_j in which ¬P:

(37) a. 'más-o-menos' : $\Diamond\phi \rightarrow (\psi \leftrightarrow (\phi \vee \neg\phi)$ is not true nor false
in a world w_i in which $\psi \rightarrow (\phi \vee \neg\phi)$ such that in a world w_j $\neg\psi \rightarrow (\neg\phi \vee (\neg(\neg\phi)))$
   b. 'más-o-menos-P' : it is possible that P is true ($\Diamond\phi$)
   c. 'más-o-menos-P' : it is possible that P is false ($\Diamond\neg\phi$)

Both understatements (37b) and (37c) are not entailments, so that it is worth wondering which kind of implications are licensed by the possibility operator.

I argue that *más o menos* is a presuppositional trigger (Glanzberg 2005, Schwarz 2016)[5] and, if the triggered presuppositions are taken for granted to be indistinctly true or false, then such presuppositions are inconsistent. The notion of inconsistency of presuppositions is based on Lewis' *General Semantics* (1970). If a sentence presents inconsistent presuppositions this sentence cannot have a definite truth-value:

> If we adopt this treatment of presupposition, sentences susceptible to lack of truth-value should have intensions that are undefined at some indices. They might even have intensions that are undefined at *all* indices; a sentence with inconsistent presuppositions should have as its intension the empty function, defined at no index. (Lewis 1970: 25-26)

The sentence 'más-o-menos-winter' means that winter and not-winter are both possible. If the propositional structure applying the possibility operator is understood as the intensional meaning of (37), 'más-o-menos-P' is not true nor false in any possible world:

(25') W

barely

W*

almost

más-o-menos
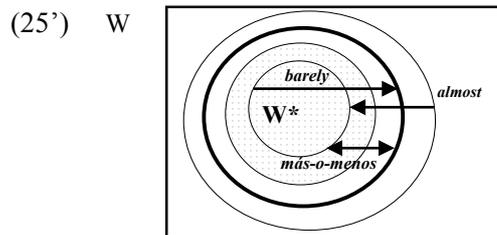
This lack of possibility of being definitely true or definitely false in a given possible world corresponds to the lack of a standard of precision *s*, in comparison to those propositions containing an approximative of the type *almost/barely*. I exemplify this problem using a (by default omitted) relaxation relation *r* (38a), which would be replaced by *s* in the predicate-logic description of *almost/barely* (38b):

(38) a. 'más-o-menos-bald'   : BALD(**r**, x)
     b. 'almost/barely-bald'   : BALD(s, x)

If *más o menos* is presented as a presuppositional trigger, then it is possible to find out an equivalent technology according to the concepts proposed by Lewis (1970). Let in a system of spheres S establish at least two standards of precision *s* such that it is true in a possible world w, iff *s* is defined at some index *i*. A first possible quantificational solution is:

(39)   a. $[[\text{almost-\$1000}]]^{w^*, I} = \lambda w.\ Dw.\ \exists Iw.$ 1 iff almost-\$1000 in W ∈ S, such that s_i in a possible world w_i is true at some i defined in I ∈ {i' $<_{i^*}$ i''}, otherwise 0 at some i undefined in respect with I
       b. $[[\text{barely-\$1000}]]^{w^*, I} = \lambda w.\ Dw.\ \exists Iw.$ 1 iff barely-\$1000 in W ∈ S, such that s_i in a possible world w_i is true at some i defined in I ∈ {i' $\geq_{i^*}$ i''}, otherwise 0 at some i undefined in respect with I

Now, 'más-o-menos-P' is not defined at some index *i* nor not-defined at all indices *I*, but *undefined* at all indices *I*. In this sense, the description of the implications of *más o menos* is related to the problem of higher-order vagueness. Higher-order vagueness is conceived as a problem posing that "the meta-language in which we describe the vagueness of a vague language will itself be vague" (Williamson 1994: 2-3).[6] Higher-order vagueness implies that some predicates persist vague, despite the incorporation of precisifications in its semantics.[7] This approach implements the intesional meaning of vague predicates by applying a definiteness operator Δ (i.e., a metalogical translation of the definite function involving the deontic operator *D*, see Vecsey 2012). Referring to the epistemic problems of vague predicates could appear superfluous, especially when approximatives determine the relaxation threshold in *S* between standards of precision s_i and s_j. Nevertheless, *más o menos* implies not only the persistence of a relaxed-vague predicate, but also the relaxation of a non-vague predicate. Herein lies the difference among *almost/barely* having some intensions defined at some index *i* (40a-40b) and *más o menos* having intensions undefined at all indices *I* (40c):

