

# CUALQUIER, EXCEPTION PHRASES AND NEGATION<sup>1</sup>

ANA ARREGUI  
*University of Ottawa*

## 1. *Introduction*

In this paper I investigate the interpretation of the Spanish free-choice (FC) indefinite *cualquier* (any). My goal is to explain the following: (1) *cualquier* licenses exception phrases:

- (1) *Puedes comprar cualquier libro excepto uno sobre conejos*  
May buy any book except one about rabbits  
"You may buy any book except one about rabbits"

(2) *cualquier* is not possible in the scope of ordinary negation, but it is possible in the scope of metalinguistic negation (the so-called 'not just any' interpretation):

- (2) *No compró #cualquier/ CUALQUIER libro.*  
not bought #any / ANY book  
"S/he didn't buy #any / ANY book" / "S/he didn't buy just any book"

and (3) in the scope of metalinguistic negation, *cualquier* does not license exception phrases:

- (3) *#No compró CUALQUIER libro excepto "Estructuras Sintácticas".*  
Not bought any book except Structures Syntactic  
"He didn't buy ANY book except Syntactic Structures."

Exception phrases show up with a restricted set of quantifiers (a.o. Hoeksema (1987), von Stechow (1994), Moltmann (1995)). In this paper I claim that exception phrases are able to associate with *cualquier* because they operate on universal implicatures generated by the FC item. Following Kratzer and Shimoyama (K&S) (2002), I propose a Hamblin style analysis of *cualquier* as a domain widening indefinite, and develop an analysis to explain (1)-(3).

---

<sup>1</sup> I would like to thank the participants of *Going Romance 2004 (Eighteenth Symposium on Romance Linguistics)* for helpful feedback on this material, as well as two anonymous reviewers who provided detailed comments. Remaining mistakes are my own.

## 2. *Some facts about distribution*

*Cualquier* is one of the Spanish determiners that translate English *any*. In Spanish, specialized indefinites show up depending on the context (the Spanish case is far from unique, see Haspelmath 1997 for a typological overview). In this section I introduce data to illustrate differences between *cualquier* vs. *algún* and *ningún*, the other Spanish indefinites that translate *any*. The objective is to make a case for the 'modal' nature of *cualquier*. I will also discuss a suggestion in Dayal 1998 that *cualquier* is the equivalent of English FC *any*, characterized as a universal quantifier. I will present data showing that *cualquier* is not simply a universal quantifier.

The examples in (4) and (5) illustrate the distribution of *algún* and *ningún*. *Ningún* can receive a universal reading (everybody-not) (4a). In the surface scope of a negative marker, *ningún* results in an existential reading (4b) (Spanish is a negative concord language). In non-negative contexts, *algún* is used to obtain an existential reading (5):

- (4) a. *Ningún policía llegó tarde.*  
No policeman arrived late  
"No policeman arrived late"  
b. *No ví ningún policía.*  
Not see any\_ policeman  
"I didn't see any policeman"

- (5) *Nadie que tenga algún motivo para quejarse debe quedarse callado.*  
Nobody that has any motive to complain should remain silent  
"Nobody who has any motive to complain should remain silent"

By contrast, *cualquier* cannot appear in simple non-modal sentences (6a, c), except when modified by a relative clause (6b, d) (so-called 'subtriggering' examples, LeGrand (1975)):

- (6) a. *\*Cualquier lechuza vivía en el bosque.*  
Any owl lived in the woods  
"Any owl lives in the woods"  
b. *Cualquier lechuza que quisiera conocer otras lechuzas vivía en el bosque.*  
Any owl that wantedSUBJ to-meet other owls lived in the woods  
"Any owl that wanted to meet other owls lived in the woods"  
c. *\*Compró cualquier libro.*  
Bought any book  
"I bought any book"  
d. *Compró cualquier libro que tuviera dibujos.*  
Bought any book that hadSUBJ drawings  
"He bought any book that had pictures"

*Cualquier* appears in generic and modal sentences, in which it is usually assumed that FC *any* appears in English (a.o. Carlson 1981, Kadmon and Landman 1993, Dayal 1998, Giannakidou 2001):

- (7) *Cualquier lechuza caza ratones.*  
 Any owl hunts mice  
 "Any owl hunts mice"
- (8) *Cualquier lechuza puede cazar ratones.*  
 Any owl can hunt mice  
 "Any owl can hunt mice"

In such environments, *algún* and *ningún* do not obtain an 'any' reading. I illustrate this with the generic case:

- (9) a. *Alguna lechuza caza ratones.*  
 Some owl hunts mice  
 "Some owl hunts mice"
- b. *Ninguna lechuza caza ratones.*  
 No owl hunts mice  
 "No owl hunts mice"

Dayal (1998) argued that English *any* is lexically ambiguous between a FC and negative polarity (PS) interpretation. She characterized FC *any* as a universal quantifier. Dayal suggested Spanish disambiguates the two interpretations, with universal FC *any* corresponding to *cualquier*. Supporting evidence appears to come from the Spanish version(s) of (10):

- (10) If anyone can solve this problem, I will be very surprised.

The English conditional can be used to say either that I will be very surprised if even one person can solve this problem, or that I will be very surprised if every person can solve this problem. It has been claimed (a.o. Dayal 1998) that the two meanings arise because of the ambiguity of English *any*. PS *any* gives rise to the 'even a single person' reading, and FC *any* gives rise to the 'every person' reading.

The two meanings in (10) appear to be teased apart in Spanish, with (11a) receiving the first interpretation and (11b) the second (but more on this later):

- (11) a. *Si alguien puede solucionar este problema, estaré muy sorprendida.*  
 if anyone can solve this problem, will-be very surprised
- b. *Si cualquiera puede solucionar este problema, estaré muy sorprendida.*  
 if anyone can solve this problem, will-be very surprised

Examples like these could appear to bring support to the hypothesis that *cualquier* is the equivalent of English universal FC *any*. However, it is possible for *cualquier* in this context to receive an interpretation that does not have a typical FC universal flavour:

- (12) a. *Si escucha cualquier ruido, llamará a la policía.*  
 if hears any noise, will-call to the police  
 "If he hears any noise, he will call the police"

- b. *Si escucha cualquier ruido, aparecerá en el Libro de Records de Guinness.*  
 if hears any noise, will-appear in the book of records of Guinness  
 "If he hears any noise, he will appear in the Guinness Book of Records"

In their most prominent interpretations, there appears to be a difference in quantificational strength between (12a) and (12b): (12a) tells us that if he hears any noise, even the most insignificant one, he will call the police; (12b) tells us that if he has the ability to hear all noises, he will appear in the Guinness Book of Records. It seems that in (12), *cualquier* can have the range of interpretations corresponding to both PS and FC *any*.

