

Exceptional Scope: The Case of Spanish.

Abstract

Unlike run-of-the-mill quantifiers, indefinites can escape islands. Schwarzschild (2002) connects this behavior with domain restriction: in his analysis, indefinites are existential quantifiers that get apparent exceptional scope when their domain is restricted to a singleton. The Spanish indefinites *un* and *algún* provide an ideal testing ground for Schwarzschild's theory. Since *un* can be a singleton indefinite, but *algún* cannot (Alonso-Ovalle and Menéndez-Benito (forthcoming)), we only expect *un* to have exceptional scope. This article tests this prediction experimentally by looking at the behavior of these indefinites in relative clauses and the antecedent of conditionals. The results yield a modulation of the predicted pattern: i) in relative clauses, *un* can have exceptional scope, but exceptional scope seems also available for *algún* to some extent; ii) in conditionals, exceptional scope is impossible for *algún*, but hard for *un*. These results are puzzling for most theories of indefinites, which predict the scopal behavior of any given indefinite to remain constant across islands, but we show that the pattern can be captured within a Hamblin semantics for indefinites (Kratzer and Shimoyama (2002)). Our proposal maintains Schwarzschild's core insight, but argues that syntactic environment plays a crucial role in determining the availability of exceptional scope.

Key words: Indefinites, Exceptional Scope, Hamblin Semantics

1. Introduction.

The scopal behavior of indefinites has been an active topic of research in formal semantics at least since the early eighties.¹ By now, it is well-known that the scope of indefinites differs from the scope of run-of-the-mill quantifiers. Certain syntactic environments, known as “syntactic islands”, limit the scope of quantifiers. Relative clauses and the antecedent of conditional are among them: as illustrated below, the sentence in (1a) cannot be paraphrased as in (1b), where

¹See Fodor and Sag 1982; Farkas 1981; King 1988; Abusch 1994; Cresti 1995; Kratzer 1998; Matthewson 1999; Reinhart 1995, 1997; Ruys 1992 and Winter 1997, among others.

the quantifier phrase *each of the six candidates* scopes out of the relative clause, and (2a) cannot be read as in (2b), where *each of the six candidates* scopes out of the conditional.

- (1) a. John read the paper that each of the six candidates had submitted.
(Schwarzschild, 2002)
- b. ≠ For each of the six candidates: John read the paper that she submitted.
- (2) a. If each of the six candidates submits a paper, then John will recuse himself.
(Schwarzschild, 2002)
- b. ≠ For each of the six candidates: if she submits a paper, then John will recuse himself.

The situation is different for indefinites like English *a* or *some*.² The classic examples in (3) show that *a* indefinites can be interpreted with “exceptional” scope, as if they had scoped out of an island: (3a) can convey that there is a particular poem by Pindar such that every student who recited it got a prize, and (3b) that the death of a particular friend of the speaker would have made her a millionaire.

- (3) a. John gave an A to every student who recited a difficult poem by Pindar. (Farkas, 1981)
- b. If a friend of mine had died in the fire, I would have inherited a fortune.
(Fodor and Sag, 1982)

Not all indefinites display the same scope patterns, though. Focusing just on English, we see that *a certain* resists narrow scope readings (Kratzer 1998; Hintikka 1986, 2002b), *at least n* indefinites resist exceptional wide scope (Liu 1997; Beghelli 1993; Kratzer 1998; Szabolcsi 1995), and bare plurals can only have the narrowest possible scope. Recent cross-linguistic work shows that indefinites in other languages also differ with respect to their scope possibilities.³ One of the challenges for the research on indefinite scope is then to understand what properties of indefinites correlate with the ability to have exceptional scope.⁴ The present work contributes to this enterprise by investigating the scopal behavior of the Spanish indefinites *un* and *algún*.

²See Fodor and Sag 1982; Farkas 1981; King 1988; Abusch 1994; Cresti 1995; Kratzer 1998; Matthewson 1999; Reinhart 1995, 1997; Ruys 1992 and Winter 1997, among others.

³See, for instance, Matthewson 1999 on Lilloet Salish, Farkas 2000 on Romanian, Yanovich 2005 on Russian, Lin 2004 and Kim 2004 on Mandarin Chinese, and Martí 2007 on Spanish.

⁴Farkas addresses this issue in a number of works (Farkas, 2002b,a, 2000, 2006). Working within a DRT framework, she proposes a number of constraints that indefinites impose on the possible values of the variables that they introduce, some of which determine the scopal behavior of indefinites.