(40)   a. $[[\text{almost-P}]]^{w^*, I} = \lambda w.\ \Delta w.\ \exists Iw.$ 1 iff almost-P in W ∈ S, such that s_i in a possible world w_i is true at some i defined in I ∈ {i' $<_{i^*}$ i''}, being I ∈ R
       Otherwise 0 at some i undefined in I ∈ R
       b. $[[\text{almost-P}]]^{w^*, I} = \lambda w.\ \Delta w.\ \exists Iw.$ 1 iff barely-P in W ∈ S, such that s_i in a possible world w_i is true at some i defined in I ∈ {i' $\geq_{i^*}$ i''}, being I ∈ R
       Otherwise 0 at some i undefined in I ∈ R
       c. $[[\text{más-o-menos-P}]]^{w^*, I} = \lambda w.\ \neg\Delta w.\ \forall Iw.$ not 1 nor 0 iff más-o-menos-P in W ∉ S, such that s_i in a possible world w_i is at all i undefined in I ∈ R

---

[6] "Higher-order vagueness consists in ignorance about ignorance. At first sight, the epistemic view of vagueness is incredible. We may think that we cannot conceive how a vague statement could be true or false in an unclear case. For when we conceive that something is so, we tend to imagine finding out that it is so." (Williamson 1994: 5) For a comprehensive review of the paradoxical status of higher-order vagueness see Wright (2010).
[7] An attempt to explain the question of higher-order vagueness is the Fine's (1997) theory of supervaluations. For a revision of the supervaluationist approach see the epistemic theory of Williamson (1994, Chapter 5.6).

This quantificational reading can be modified by an only universal quantification reading. So, 'almost/barely-P' are defined not only at some indices i, but at all indices I among a set of relaxations R (41a-41b):

(41)   a. $[[\text{almost-P}]]^{w^*,I} = \lambda w. \Delta w. \forall Iw.$ 1 iff almost-P in $W \in S$, such that s_i in a possible world w_i is true at all i defined in $I \in \{i' <_{i*} i''\}$, being $I \in R$.
Otherwise 0 at all i undefined in $I \notin R$

        b. $[[\text{barely-P}]]^{w^*,I} = \lambda w. \Delta w. \forall Iw.$ 1 iff barely-P in $W \in S$, such that s_i in a possible world w_i is true at all i defined in $I \in \{i' \geq_{i*} i''\}$, being $I \in R$.
Otherwise 0 at all i undefined in $I \notin R$

        c. $[[\text{más-o-menos-P}]]^{w^*,I} = \lambda w. \neg\Delta w. \forall Iw.$ not 1 nor 0 iff más-o-menos-P in $W \notin S$, such that s_i in a possible world w_i is at all i undefined in $I \in R$.

These definite i in I containing the set of relaxations R correspond to a system of spheres S allowing a standard of precision s. On the contrary, these precisifications do not apply to 'más-o-menos-P', because no relaxation set R is containing any definite index I (due to $\forall\neg\Delta$). In other words, vagueness persists by *más o menos* still as a higher-order vagueness.

    The inconsistency of the presuppositions of a proposition of the type 'más-o-menos-P' is followed by its intensional meaning indefinite at all indices and prevents its extensions from being true or false. The truth-value assignment of both true and false readings (42c) relies on the fact that no presupposition is defined at any index (42b):

(42)   a.   It is 'más-o-menos-winter'
        b. $(\neg\Delta\phi : \Diamond P \rightarrow (p^V\neg p))$
        c.   » (it is winter)
                  » (it is not winter)

Ultimately, the semantic description of *más o menos* does not turn out to be so accurate like *almost/barely*. This problem is related to the fact of vagueness[8] and allows *más o menos* to be considered as a "vagueifier" (as it is explained in the following section.)