The interpretations described, though the most salient, are not the only ones available: (12a) could mean that if he has the ability to hear all noises, he will call the police (strange), and (12b) could mean that if he hears any noise at all, he will appear in the Guinness Book of Records (this last one is not so odd: imagine that a series of almost imperceptible noises will be played such that if he heard any of those, he would have almost superhuman hearing abilities; this would merit an entry in the Guinness Book of Records). Similarly, although the most salient interpretation of (11b) is one in which I will be astonished if everyone can solve the problem, in a context in which we have a salient set of individuals (let's say the students in my class), (11b) could be taken to mean that if anyone of them can solve the problem, I would be very surprised. The conclusion is that *cualquier* cannot be claimed to be simply a universal quantifier.

What is the difference between (12a), with *cualquier*, and a version with plain *algún*?

- (13) *Si escucha algún ruido, llamará a la policía.*  
 if hears some noise, will-call to the police  
 "If he hears a noise, he will call the police"

It is hard to describe. (12a) would be appropriate if he was particularly nervous, and more than ready to call the police. The sentence in (13) would be used to describe the attitude of a regular person, who would call the police upon hearing some suspicious noise. Borrowing from Kadmon and Landman's terminology (Kadmon and Landman 1993), it seems intuitively correct to say that the use of *cualquier* widens the domain with respect to (13). I will take this up below.

### 3. *Cualquier* as a Hamblin-indefinite<sup>2</sup>

There are many proposals in the recent literature that in some way incorporate alternatives into the semantics of free-choice items (a.o. Dayal 1998, Giannakidou 2001, Aloni 2002, Kratzer and Shimoyama 2002, Farkas 2005). A review of the recent literature is beyond the scope of this paper. I will formulate my proposal within the framework of Kratzer and Shimoyama (2002) (K&S). K&S have proposed an analysis of indefinites based on Hamblin's theory of question-denotations. According to K&S, indefinites introduce sets of alternatives, which can then be quantified over by operators

---

<sup>2</sup> Menéndez-Benito (2005) proposes a sophisticated analysis of *cualquier* as a Hamblin indefinite. The reader is referred to her work for a much more subtle overall picture.

and determiners.<sup>3</sup> The analysis is designed to explain quantificational variability effects, and the association between indefinites and various types of quantifier-like operators. The 'morphological flexibility' of K&S's proposal will be important in the present work, since it will give insight into the differences between the various Spanish indefinites that correspond to English *any*. K&S's views about domain widening and the generation of implicatures will further allow us to explain the interaction between *cualquier* and exception phrases.

Before moving on to K&S's proposal, I would like to show that even though there appears to be variability in the quantificational force of *cualquier*, this cannot be accounted for simply as a case of quantificational variability due to the presence of adverbial modifiers (that is, it cannot be given a standard indefinite quantificational variability analysis). The argument follows the one proposed by Dayal 1998, who noted that English *any* did not evidence the quantificational variability effects shown by *a*:

- (14) a. A philosopher is sometimes wrong.  
 b. Any philosopher is sometimes wrong.  
 (Dayal 1998: 438)

Whereas (14a) is ambiguous, and allows for a 'bound variable' reading (*there are philosophers who are wrong*), (14b) only allows a frequency interpretation (*any philosopher is such that there are times when he/she is wrong*). *Cualquier*, like *any* in (14b), only allows for a frequency construal:

- (15) *Cualquier filósofo a veces se equivoca.*  
 any philosopher at times self mistakes  
 "Any philosopher is sometimes wrong"

Examples like this suggest that variations in the quantificational force of *cualquier* cannot be explained by just any analysis designed to account for quantificational variability in the interpretation of indefinites.

### 3.1 Specialized Hamblin-indefinites

The basic insight behind K&S's proposal is the idea that indefinites denote sets of entities, which combine with predicates via point-wise function-argument application. The alternatives thus generated are then quantified over by various types of operators, or by default proposition-level quantifiers. To illustrate how the proposal works, I present one of K&S's Japanese examples below:

- (16)  $[[\mathbf{dare}]]^{w,g} = \{x: \text{human}(x)(w)\}$  "someone"  
 $[[\mathbf{nemutta}]]^{w,g} = \{\lambda x. \lambda w'. \text{slept}(x)(w')\}$  "slept"  
 $[[\mathbf{dare\ nemutta}]]^{w,g} = \{p: \exists x [\text{human}(x)(w) \ \& \ p = \lambda w'. \text{slept}(x)(w')]\}$   
 (K&S: 6)

<sup>3</sup> A Hamblin-style analysis was also put forward by Aloni (2002), with differences.

In (16) we observe the result of combining the denotation of the predicate with the denotation of a Hamblin-indefinite via point-wise functional application. The result is a set of alternative propositions of the form 'x slept' for all human  $x$  in the domain of quantification. An existential propositional quantifier would combine with this set of alternatives and claim that some alternative in the set is true:

- (17) Where  $A$  is a set of propositions,  
 $[\exists](A) = \{\text{the proposition that is true in all worlds in which some proposition in } A \text{ is true}\}$   
 (K&S: 6)

K&S's Hamblin-style analysis of the interpretation of indefinites gives some flexibility to the relation between indefinites and operators, and at the same time, places some restrictions. The case of the interpretation of Japanese indefinites is a good example of the flexibility built into the system:

- (18) a. *[[Dono hon-o yonda] kodomo ]-mo yoku nemutta*  
 which book-ACC read child -MO well slept  
 "For every book  $x$ , the child who read  $x$  slept well"  
 b. *Taro-wa [[dare-ga katta] mochi] o tabemasita ka?*  
 Taro-TOP who-NOM bought rice cake-ACC ate Q  
 "Who is the  $x$  such that Taro ate rice cakes that  $x$  bought?"  
 (K&S: 2)

In (18a) we find the indefinite *dono hon-o* (book) associated with the universal quantifier *mo*. The result is an interpretation with universal quantification. In (18b) we find the indefinite *dare* (someone) associated with a question operator *ka*. The result is a question interpretation. By allowing different kinds of operators to combine with alternatives sets, K&S can explain the flexibility observed in the interpretation of the indefinites.