Schwarzschild 2002 draws a connection between specificity, domain restriction and scope. On Schwarzschild's proposal, indefinites are existential quantifiers. They get specific readings whenever their domain is restricted to a singleton set. In that case, the scope of the existential quantifier is neutralized. Apparent island violations (exceptional scope readings) are then the result of restricting the domain of an existential to a singleton. Interestingly, not all indefinites allow for the same domain restrictions: some indefinites require their domains to be maximal (they are "domain wideners" (Kadmon and Landman, 1993; Kratzer and Shimoyama, 2002)) and others disallow singleton domains (Alonso-Ovalle and Menéndez-Benito, 2008b, forthcoming). Thus, Schwarzschild's proposal makes the following typological prediction: only indefinites whose domain can be restricted to a singleton will have exceptional scope. Evidence from Italian suggests that this prediction is on the right track. According to Zamparelli (2007), Italian *qualche*, which is a domain widener, cannot escape out of islands.

The Spanish indefinites *un* and *algún* provide an ideal testing ground for Schwarzschild's theory. As shown in Alonso-Ovalle and Menéndez-Benito (2008b; forthcoming), *un* can be a singleton indefinite, but *algún* cannot. Thus, on Schwarzschild's account, we expect exceptional scope to be possible for *un* but completely impossible for *algún* in all types of islands (sections 2.1–2.3) We have tested this prediction experimentally by looking at the availability of exceptional scope readings for *un* and *algún* in two types of islands: relative clauses and the antecedent of conditionals (section 3). The experimental results yield a modulation of the predicted pattern: i) in relative clauses, *un* can have exceptional scope (as expected), but exceptional scope seems also available for *algún* to some extent; ii) in conditionals, exceptional scope is impossible for *algún* (as expected), and hard for *un* (contrary to expectations.) These results are puzzling for most theories of indefinites in the market, which predict the scopal behavior of any given indefinite to remain the same across different types of islands.⁵ In section 3, we aim to capture this challenging pattern within the Hamblin semantics for indefinites put forward in Kratzer and Shimoyama 2002. Our proposal maintains Schwarzschild's core insight that domain restriction and exceptional scope are closely connected, but argues that the syntactic environment of the indefinite also plays a crucial role in determining the availability of exceptional scope.

⁵See, among others, Reinhart 1995; Kratzer 1998; Winter 1997 and Matthewson 1999

2. Domain restriction and exceptional scope: *un* vs. *algún*.

The starting point for our investigation of the scopal behavior of the Spanish indefinites *un* and *algún* is the proposal presented in Schwarzschild 2002, which we summarize below.

2.1. Singleton indefinites.

Schwarzschild (2002) claims that the null hypothesis that indefinites are existential quantifiers can explain the “exceptional” scopal behavior of indefinites. On this view, indefinites are like any other quantifiers in that i) their scope is limited by islands, and ii) their domain can be restricted. When the domain of an indefinite is maximally restricted to a singleton, its scope is neutralized and we get the illusion of exceptional scope. To see how this works, consider the following example:

- (4) Everyone at the party voted to watch a movie that Phil said was his favorite.
(Schwarzschild 2002)

Assuming that *a movie that Phil said was his favorite* is an existential quantifier, the sentence in (4) will be true if and only if for every individual x that was at the party, there is a movie that Phil said was his favorite and that x voted to watch. Suppose that Phil said that “Casablanca” was his favorite movie. Then, the domain of the indefinite in (4) will be the singleton below:

- (5) {“Casablanca”}

Given this, (4) will be true if and only if for every individual x that was at the party there is a movie in the set in (5) which x voted to watch. In other words, (4) will be true if and only if there is a particular movie that everyone in the party voted to watch. Restricting the domain of the indefinite to a singleton results in scope neutralization.

Of course there are examples where an indefinite has exceptional scope but its domain is not overtly restricted to a singleton. Consider, for instance, the sentence in (6).

- (6) Everyone at the party voted to watch a movie that Phil liked. (Schwarzschild 2002)

If Phil likes more than one movie, the set of movies that Phil likes is not a singleton. However, exceptional scope seems available for this example, which can be interpreted as talking about a particular movie. How come? On Schwarzschild’s view, the answer to this question has to do with a property of natural language quantifiers which is by no means specific to indefinites: It

is well-known that the domain of quantifiers can be contextually restricted. When uttering, for instance, the sentence in (7a), we do not mean to talk about everybody in the whole world, but rather about all the individuals with a contextually relevant property (say, all individuals that were at my birthday party yesterday.) In what follows, we will use subset selection functions (functions from sets to subsets) to model contextual domain restrictions (von Stechow, 2000; Kratzer, 2003, 2005). We will assume that quantificational determiners introduce free variables ranging over functions of type $\langle et, et \rangle$, which pick a subset out of the extension of the common noun. Then, the interpretation of the universal quantifier in (7a) can be represented as in (7b).