2. APPROXIMATIVES AND VAGUE ITEMS

If approximatives yield a vague intension, this vague intension "has a number of objects that determinately fall in its extension and a number of objects that determinately fall in its anti-extension: and in between there are some unclear cases." (Eklund 2005: 31) From a philosophical point of view, Eklund (2001, 2005) call these linguistic phenomena "vagueifiers":

> [T]he effect of a vagueifier is less clear. One can here say either of two things: either tagging on a vagueifier to an already vague predicate does not have any genuine semantic effect, or the vagueifier makes the already vague predicate *more vague*. (Eklund 2001: 375)

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[8] "The claim that a sentence is neither definitely true nor definitely false has no more to do with bivalence than the claim that it is neither necessarily true nor necessarily false." (Simons y Williamson 1992: 150)

2.1. **Approximatives as vagueifiers**

Approximatives can be classified following this definition based on the category of vagueifiers, but a conceptual distinction between vague items and vagueifiers is required:

a. PRECISION AND IMPRECISION−. Vague items are those predicates which "admit borderline cases, they lack (or at least apparently lack) sharp boundaries and they are susceptible to sorites paradoxes" (Keefe 2003: 9). On the other hand, vagueifiers (like approximatives) differ from vague items in that vagueifiers are precise linguistic items, since they can apply to intrinsically vague items. See:

(11'') [Bruce Willis is bald]$_{\neg\Delta}$
(34c') [Devon is 'más-o-menos-bald']$_{\neg\Delta}$
(21') In Indiana, in December [it's 'más-o-menos-winter']$_{\neg\Delta}$

In a case like (11''), 'bald' constitutes a vague predicate denying a definite truth-value assignment ($_{\neg\Delta}$), which scope involves the whole proposition. In turn, cases like (34c') and (21') present a vagueifier (*más o menos*) in its structure: in opposition to vague items, which extend vagueness in an irrestricted way (11''), vagueifiers present a restricted scope (21'), even if they apply to an intrinsically vague item (34c'). Regarding these examples, the resulting schema is the following:

	APPLICATION
	(im)precision
VAGUE ITEMS	imprecise
VAGUEIFIERS	precise

Figure 1

b. DEFINITENESS AND INDEFINITENESS−. Vague items and vagueifiers produce propositions that are intensionaly vague, since both elements denote a higher-order vagueness (i.e., neither true nor false). Recalling the criterion proposed by Lewis (1970: 25): "sentences susceptible to lack of truth-value should have intensions that are undefined at some indices. They might even have intensions that are undefined at all indices". Those sentences having undefined intensions at some indices constitute propositions containing vagueified items (items modified by a vagueifier like *más o menos*), yielding inconsistently presuppositional implications (for even though the modified predicate is not vague itself, like in 'más-o-menos-winter'). Those sentences having undefined intensions at all indices constitute propositions containing vague items themselves. Indefinite vague items are undefined at least at one index *i* (either $\neg\Delta\exists I$ or $\neg\Delta\forall I$), arising higher-order vagueness:

	APPLICATION	INTENSION
	(im)precision	(un)definiteness
VAGUE ITEMS	imprecise	indefinite
VAGUEIFIERS	precise	indefinite

Figure 2

c. DETERMINATION AND INDETERMINATION−. Finally, vagueifiers would share with vague items an underdetermined extension, since a vague predicate ('bald': BALD(r, x)) can become vagueified ('más-o-menos-bald' : BALD(r, x)). According to Eklund (2005), three extensions can be identified: the extension, the anti-extension and an unclear threshold. The vagueifier *más o menos* is compatible with vague predicates insofar as both denote indefiniteness. In addition, *más o menos* differ from *almost/barely* because *más o menos* does not allow a precisification in being applied. This poses a first modification of Figure 1, considering vagueifiers like *más o menos* to be imprecise, differing from the approximatives of the type *almost/barely* (which are precise in their application):

	APPLICATION	INTENSION
	(im)precision	(un)definiteness
VAGUE ITEMS	imprecise	indefinite
más o menos	imprecise	indefinite
"barely/almost"	precise	indefinite

Figure 3

A last issue concerns the extension of the two types of approximatives. While *más o menos* modifies non-vague predicates in a similar way as vague ones do, *almost* and *barely* are extensionally determinate:

	APPLICATION	INTENSION	EXTENSION
	(im)precision	(in)definiteness	(in)determination
"bald"	imprecise	indefinite	indeterminate
más o menos	imprecise	indefinite	indeterminate
"barely/almost"	precise	**indefinite**	**determinate**

Figure 4

This further distinction in the extension of approximatives is based on the two peripheric extensions in respect with the indeterminate threshold that Eklund (2005) defines as "unclear":

Figure 5

This tripartite scheme resembles to the polarity of approximatives presented in section 1.1. Thus, a 'barely-bald' proposition has a true extension according to its positive polarity and an 'almost-bald' proposition has a false extension ("anti-extension") according to its negative polarity. In this sense, the indefiniteness of the implications of *más o menos* is related to its extensional indetermination (i.e., "unclear extension").