But not all indefinites are very liberal. According to Kratzer 2003, selectivity is typical of morphologically complex determiners (like *cualquier*), and is to be accounted for in terms of a specialization in feature checking. The complex determiners

*must enter into an agreement relation with a matching interpretable feature that happens to be unpronounced.* (Kratzer 2003)

Kratzer proposes we can think of negative concord examples as a case of feature-checking indefinites.<sup>4</sup> As we have seen (4b), Spanish *n*-words in negative contexts are not interpreted as negative quantifiers. According to Ladusaw (1996), *n*-words do not carry negation, but simply reflect morphologically a negation operator in the clause.:

*the expression of negation is associated with an abstract element of clause structure (...) the argument n-words are treated as non-negative indefinites which are obligatorily to be associated with this abstract operator of clausal negation.* (Ladusaw 1996)

---

<sup>4</sup> Kratzer also discusses interrogative indefinites, but I will leave them aside here.

Another example of a specialized indefinite can be found in Alonso-Ovalle and Menéndez-Benito's (A&M) (2002) Hamblin-style analysis of *algún*, the other Spanish indefinite that translates *any*. According to A&M, *algún* is a domain-widening epistemic indefinite, associating with an utterance-level assertion operator. By widening the domain at an epistemic root-level, the speaker is able to generate 'ignorance' implicatures (further discussion of 'ignorance implicatures' can be found in § 4.1). An example of the epistemic effects triggered by *algún* is illustrated below (examples from A&M:1-2):

- (19) A: *María está tomando alguna clase de lingüística.*  
 Maria is taking some class of linguistics  
 B: *#Cuál?*  
 "#Which?"

By choosing *alguna*, the speaker indicates ignorance with respect to the choice of class, so the listener's follow-up question is inappropriate. A 'regular' non-epistemic indefinite (*una*) would not have this consequence:

- (20) A: *María está tomando una clase de lingüística.*  
 B: *Cuál?*

The idea that indefinites can be specialized in their association with operators is insightful with respect to the behaviour of *cualquier*. As we have seen (§2), *cualquier* appears in many of the modal contexts where (FC) *any* appears in English. To capture this fact, I propose that the alternatives introduced by *cualquier* can only associate with modal operators. *Cualquier* is a specialized indefinite that can only agree with a modal. In the absence of a modal, the alternatives generated by *cualquier* percolate to the root level, to be quantified over by the default existential quantifier over propositions.<sup>5</sup>

Of course, the idea that there is a special relation between free-choice and modality is not new. Giannakidou (2001), for example, has argued that FC items in Modern Greek are indefinites bound by 'non-veridical' operators. Aloni (2002) has presented an analysis that treats free-choice indefinites as introducing alternatives, and gives modals a semantics that allows them to directly quantify over the alternatives.<sup>6</sup>

### 3.2 *Is 'cualquier' a domain-widening' indefinite?*

In their influential analysis, Kadmon and Landman (1993) characterized English *any* as a 'domain widening' indefinite.<sup>7</sup> According to their proposal, *any* has the effect of broadening the interpretation of the common noun predicate. A pragmatic constraint requires that the use of *any* be justified in terms of strength. The two key ingredients of their proposal are given below:

---

<sup>5</sup> The proposal accounts for the cases in which *cualquier* appears in imperatives, generics and modals. It doesn't straightforwardly explain how *cualquier* is licensed via subtrigging. A proper analysis of the interaction with the subjunctive mood morphology in the relative clause would be needed (see Menéndez-Benito (2005) for some discussion). The problem remains for future research.

<sup>6</sup> For further examples, the reader is also referred to Farkas (2005), who presents a discussion of free-choice items in Romanian in the framework of alternatives, and Yanovich (2005) (SALT presentation), who discusses Hamblin indefinites in Russian.

<sup>7</sup> For a recent discussion of widening, the reader is referred to Chierchia (2005).

- (21) a. *Widening*: *any* widens the interpretation of the common noun predicate along a contextual parameter  
 b. *Strengthening*: *Any* is licensed only if the widening that it induces creates a stronger statement.

A simple example to illustrate their proposal is given below:

- (22) A: Do you have dry socks?  
 B: I don't have any socks.

By choosing *any*, B broadens the domain of socks under consideration. It is no longer simply about dry socks. The result of widening is a stronger statement: B denies having either dry socks or wet socks.

The domain-widening insight has been very influential. K&S analyze the German indefinite *irgendein* as a domain-widening indefinite. A&M analyze Spanish *algún* as a domain widening indefinite. I want to argue that Spanish *cualquier* is also a domain-widening indefinite, but that it differs from *algún* with respect to its combinatorial possibilities. I will start by comparing *cualquier* to a 'regular' non-widening indefinite *un*. *Un* (and *una*) can appear in some of the contexts that license *cualquier*:

- (23) a. *Una/ cualquier persona decente te diría lo mismo.*  
 a/any person decent you would-tell the same  
 "A/Any decent person would tell you the same thing."

In examples like this, the contrast between *un* and *cualquier* does seem to parallel the difference between English *a* and *any*. The choice of *cualquier* signals that the generalization applies more widely than if *un* had been used. Domain-widening seems to be a good way of characterizing the difference.

### 3.3 A denotation for 'cualquier'

The proposal in (24) is modeled after K&S's analysis of *irgendein*. *Cualquier* is treated as a Hamblin-indefinite: it generates alternatives by introducing a set of individuals. *Cualquier* is also treated as a domain-widening indefinite: it broadens the set of individuals under consideration. K&S's implementation of domain widening follows Chierchia 2001.

- (24)  $[[\text{cualquier-}_D \text{ N}]]^{\text{g}, \text{w}} = \{x: \exists \text{g}' [x \text{ is N in } w \ \& \ x \in \text{g}'(\mathbf{D})]\}$   
 where,  $\text{g}'$  is a function that applies to the contextually given domain  $\mathbf{D}$  and has as output some  $\mathbf{D}'$  that is in an extension of  $\mathbf{D}$ .

The proposal in (24) does not itself explain the specialization of *cualquier*. We need to add to (24) the fact that the alternatives introduced by the indefinite can only associate with modal operators. With these pieces in place, we have a solution to part of our puzzle: we predict that sentences like (25) should be unacceptable.