- (7) a. Everyone had a great time.
 b. $\lambda P. \forall x [f_{\langle et, et \rangle}(\mathbf{person})(x) \rightarrow P(x)]$

Indefinite noun phrases, like other quantifiers, are amenable to contextual restrictions. The truth-conditions of the sentence in (6), for instance, will be represented as in (8). That is, the sentence in (6) will be true if and only if for every x that belongs to the subset of people at the party picked out by the subset selection function f (introduced by the universal quantifier), there is a movie y that Phil liked in the subset of movies selected by the subset selection function g (introduced by the indefinite.)

- (8) $\forall x [f_{\langle et, et \rangle}(\mathbf{at-the-party})(x) \rightarrow \exists y [g_{\langle et, et \rangle}(\mathbf{movie})(y) \ \& \ \mathbf{liked}(\mathbf{Phil}, y) \ \& \ \mathbf{voted}(x, y)]]$

Assume now that g is the function that maps the set of movies that Phil liked to the singleton in (5). The indefinite in (6) will then be a singleton indefinite. The sentence in (6) will be true in that particular context if and only if there is a particular movie (namely, “Casablanca”) that everyone at the party voted to watch. As before, the scope of the indefinite is neutralized.

2.2. *Un* vs. *algún*.

The Spanish indefinites *un* and *algún* contrast with respect to whether they can range over singleton domains (Alonso-Ovalle and Menéndez-Benito, 2008b, forthcoming). Consider, for instance, the sentence in (9) below:

- (9) Juan compró { un / algún } libro que resultó ser el más caro de la
 Juan bought { UN / ALGÚN } book that happened to be the most expensive in the
 librería.
 bookstore
 ‘Juan bought a book that happened to be the most expensive one in the bookstore.’

Since there can only be one book that turned out to be the most expensive one in the bookstore, the extension of the noun phrase that the indefinite combines with is a singleton.⁶ The version of the sentence in (9) with *un* is perfectly acceptable, showing that the domain of *un* can be reduced to a singleton set. The version with *algún*, however, is deviant. Unlike *un*, *algún* does not tolerate singleton domains.⁷

The sentence in (10) below makes the same point. Since there can only be one candidate that is the most incompetent among the ones that applied, the indefinite in (10) ranges over a singleton domain. As expected, the version of the sentence in (10) with *un* is perfectly appropriate, but the version with *algún* is deviant.⁸

- (10) Pedro contrató a { un / algún } candidato que era el más incompetente de los
 Pedro hired a { UN / ALGÚN } candidate that was the most incompetent of the ones
 que se presentaron.
 that SE applied
 ‘Pedro hired a candidate that was be the most incompetent of the ones that applied.’

In section 2.1, we used subset selection functions to model the contextual domain restrictions of quantifiers. Domain shifting constraints can then be modelled as constraints on the possible values of the subset selection function: we can have singleton subset selection functions, as in (11a), which would yield specific indefinites (Schwarzschild, 2002), and, conversely, we can

⁶While in these examples the domain of *un* is a singleton, *un* cannot combine with nouns whose extension is known to be a singleton, as illustrated by (ia) (Heim, 1991; Percus, 2006). The contrast between (ia) and (ib) is explored in Schwarz et al. (forthcoming Spring 2009).

- (i) a. † Subí a una montaña más alta de Massachusetts.
 I climbed to a mountain most tall in Massachusetts
 ‘I climbed a tallest mountain in Massachusetts.’
 b. Subí a una montaña que es la más alta de Massachusetts.
 I climbed to a mountain that is the most tall in Massachusetts
 ‘I climbed a mountain that is the tallest of Massachusetts.’

⁷Note that that the relative clauses in these examples are restrictive. First, there is not intonational break, as in the case of non-restrictive clauses. Second, unlike non-restrictive relative clauses, the relative clauses in these examples do not have to be have speaker-oriented (Potts, 2003), as shown by the example below:

- (i) Juan piensa que María habló con una chica que sale con Samuel (pero la chica en cuestión sale con Marcos.)
 Juan believes that María spoke with UNA girl that goes out with Samuel (but the girl in question goes out with Marcos)

⁸Thanks to Chris Potts for pointing out this type of example to us.

have anti-singleton subset selection functions: functions that never return a singleton domain, as in (11b).⁹

- (11) a. f is a singleton subset selection function iff for any set P , $f(P)$ is a singleton.
 b. f is an anti-singleton subset selection function iff for any set P , $f(P)$ is *not* a singleton.

In view of the data above, we would like to propose that *algún* introduces an anti-singleton subset selection function into the semantic representation:¹⁰

$$(12) \llbracket \text{algún} \rrbracket = \lambda f_{\langle e,t \rangle} \lambda P_{\langle e,t \rangle} \lambda Q_{\langle e,t \rangle} : \mathbf{antisingleton}(f). \exists x [f(P)(x) \ \& \ Q(x)]$$

Since *un* is compatible with singleton domains but *algún* is not, Schwarzschild's account predicts that only *un* will be able to get exceptional scope. In the next section we present an off-line study designed to test this prediction in two types of islands: relative clauses and the antecedent of conditionals.