2.2. *Más o menos* as a hedge

Given its propositional nature, *más o menos* appears to fit into the set of vagueifiers. The incorporation of *más o menos* in a sentence shapes the formal implications which are derived from it. In doing so, vagueifiers can be formally described, but its semantic properties are not susceptible to follow a binary frame-work. This is to say, a vagueifier like *más o menos* triggers inconsistent presuppositions which background remains in an indeterminate extension.

Linking with that, the approximative *más o menos* has been categorized as a hedge. Lakoff (1973: 195) defines the hedges as "those words which labor is to make things fuzzier or less fuzzy". This author proposes an analysis of the so-called hedges in terms of fuzzy logic (Zadeh 1961, 1975). Fuzzy logic stipulates that gradable predicates can be assigned to a degree scale of truth-value, leaving aside the bivalent dichotomy between truth and falsehood. For those items of the type *más o menos*, other authors have proposed different categorizations based on the concept of bush (Caffi 1999, 2007), rounder (Krifka 2002, 2007) or, in a strictly propositional way, APPROXIMATOR (Wachtel 1980, 1981; Channell 1980, 1994). These categorizations underline the semantic proposal outlined by Sevi (1998), who also incorporates the standard of precision.

In addition, Lakoff (1973) suggests that propositions of the type 'más-o-menos-P' can be described using basic operators of modal logic (Goguen 1971, Rosch 1973):

(43) Devon is 18 years old $\qquad \underline{(P)}$
       a. Iff Devon is 18 years old, then true $\qquad (Q \to P) - 1$
       b. Iff Devon isn't 18 years old, then false $\qquad (\neg Q \to P) - 0$
(44) Devon is 'más-o-menos-18 years' old $\qquad \underline{(\Diamond P)}$
       a. It is possible that Devon is 18 $\qquad (\Diamond P \to (P^{\vee}\neg P)) - ??$
       b. It is possible that Devon isn't 18 $\qquad (\Diamond \neg P \to (\neg P^{\vee}P)) - ??$

Hedges work as items which are added to a given proposition, such that the truth-conditions are modified. This modification is not due to a vague predicate itself (like 'bald'), but to the

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incorporation of an adverb modalizing a sentence which adjusts its bivalence (Wierzbicka 1986). This carries other pragmatic issues (Sadock 1977, 1981) that fall outside of the scope of this work[9].

3. SOME CONSIDERATIONS FOR AN INTENSIONAL SEMANTICS OF *MÁS O MENOS*

Following the Sevi's approach (1998), some considerations for an intensional semantics of *más o menos* can be sketched out. According to his treatment for *almost/barely*: "The semantics of these adverbs is underspecified, and this gives rise to ambiguities […] more similar to the ambiguities of a modal operator that can choose different kinds of accessibility relations." (Sevi 1998: 65). In this sense, this author proposes an analysis in terms of a three-place relation depending of the choice of some index *i* in the set *I*:

(45) Let A be a formula, let I be a discrete set, and let $<$ be a three-place relation such that for every $i^* \in I$, $<_{i^*}$ is a strict partial order on I ($i_1 <_{i^*} i_2$ is read as i_1 is closer to i^* than i_2)
$[[almostA]]^{i^*} = 1$ iff $[[A]]^{i^*} = 0$ and there is an i', s.t for any i'', i' $<_{i^*}$ i'', and $[[A]]^{i'} = 1$
$[[barelyA]]^{i^*} = 1$ iff $[[A]]^{i^*} = 1$ and there is an i', s.t for any i'', i' $<_{i^*}$ i'', and $[[A]]^{i'} = 0$

In the first case, 'almost-A' is true at an index *i* with a given standard of precision *i** iff the formula *A* is false in respect with this standard of precision *i** but there is a minimally close *i'*, such that *A* is true in *i'* (this is the closeness relation). In the second case, on the contrary, 'barely-A' is true at an index with the same standard of precision *i** iff the formula *A* is true in this standard of precision *i** and there is a minimally close *i'*, such that *A* would be false in *i'* (distance relation).