- (25) *#No compró cualquier libro.*

not bought any book  
"S/he didn't buy any book"

*Cualquier* in (25) does not combine with an appropriate modal operator. The alternatives generated by *cualquier* percolate above negation, and no strengthening takes place. The unacceptability of (25) arises in the same way as that of (26):

(26) #*Compró cualquier libro.*  
"S/he bought any book"

The widening indefinite is not properly justified in terms of strengthening.

### 3.4 Some examples: the case of imperatives and conditionals

To see the proposal in action, I will briefly examine the cases of imperatives and conditionals, starting with the first. Both *cualquier* and *un* can appear in imperative sentences. The meaning differences are hinted at by the different translations:

(27) a. *Dame un libro*  
give-me a book  
"Give me a book"  
b. *Dame cualquier libro*  
give-me any book  
"Give me any book"

The difference become apparent when considering possible continuations. It would be possible to follow (27a) with *No, no ése* ("No, not that one"), but it would be very odd to follow (28b) in this way:

(28) a. *Dame un libro. No, no ése.*  
b. *Dame cualquier libro. #No, no ése.*

In her discussion of free-choice in imperatives, Aloni (2003) has presented examples like these to argue that *any* has a widening effect in the context of imperatives. Let me start by saying something about Aloni's semantics for imperatives. Aloni assumes that imperatives denote propositions that correspond to desirable situations. That is, they are interpreted with respect to a modal base made up of the desires of a participant in the conversation ( $A_w$ ). The imperative operator is given the following semantics<sup>8</sup>:

(29)  $[\!|\phi|]_{M,g} = \{w \mid \forall \alpha \in \text{ALT}(\phi)_{M,g}: \exists w' \in A_w: w' \in \alpha \ \& \ \forall w' \in A_w: \exists \alpha \in \text{ALT}(\phi)_{M,g}: w' \in \alpha\}$   
(Aloni 2003)

Aloni's treatment of the imperative departs from the standard semantics for modals in terms of quantification over possible worlds. Aloni's imperative operator  $!$  quantifies both

---

<sup>8</sup> I have slightly simplified Aloni's proposal, excluding a detail that is not relevant here.

over worlds and over the alternatives introduced by indefinites ( $ALT(\phi)_{M, g}$ ). The imperative is true in a world  $w$  iff: "(i) every alternative induced by  $\phi$  is compatible with the desire state  $A_w$ ; (ii) the union of all these alternatives is entailed by  $A_w$ " (Aloni 2003).

Suppose for example that *cualquier* in (27b) introduces the alternatives *that you give me book a, that you give me book b, that you give me book c, that you give me book d*. The imperative operator would quantify over these alternatives and claim (i) that for every alternative, there is some world compatible with (my) desires where the alternative is true, and (ii) in all the worlds compatible with (my) desires, there is some alternative that is true.

Aloni points out that the presence of a widening indefinite in imperative contexts as she characterizes them does not lead to strengthening in the sense of Kadmon and Landman (that is, strengthening evaluated on the basis of relative entailment). There is no entailment relation (in either direction) between imperatives with a regular indefinite and imperatives with a widening indefinite. To explain why the widening indefinite is acceptable, Aloni proposes we think of strength in imperatives in a different way, and proposes a notion of relative strength that does not depend on entailments, but rather is based on how imperatives can be satisfied:

$$(30) \quad !A \approx !B \text{ iff } \forall \beta \in ALT(B): \exists \alpha \in ALT(A): \alpha \subseteq \beta \quad (\text{Aloni 2003})$$

The definition in (30) states that, for any two imperatives  $!A$  and  $!B$ ,  $!A$  is at least as strong as  $!B$  ( $!A \approx !B$ ) iff it is the case that for every alternative corresponding to  $B$  there is some alternative corresponding to  $A$  that is a subset of it. When dealing with the case of Hamblin-style indefinites, the alternatives corresponding to  $A$  and  $B$  are the propositions generated by the indefinites.

Aloni's notion of strengthening allows us to make sense of the presence of *cualquier* in (27b), even if don't adopt the specifics of her  $!$ -analysis: (27b) is stronger than (27a) (more precisely, (27b) is at least as strong as (27a), but (27a) is not at least as strong as (27b)). Given that *cualquier* broadens the domain, the set of alternatives generated by the indefinite in (27a) will be a subset of the set of alternatives generated by the indefinite in (27b). Stated in terms of compliancy conditions, every way of obeying (27a) is also a way of obeying (27b), but not every way of obeying (27b) is a way of obeying (27a). In this sense, we can say that (27b) is stronger than (27a), and widening is pragmatically justified.

What is the difference between *algún* and *cualquier* in imperatives? I will accept A&M's characterization of *algún* as an epistemic indefinite, with an interpretation tied to an utterance-level assertion operator. The alternatives introduced by *algún* are quantified over by the assertion operator. I have characterized *cualquier* as a modal indefinite, with an interpretation tied to content-level modal operators. That is, the alternatives introduced by *cualquier* are quantified over by modals (generic operators, modal verbs, and imperative operators). Can we find evidence in favor of distinguishing between imperatives that involve epistemic indefinites associated with an assertion operator vs. imperatives that involve modal indefinites associated with an imperative operator? Intuitions are subtle. Imagine you see somebody with a bag full of books, and ask that person to give you a book. You can justify complaining about the book you have been given if your request was made with *algún*, it is much harder with *cualquier*:

- (31) A: *Dame algún libro.* 'Give me a book'  
 B: *Acá tenés.* 'Here you are'  
 A: *No... éste no...* 'No... not this one...!'
- (32) A: *Dame cualquier libro.*  
 B: *Aca tenés.*  
 A: *#No... éste no....*

As the examples show, the alternatives introduced by *algún* behave differently than the alternatives introduced by *cualquier*.

Let us turn to the case of conditionals. As I have pointed out, conditionals with *cualquier* can have two interpretations.

- (33) *Si escucha cualquier ruido, le dirá a su médico*  
 if hears any noise, him will-tell to his doctor  
 "If he hears any noise, he will tell his doctor"

(33) can receive an 'ability' interpretation ('if he is able to hear any noise, he will tell his doctor') or a 'whatever noise' interpretation ('should he hear any noise at all, he will tell his doctor'). This follows from a K&S-style analysis of *cualquier*, if we assume that the sets introduced by the indefinite are bound by different modals:

In the 'ability interpretation', the alternatives introduced by *cualquier* are distributed over an implicit ability modal within the antecedent clause of the conditional:<sup>9</sup>

- (34) modal<sub>conditional</sub> ( if modal<sub>ability</sub> (he hears CUALQUIER noise))  
 (he will tell his doctor)
- =
- modal<sub>conditional</sub> ( if modal<sub>ability</sub> { he hears k-noise  
 he hears x-noise  
 he hears y-noise  
 he hears z-noise  
 ..... } ) (he will tell his doctor)

In this interpretation, the alternatives introduced by *cualquier* associate with the ability modal. The hypothesis is that he has the ability to hear any noise: for every world *w* compatible with his ability, there is a proposition in the set of alternatives generated by the indefinite that is true in *w* (this does not yet guarantee the 'universal' interpretation, we will turn to that in the next section). The conditional in (34) claims that if he has this ability, he will tell his doctor.

<sup>9</sup> Non-overt modal operators have been postulated in various places in the literature (influentially, in Kratzer 1978, 1991, and Heim 1982). The practice of positing silent operators has proven particularly widespread in the study of genericity (see Carlson and Pelletier 1995). We can understand the 'ability' reading described above as belonging to this group.

In the 'whatever noise' interpretation, there is no modal within the antecedent, and the alternatives introduced by *cualquier* provide alternative values for the antecedent clause itself:

(35) modal<sub>conditional</sub> (if he hears CUALQUIER noise) (he will tell his doctor) =

$$\text{modal}_{\text{conditional}} \left( \left\{ \begin{array}{l} \text{he hears z-noise} \\ \text{he hears k-noise} \\ \text{he hears x-noise} \\ \text{he hears y-noise} \end{array} \right\} \right) \text{ (he will tell his doctor)}$$

A proposal like this would allow the modal corresponding to the conditional to operate over the set of propositional alternatives generated by the widening indefinite in the antecedent clause. Such an analysis would follow the lines of K&S's proposal for necessity and possibility modal (and Aloni's analysis of imperatives).

An different approach would be to follow Heim (1982)'s (Lewis-inspired) unselective-binder approach, and allow the modal to quantify over world-assignment pairs. The widening effect of the indefinite could be captured either way (for a recent discussion of unselective binding over propositions in the antecedents of conditionals, the reader is referred to Alonso-Ovalle 2004).

#### 4. *Implicatures and metalinguistic negation*

Having put in place some machinery to talk about the truth-conditions of *cualquier* indefinites, we turn now to their implicatures, 'universal flavor', and interaction with metalinguistic negation.

##### 4.1 *Universal implicatures of Hamblin-indefinites*

Since Carlson (1981)'s discussion of *any*, it has often been noted that FC indefinites have some of the qualities of universal quantifiers, but lack others. K&S have investigated the 'universal quantifier' flavor associated with free-choice indefinites that appear to have existential quantificational force. They investigate in detail the case of German *irgendein* and characterize the 'universal effect' as an implicature arising from the use of a widening Hamblin-indefinite. To see a simple example of how this works, let us go through A&M's illustration of the generation of the 'universal effect'.

(36) Mary believes that *irgendein* girl came to the party.

The use of a widening Hamblin-indefinite indicates that the domain of quantification has been expanded. The alternatives generated by *irgendein* look like this:

(37) Mary believes that     $\lambda w$ . Susan came to the party in  $w$   
                                       $\lambda w$ . Suzanne came to the party in  $w$   
                                       $\lambda w$ . Suzette came to the party in  $w$   
                                      ....etc., for all girls in the expanded domain

The sentence in (36) will be true iff for every world compatible with Mary's beliefs, one of the propositions in the set of alternatives is true. This will be the case, for example, if for every proposition in the set, there is some world in the set of Mary's doxastic alternatives in which it is true. But it will also be true if there is a single proposition in the set that is true in every world in the set of Mary's doxastic alternatives, or if some other (non-empty) subset of propositions is such that for every proposition in the subset there is some world in the set of Mary's doxastic alternatives in which it is true. In sum, the truth conditions for *believe* do not guarantee that every proposition in the set of alternatives corresponds to an epistemic option. Yet, as K&S point out, *irgendein* would not be used unless all the alternatives constituted epistemic options!

K&S explain this last fact by proposing that the pragmatic justification of the use of *irgendein* is to block exhaustivity inferences. Suppose that Mary believes that Susan came to the party. The speaker could then have reported Mary's beliefs truthfully with an indefinite with a narrower domain. But then the listener could have inferred that Mary did not believe that anybody else came to the party. And this would be a mis-representation. By choosing a domain widening indefinite, the speaker lets the hearer know that if Mary believes that Susan came to the party, she also believes that other people (e.g. Suzanne) also came. The distributivity of the set of alternatives generated by the indefinite over the set of worlds corresponding to Mary's beliefs arises as an implicature.

#### 4.2 *Metalinguistic negation and denial*

As we have seen in (2) (repeated below), *cualquier* cannot appear in the scope of ordinary negation, but it can appear in the scope of metalinguistic negation

- (38) *No compró CUALQUIER libro.*  
 not bought any book  
 "S/he didn't buy any book"

Metalinguistic negation can be recognized by a special intonational contour. It has been extensively studied by Horn (a.o. 1985, 1989, 1999, 2000), who claims that metalinguistic negation is used to indicate an objection to a previous utterance. The objection could arise for a variety of reasons. For example, one could disagree with the implicatures of what has been said (conventional or conversational), the morphology used, the register, etc. An example in which metalinguistic negation is used to deny the implicatures of what has been said is given in (39):

- (39) (Who was that lady I saw you with last night?)  
 That was no lady, that was my wife. [Horn 1985: 134]

The second speaker in (39) does not mean to suggest that his wife is not a lady. Rather, he means to deny the implicatures associated with the question. Horn gives another illustration, following up on an example by Grice:

- (40) X is meeting a woman this evening.

Grice noted that the sentence in (40) suggests that X is meeting a woman who is not X's wife, mother, sister, or even a platonic friend. As Horn points out, such implicatures can be negated:

- (41) No, he's not (meeting a woman this evening) – he's meeting his wife.  
[Horn 1985: 134]

According to Horn, the metalinguistic use of negation is associated with the assertability of an utterance. Metalinguistic negation indicates disagreement with assertability, it does not strictly speaking operate on truth-conditional content. Take, for example, (42):

- (42) SOME men aren't chauvinists – ALL men are. [Horn 1985: 132]

If negation operated on the truth-conditional content of 'some men are chauvinists', the continuation sentence would be inconsistent. It isn't. It makes sense to say that negation operates on the implicatures associated with 'some'.