This semantics involves a relation of proximity to the index of evaluation, being specifically a closeness-proximity in almost and a distance-proximity in barely. None of these relations can be applied to *más o menos*, since this adverb does not present a determinate proximity and, consequently, neither does it imply an affirmative/negative polarity. The approximative *más o menos* falls apart in the mirror image of (45), since *más o menos* does not have an index *i** related to a standard of precision that strictly orders *i'* and *i''*. One possible solution can be to establish a three-place relation $<$ which does not specify a strict partial order on the set *I*, where *I* is a higher-order vagueness set of indices yielding a possibly-true reading or a possibly-false reading:

(46) Let A be a formula, let I be a vague set $I_{-\Delta}$, and let $<$ be a three-place relation such that for every $i^* \in I_{-\Delta}$, $<_{i^*}$ is an indistinct order on I (being possible both configurations $i_1 <_{i^*} i_2$ or $i_2 <_{i^*} i_1$)

Incorporating the notion of presuppositional inconsistency (see section 1.2), a possibly-true reading would be backgrounded by *A* followed from a true presupposition, and a possibly-false reading would be backgrounded by *A* followed from false presupposition:

---

[9] "Rather than being just true or false, *almost P* would seem to be more-or-less true or false depending on the circumstances and would thus seem to require a fuzzy logic along the lines of that in Lakoff's work." (Sadock 1981: 259)

(47)   Let A be a formula, let I be a vague set $I_{\neg\Delta}$, and let $<$ be a three-place relation such that for every $i* \in I_{\neg\Delta}$, $<_{i*}$ is an indistinct order on I (being possible both configurations $i_1 <_{i*} i_2$ and $i_2 <_{i*} i_1$)

$[[\text{más-o-menosA}]]^{i*} \gg 1$ iff $[[A]]^{i*} = 0$ and there is an i', s.t for any i'', $i' <_{i*} i''$, and $[[A]]^{i'} \approx 1$
or
$[[\text{más-o-menosA}]]^{i*} \gg 0$ iff $[[A]]^{i*} = 0$ and there is an i', s.t for any i'', $i'' <_{i*} i'$, and $[[A]]^{i'} \approx 0$

This formulation can work if it is read as a combination of two possible orders involving i' and i'', such that both possible configurations $i_1 <_{i*} i_2$ and $i_2 <_{i*} i_1$ are (inclusive) disjunctive, depending on whether 'más-o-menosA'$\gg$1 presupposes A or whether 'más-o-menosA'$\gg$0 does not. In both cases $[[A]]^{i*}=0$ entails the falsehood of the propositional content, but in the former one $[[A]]^{i'} \approx 1$ the proposition is *approximately* true and in the latter one $[[A]]^{i'} \approx 0$ the proposition is *approximately* false. An operator such as $\approx$ 'approximately-true/false' applies to a possibly-true reading or to a possibly-false one, relating to the presupposition in which the reading is backgrounded. Now, it is obvious that such a 'approximately-true/false' metalanguage contains in certain way the intuitive function that is supposed to be described in *más o menos*.

     In the possible worlds explanation of *almost/barely*, Sevi (1998: 81) states that sentences containing these approximatives get some sort of modal reading: "An *almostϕ* sentence with this kind of reading can be continued with a *but* clause, which gives us a hint about its meaning." The same test can be exactly applied to *barely* (only varying the polarity of the continuing clause):

(48)   a. In the UK, the Bremain almost won, *but it did NOT win*   (almost-P, ¬P)
            b. In the UK, the Brexit barely won, *but in fact it won*   (barely-P, P)

These examples shed light on the proximal-polar meaning of approximatives, but the continuing clauses in (48) are related more to a pragmatic phenomenon: *but*-clauses seem to be a pragmatic nuance of the disjunction of presuppositions; i.e., a Q-based generalized conversational implicature (Horn 2009) produced by an alternative way of denying or affirming a proposition (as negative or positive polar entailments in *almost/barely* license). In addition, it is not possible to stipulate a preferred reading of 'más-o-menos-P' following a *but*-clause test:

(49)   In the UK, the Brexit 'más-o-menos-won'
            (In the UK, the Brexit *more or less* won)
                 a. Brexit won, *but in fact it did NOT win* (resulting votes were 51/49%)
                 b. There wasn't a significant majority, *but Brexit DID win*

The *but*-clause in (49a) is based on a false presupposition and can be felicitously canceled if the regarded presupposition is true (49b), both readings being possible and mutually cancelled according to the presuppositional inconsistency. It must be noted that Sevi refers to this problem considering that "the *notP* implication of *almostP* is somehow backgrounded" (1998: 67), what is defined by Horn (2002) in semantico-pragmatic terms as an assertorically inert entailment.