As we have said, *cualquier* can be in the scope of metalinguistic negation, giving rise to the 'not just any' interpretation. Similarly to the situation in (42), in this case negation seems to operate on the implicatures associated with *cualquier*:

- (43) *No compré CUALQUIER libro, compré Estructuras Sintácticas.*  
not bought any book, bought Structures Syntactic  
"He/She didn't buy (just) ANY book, he/she bought Syntactic Structures"

The appearance of *cualquier* generates (unreasonable) universal implicatures (*he/she bought every book in an expanded domain*). Metalinguistic negation operates on these implicatures (*he/she did not buy every book in an expanded domain*), generating the 'not just any random' interpretation.<sup>10</sup> The negation of the implicatures strengthens the truth conditional claim made by the sentence (that a proposition of the form "he bought x and x is a book" is true for x member of the expanded domain). The use of *cualquier* does not strengthen the truth-conditional claim of the sentence, but the negation of the universal implicature does, and so the widening indefinite is justified.

Even though Horn appears to be correct in claiming that metalinguistic negation does not operate on the truth-conditional content of the clauses in its scope, it is still possible that he is incorrect in his characterization of metalinguistic negation as an 'extra-logical' operator, that does not affect the truth conditions of the sentence it appears in. There has been a lot of interest recently in the idea that pragmatic effects are 'visible' to the grammar, and that there is a closer interaction between semantics 'proper' and implicatures (a.o. Chierchia 2001, 2005). Even though I will not be able to present an explicit compositional analysis of the interaction between negation and implicatures here, I would like to point to proposals like Chierchia, which point in a promising direction.

The idea that the negation of the implicatures forms part of the interpretations is helpful in understanding the use of metalinguistic negation in *cualquier* statements. It

---

<sup>10</sup> See also Chierchia 2005 who claims that negation operating over implicatures can give rise to the 'rhetorical' "not just any" reading (Chierchia 2005: 32).

seems odd to think that negation in examples like (38) indicates disagreement with the assertability of the non-negated version. It is never possible to assert '*Compró cualquier libro*' / '*Compró CUALQUIER libro*'. On the other hand, the case can be explained if the negation of the implicatures belongs to the truth-conditional content of the utterance.

In his discussion of embedded implicatures, Chierchia (2001, 2005) has argued that implicatures are computed locally and are added as soon as possible to the derivation of the semantic value of a sentence. Their addition is conditioned by a pragmatic principle: adding the implicatures must lead to strengthening (Chierchia 2001). Chierchia's idea that implicatures are generated locally and are visible as soon as possible to the computation of the sentence's truth-conditions could help us make sense of Horn's proposal that metalinguistic negation is able to target the implicatures of what is said. Metalinguistic negation in examples with *cualquier* contributes to the strength of what is said, it does not object to assertability.

One of the arguments put forward by Chierchia (2001)/(2005) in favor of the idea that implicatures are computed locally arises from examples like (44):

(44) John believes that his colleague makes \$100 an hour. [Chierchia 2001:6]

The example in (44) conveys the information that John believes that his colleague makes exactly \$100 an hour. This suggests that the 'exactly' implicature of the numeral forms part of the content of the belief attributed to John, and thus that the implicature is computed locally. A similar example can be constructed for *cualquier*:

(45) *Sara cree que Susana no quería CUALQUIER libro, cree que quería 'Estructuras'*  
S. believes that Su. not wanted any book, believes that wanted 'Structures'  
"S. believes that Su. didn't want ANY book, she believes she wanted 'Structures'"

The example in (45) conveys the information that Sara's belief was that Susana didn't want a random book. The negation of the implicatures has become part of the truth-conditional content of the embedded clause.

## 5. *Exception phrases*

The idea that implicatures are computed locally and can be added to the computation of truth-conditions could also help us understand Horn's proposal that universal implicatures can license exception-phrases. We will turn to exception phrases in this section.

### 5.1 *Von Stechow's analysis of exception-phrases*

Exception phrases place limits on the strength of quantificational claims. According to von Stechow (1992, 1994), they subtract from domains of quantification (cf. Hoeksema (1987) and Moltmann (1995)). Exception phrases typically combine with universal-type quantifiers, and are not possible with existential-type quantifiers:

(46) I liked every book except the book about rabbits.

(47) #I liked some book except the book about rabbits.

The analysis proposed in von Fintel (1994) provides an account of the contrast between (46) and (47)<sup>11</sup>. The intuition behind von Fintel's account is that there is a 'well-formedness condition' that regulates the use of exception-phrases: the use of an exception phrase restricts the strength of quantificational statements and conveys the information that the stronger, non-restricted statement would have been false. So, for example, (46) conveys the conjunction in (48):

- (48) I liked every book except the book about rabbits and it is false that I liked every book.  
 $\text{every}([\textit{book}] - [\textit{the book about rabbits}])(\{x: \text{I liked } x\}) \&$   
 $\neg \text{every}([\textit{book}])(\{x: \text{I liked } x\})$

As (48) shows, the role of the exception phrase in von Fintel's analysis is to remove some item(s) from the domain of quantification of *every*, and the well-formedness requirement results in the information provided by the second conjunct. Von Fintel's account of the ill-formedness of (47) relates it to the falsehood of the corresponding conjunction:

- (49) I liked some book except the one about rabbits  
and it is false that I liked some book.  
 $\text{some}([\textit{book}] - [\textit{the book about rabbits}])(\{x: \text{I liked } x\}) \&$   
 $\neg \text{some}([\textit{book}])(\{x: \text{I liked } x\})$

The intuitive generalization is that exception phrases are true only when the following condition is satisfied (von Fintel calls this the *restrictiveness condition* (von Fintel 1994: 106)):

- (50) ***Restrictiveness condition:***  
 If a sentence with an exception phrase is true, the same sentence without the exception phrase is false  
 (*without making the exception, the sentence would be false*)

The intuition that sentences with exception-phrases can only be true if the corresponding examples without exception phrases are false will be central to explaining the interaction with negation.