To avoid intuitive tests, Sevi (1998: 83 (42-43')) establishes an equivalence between the set of indices *I* and the set of possible worlds *W*, so that this relation between *I* and *W* constitutes a similarity relation in the factual world. If the factual world is coinciding with the world of evaluation as well, then:

(50) I almost went to Paris
(50') I did not go to Paris, and there is a world where I went there, which is more similar to the real world than any other world
(51) I barely went to Paris
(51') I went to Paris, and there is a world where I did not go there, which is more similar to the real world than any other world

From this semantic description, a Q-based generalized conversational implicature is followed (i. e., the so-called *but*-clause):

(50) I almost went to Paris
(50') I did not go to Paris, and there is a world where I went there, which is more similar to the real world than any other world
   (Q+>) *But* I did NOT go
(51) I barely went to Paris
(51') I went to Paris, and there is a world where I did not go there, which is more similar to the real world than any other world
   (Q+>) *But* I did go

If this semantics is applied to *más o menos*, it must be translated in terms of possibility modal force embedded in the factual evaluation (the real world); beyond both preferred and dispreferred pragmatic readings (both depending on the double semantico-presuppositional nature of 'más-o-menos-P'):

(52) It is possible that I went to Paris and it is possible that I did not go to Paris, and there is a world where I went to Paris or where I did not go there, which is more similar to the real world than any other world
   (Q+>) *But* I did go/*But* I did not go (according to a true or false regarded presupposition)

In conclusion, the mirror image formulated by Sevi (1992: 85 (44-45)) for the possible worlds relation in 'almost-P' (53) and 'barely-P' (54) is considered for the semantics of 'más-o-menos-P' under the scope of a modal operator of possibility (55), which covers both proximities in terms of indetermination and both polarities as well in terms of presupposition:

(53) *Almostϕ* is true iff ϕ is false, and there is a $\neg A$ world where ϕ is true which is closer to the real world than any other $\neg A$ world
(54) *Barelyϕ* is true iff ϕ is true, and there is a $\neg A$ world where $\neg\phi$ is true which is closer to the real world than any other $\neg A$ world
(55) *Más-o-menos-ϕ* is possibly true iff $\Diamond\phi$ as well as possibly false iff $\Diamond\phi$, and there is a $\neg A$ world where $\Diamond\phi$ is possibly true which is closer to the real world than any other $\neg A$ world or where $\Diamond\phi$ is possibly false which is closer to the real world than any other $\neg A$ world.

4. FINAL REMARKS

As demonstrated here, the propositional properties described by Sevi (1998) for *almost* and *barely* do not apply to *más o menos*. The approximative *más o menos* does not assign a standard of precision in combination with gradable-vague predicates; what is more, *más o menos* invites the incorporation of a relaxation relation *r* in the argumental description of the predicate this adverb modifies (even modifying non-vague predicates). Likewise, a comparison to a standard of precisification does not apply either: relaxation is not neutralized and, for this reason, *más o menos* seems to be a vagueifier. The counterfactual relation based on a necessity modal force proposed for *almost* and *barely* also suggests a change in modal operator (of possibility) involved in *más o menos*. In connection with the latter, the implications triggered by a proposition of the type 'más-o-menos-P' refer to different presuppositions rather than to entailments (as in *almost/barely*). These presuppositions, nonetheless, are inconsistent since they are undefined at all intensional indices.

In the same way, the fact that inconsistent presuppositions in a 'más-o-menos-P' proposition are undefined at all indices is supposed to be connected to the problem of higher-order vagueness. This difference in the vague nature of approximatives relates to a difference in the extension of approximatives as vagueifiers (being a determinate extension in *almost/barely* and an indeterminate one in *más o menos*.) This distinction brings forth some additional differences in the considerations of approximatives as hedges in their pragmatic developments.

Finally, an intensional semantic account for *más o menos* should take into consideration these differences among the approximatives of the hedge-type *almost/barely* and the approximatives of the hedge-type *más o menos*. As Sevi proposes for *almost/barely*, a study in terms of indices of evaluation relating possible worlds is an appropriate technology for the semantics of *más o menos*, although the vague status of this approximative must not be lost sight of. As a last suggestion, the semantic properties revisited in this work points to a further fine-grained distinction between two subsets of vagueifiers, including *almost/barely* and *más o menos* as the prototypical ones, termed APPROXIMATIVES and APPROXIMATORS, respectively.

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