## 5.2 *Exception phrases in the scope of negated universals*

As a preliminary to our discussion of the interaction between *cualquier*, exception phrases and negation in the next section, let us consider first the simpler case of exception phrases in the scope of negated universal determiners. The empirical observation is that,

---

<sup>11</sup> I will not present the full details of von Fintel's analysis here. Von Fintel eventually characterizes the semantics of exception phrases in terms of a unique exception-set. However, for my purposes, the remarks here are enough. The reader is referred to von Fintel's text for the analysis.

in general, exception phrases cannot modify universal determiners in the scope of negation:<sup>12</sup>

- (51) I didn't buy every book.  
 (52) I bought every book except the one about rabbits.  
 (53) #I didn't buy every book except the one about rabbits.

The examples in (51) and (52) show that it is possible for the universal determiner to be interpreted in the scope of negation and it is possible for the universal determiner to host exception phrases, and yet, as (53) shows, it cannot do both at once. As I show below, the unacceptability of (53) follows straightforwardly from the restrictiveness condition in von Stechow's analysis. In order for an exception phrase to be acceptable in (53), the conjunction in (54) would have to be true, and that is not possible:

- (54) It is false that I bought every book except the book about rabbits  
and it is false that it is false that I bought every book

$\neg \text{every}([\textit{book}] - [\textit{the book about rabbits}])(\{x: \text{I bought } x\})$   
 $\& \neg \neg \text{every}([\textit{book}])(\{x: \text{I bought } x\}) \quad (= \text{every}([\textit{book}])(\{x: \text{I bought } x\}))$

Given that the original statement is a negation, conjunction with a negation of the original statement minus the exception phrase is equivalent to conjunction with a non-negated universal. But that can't be true. It cannot be the case that I failed to buy every book within some subset of books and at the same time I managed to buy every book. In the scope of negation, the exception phrase is unacceptable.

### 5.3 Exception phrases with *cualquier* in the scope of metalinguistic negation

5.3.1 *Licensing exception phrases with implicatures.* As we have seen before, *cualquier* statements trigger universal implicatures. I will follow Horn (1985, ff.) in assuming that, in the absence of universal quantifiers, universal implicatures can license exception phrases. In this section, I will briefly review some of Horn's evidence.

Horn (2000) presents examples that argue against the idea that only universal quantifiers can license exception phrases. One of his examples is given in (55):

- (55) I wouldn't vote for anyone but Bill. (Horn 2000)

In (55) we find *any* in the scope of negation. This is PS *any*, and it is not interpreted as a universal quantifier. Horn suggests that the exception phrase in this example is licensed because (55) is typically used to signal a universal negative (in Horn's words, the exception phrase is licensed by a 'universal-implicating host'):

---

<sup>12</sup> I am grateful to an anonymous reviewer for pointing out that Moltmann (1995) had already discussed exception phrases associating with universals in the scope of negation. I do not believe the proposal here is incompatible with Moltmann's views. However, Moltmann's proposal is stated in terms of homogeneity restrictions on polyadic quantification, where negation fuses with the universal, and a comparison between the two proposals lies outside the scope of this paper.

- (56) I wouldn't vote for anyone but Bill = I would vote for no one but Bill.  
(Horn 2000)

Examples like (57) provide further evidence in favor of the idea that universal implications are enough to license exception phrases:

- (57) I didn't fail a single student except Bill. (Horn 2000)

The alternative would be to characterize *a single student* as a universal quantifier, which seems far-fetched.

5.3.2 *Back to 'cualquier'*. As we saw in (1), *cualquier* licenses exception phrases. Following Horn's idea that exception phrases can be licensed by implicatures, we can explain modification by exception phrases on the basis of the universal implicatures generated by the Hamblin-style widening indefinite. Let us look at the example again:

- (1) *Puedes comprar cualquier libro excepto uno sobre conejos*  
May buy any book except one about rabbits  
"You may buy any book except one about rabbits"

In examples like (1), it is usually accepted that the quantificational force of the modal is existential (though, see for example Aloni's semantics for imperatives, that includes universal quantification over alternatives). The modal in (1) quantifies over the alternatives introduced by *cualquier*, and the sentence claims that it is possible for you to buy a book about rabbits. The possibility is merely compatible with your obligations.

Even though the alternatives introduced by *cualquier* in examples like (1) are quantified over by existential modals, exception phrases are still possible. I take it that in these examples exception phrases are licensed by universal implicatures. Following K&S, I claim that universal implicatures are generated by the choice of a domain-widening indefinite: by widening the domain with the choice of *cualquier*, the speaker indicates that the range of alternatives has been expanded, and such lack of commitment to a narrow domain generates the implicature that all the options are 'live'.

A further example that could be analyzed along these lines is given in (58) (inspired by Carlson 1981):

- (58) *Al aceptaría cualquier /\*un premio excepto el Premio al Mejor Director*  
Al would accept any/ \*a prize except the Award to Best Director  
"Al would accept any/\* prize except the Best Director Award."

A K&S-style analysis of the modal would result in truth conditions that claim that every future history is such that one of the alternatives introduced by *cualquier* is true. As we have seen, this in itself does not guarantee distributivity. Rather, distributivity is achieved as an implicature, and it is the implicature that licenses the exception phrase. This is schematized in (59):

- (59) every ( $\{x: x \text{ is a prize in } D'\} - \{\text{the Best Director Award}\}$ )  
 ( $\{x: \text{AI would accept } x\}$ )

Again, von Fintel's restrictiveness condition is satisfied: it can be true that AI would accept any prize except the Best Director Award and at the same time be false that AI would accept any prize.

The cases of conditionals can be thought of in a similar way. The modal combines with the set of propositions generated by the widening Hamblin-indefinite and distributivity is achieved as an implicature. An example is given in (60):

- (60) *Si me dice cualquier cosa excepto lo que quiero oír, deberá disculparse.*  
 if me tells any thing except it that want hear, must apologize  
 "If he/she tells me anything except what I want to hear, he/she must apologize"

A schema of the interpretation of (60) is provided below:

- (61) must (s/he tells me anything except what I want to hear)(s/he apologizes)  
 =  
 must  $\left\{ \begin{array}{l} \text{(s/he tells me he is hungry)} \\ \text{(s/he tells me he wants to watch tv)} \\ \text{(s/he tells me he is happy I am not upset)} \end{array} \right\}$  (s/he apologizes)

The alternatives introduced by *cualquier* associate with the universal deontic modal. The exception phrase subtracts from the set that makes up the denotation of the indefinite, and von Fintel's felicity condition on exception phrases is satisfied: if (60) is true, the conjunction in (62) is also true:

- (62) if he tells me anything except what I want to hear, he will have to apologize and it is false that if he tells me anything he will have to apologize.

As we saw in (3), *cualquier* does not license exception phrases in the scope of metalinguistic negation:

- (3) #*No compró CUALQUIER libro excepto "Estructuras Sintácticas".*  
 Not bough any book except Structures Syntactic  
 "He didn't buy ANY book except Syntactic Structures."

We already have the ingredients to account for this. The exception phrase is operating on the set of implicatures in the scope of negation:

- (63)  $\neg$  every( $\{x: x \text{ is a book in } D'\} - \{\text{Syntactic Structures}\}$ )( $\{x: \text{he bought } x\}$ )  
 &  $\neg$  every ( $\{x: x \text{ is a book in } D'\}$ ) ( $\{x: \text{he bought } x\}$ )  
 (= every ( $\{x: x \text{ is a book in } D'\}$ )( $\{x: \text{he bought } x\}$ )

According to (63), in order for (3) to be true it would have to be false that he bought every book within some reduced domain of books and at the same time it would have to

be true that he bought every book. This is impossible. The exception phrase simply cannot be felicitously used and the sentence is unacceptable.

As a final note here, let me point out that the licensing-by-implicature of exception-phrases in *cualquier* sentences is not unique. There are other modifiers that are usually said to combine only with universals that can modify Spanish *cualquier* and English FC *any*. For English FC *any*, Horn (1985,ff.), Dayal (1998), (a.o.), point to the case of *almost*:

- (64) a. Almost anybody can tell you that.  
b. #Almost somebody can tell you that.  
c. Almost everybody told me that.

We could explain the availability of *almost*-modification for FC *any* by appealing to the universal implicatures of a Hamblin-style indefinite. A similar case arises in Spanish:

- (65) a. *Casi cualquiera puede decirte eso*  
Almost anybody can you-tell that  
b. #*Casi alguien puede decirte eso*  
Almost somebody can you-tell that  
c. *Casi todos vinieron*  
Almost everybody came

Even though *casi* (almost) cannot modify plain existentials (65b), it is able to modify the Hamblin indefinite in possibility statements (65a). The universal implicatures arising from the indefinite are responsible for licensing this option.

## 6. Conclusion and last remarks

In this paper I have investigated the interpretation of the Spanish FC indefinite *cualquier*, the role of metalinguistic negation, and its interaction with exception phrases. I have shown that a Hamblin-style approach, together with a theory of domain widening can help us understand the patterns found in the data. K&S's (2002) idea that widening gives rise to 'universal implicatures' (through distributivity) plays a crucial role in the analysis. An explicit compositional spell-out of the interaction remains a topic for future research. However, proposals like Chierchia's (2001, 2005), that suggest that implicatures can enter into the computation of semantic meaning, appear very promising.

## References

- Aloni, Maria. 2002. "Free choice in modal contexts", ms.  
---- 2003, "On choice-offering imperatives", ms.  
Alonso-Ovalle, Luis. 2004. "Simplification of disjunctive antecedents", *Proceedings of the North East Linguistic Society 34*, ed. by Keir Moulton and Matthew Wolf, University of Massachusetts, Amherst: GLSA, pp. 1-15  
---- & Paula Menéndez-Benito. 2003. "Some epistemic indefinites", *Proceedings of the North East Linguistic Society*, ed. by Makoto Kadowaki and Shigeto Kawahara, University of Massachusetts, Amherst: GLSA, pp. 1-12.  
Carlson, Greg. 1981. "Distribution of Free Choice 'any'", *CLS 17*.

- & Pelletier, Francis Jeffrey. 1995. *The Generics Book*, Chicago: Chicago University Press.
- Chierchia, Gennaro. 2001. "Scalar Implicatures, Polarity Phenomena, and the Syntax/Pragmatics Interface", ms.
- 2005. "Broaden your views: implicatures of domain widening and the "logicality" of language", ms.
- Dayal, Veneeta. 1998. "Any as inherently modal", *Linguistics and Philosophy* 21: 433-476.
- Farkas, Donka. 2005. "Free-Choice in Romanian", to appear in *Festschrift for Larry Horn*, edited by Gregory Ward and Betty Birner.
- Fintel, Kai von. 1994. "Restriction on Quantifier Domains", PhD Diss, UMass.
- Giannakidou, Anastasia. 2001. "The meaning of free choice", *Linguistics and Philosophy* 24: 659-735.
- Haspelmath, Martin. 1997. *Indefinite pronouns*. Oxford: Oxford University Press.
- Heim, Irene. 1982. *On the interpretation of definite and indefinite noun phrases*, Amherst: GLSA Publications.
- Hoeksema, Jack. 1987. "The logic of exception", *ESCOL* 4:100-113.
- Horn, Larry. 1999. "any and (-)ever: Free choice and free relatives", (ms.)
- 2000. "Pick a theory (not just any theory)", in Horn and Kato (eds.), 2000, *Negation and Polarity*, Oxford University Press.
- 1989. *A Natural History of Negation*, The University of Chicago Press.
- 1985. "Metalinguistic negation and pragmatic ambiguity", *Language* 1985, 61:1, 121-174.
- Kadmon, Nirit & Fred Landman. 1993. "Any", *Linguistics and Philosophy* 16: 353-422.
- Kratzer, Angelika. 1978. *Semantik der Rede: Kontexttheorie Modalwörter Konditionalsätze*. Königstein/Taunus: Scriptor.
- 1991. "Modality". *Semantik/Semantics*, eds. Arnim von Stechow & Dieter Wunderlich, 639-656, Berlin: de Gruyter.
- 2003. "Indefinites and the operators they depend on: from Japanese to Salish", ms.
- & Junko Shimoyama. 2002. "Indeterminate pronouns: the view from Japanese", ms.
- Ladusaw, William. 1996. "Negation and Polarity Items", in Lappin, S. (ed.) *The Handbook of Contemporary Semantic Theory*, Blackwell, Oxford/
- LeGrand. 1975. "Or and Any: The semantics and syntax of two logical operators", PhD dissertation, University of Chicago.
- Menéndez-Benito, Paula. 2005. "The grammar of choice", PhD dissertation, University of Massachusetts, Amherst.
- Moltmann, Friederike. 1995. "Exception phrases and polyadic quantification", *Linguistics and Philosophy* 18. 3: 223-280.
- Yanovich, Igor. 2005. "Choice-functional series of indefinite pronouns and Hamblin semantics", SALT presentation