2.3. Testing the Prediction: *Un* vs. *algún* in relative clauses and conditionals.

2.3.1. Participants.

Twenty-four undergraduate students at the Universidad de Castilla La Mancha (Spain) participated in the experiment. All of them were native speakers of Iberian Spanish and monolingual. They received no incentive for participating in the experiment.

2.3.2. Materials and procedure.

The experiment was an off-line questionnaire in which target sentences were preceded by a paragraph describing a scenario. Subjects were asked whether the target sentences were appropriate descriptions of the preceding scenarios. The questionnaire comprised two subexperiments, with twelve experimental items each.¹¹ Subexperiment 1A looked at the availability of exceptional scope for *un* and *algún* in relative clauses, and subexperiment 1B in the antecedent of conditionals.

⁹See von Stechow (1999) for the definition of a singleton subset selection function.

¹⁰For the sake of concreteness, we will assume that the antisingleton constraint is a presupposition on the value of that function, much as ϕ -features on pronouns are modelled as presuppositions on their value of their possible referents (Cooper, 1983; Dowty and Jacobson, 1989; Sauerland, 2003; Heim and Kratzer, 1998). The function in (12) is partial. Following the notation in Heim and Kratzer (1998), the expression right before the colon indicates the definedness condition.

¹¹A full list of items is available from the authors' webpages: <http://wwwuser.gwdg.de/~pmenend/> and <http://www.alonso-ovalle.net>.

Subexperiment 1A: relative clauses. The twelve experimental sentences of subexperiment 1A were of the form in (13). The subject was a proper name or a definite description. The universal quantifier *todos los NP* appeared in object position. The NP inside the quantifier phrase contained a RC which in turn contained an indefinite phrase.

(13) [*IP* [*DP* subject] [*VP* verb [*QP* todos [*DP* los [*NP* N [*CP* ... { *algún / un* }]]]]]]]

Each experimental item came in two versions. In the first version (condition 1) the relative clause contained *algún*, and in the second version (condition 2), *un*. Half of the items with *algún* featured the partitive version *alguno de los*, and half of the items with *un*, its partitive version *uno de los*.¹² Furthermore, all the indefinite noun phrases contained a possessive pronoun whose antecedent was the subject of the sentence.¹³ A sample item is provided below:

- (14) a. Condition 1: El profesor López ha enviado al concurso de redacción todos
 The professor López has sent to-the contest of writing all
 los trabajos que le entregó algún estudiante suyo.
 the papers that to-him gave ALGÚN student of-his
- b. Condition 2: El profesor López ha enviado al concurso de redacción todos
 The professor López has sent to-the contest of writing all
 los trabajos que le entregó un estudiante suyo.
 the papers that to-him gave UN student of-his
 ‘Professor López has sent to the writing contest all papers that a student of his gave him.’

All experimental items were preceded by a paragraph — the same for the two conditions of any given item — describing the context in which the sentences had to be judged by the subjects. The scenario corresponding to the item in (14) is provided below:

- (15) El profesor López ha enviado al concurso de redacción todos los trabajos que le entregó su alumno favorito, y no ha enviado ninguno de los trabajos que le entregaron sus otros alumnos.

¹²The partitive versions were included to see if partitivity had an effect on the availability of exceptional scope - Frazier and Bader (2007) found that partitivity has an effect on the possibility of interpreting the otherwise non-specific German indefinite *irgendein* as specific. However, partitive was not found to be relevant, and will be ignored in the remainder of the paper.

¹³This was done to give the wide scope reading all the chances possible, since bound variable pronouns may favor exceptional scope, see Kratzer 1998.

‘Professor López has sent to the writing context all the papers that his favorite student gave him, and he has not sent any of the other papers that the rest of his students gave him.’

All the scenarios made the corresponding target sentence true on the wide scope reading of the indefinite (exceptional scope), and false on the narrow scope reading. Consider for instance the sentences in (14) above. On the wide scope reading of the indefinite, the sentences in (14) are true if and only if there is at least one student of López all whose papers López sent to the contest. They are therefore true in the scenario in (15), since López sent to the contest all papers by his favorite student. On the narrow scope reading of the indefinite, the sentences in (14) are true if and only if López sent to the contest all papers that his students had given him. The scenario in (15) does not meet this condition, since López only sent to the contest the papers ofcc one of his students. Under this reading, the sentences in (14a) are false.

Between the scenario and the target sentence, subjects were presented with a question asking whether the sentence was an appropriate description of the preceding context. Subjects were asked to answer by circling either ‘yes’ or ‘no’.

(16) ¿Crees que la oración siguiente es una descripción apropiada de esta situación? Sí / No.

‘Do you think the following sentence is an appropriate description of this situation? Yes / No.’

Subexperiment 1B: conditionals.. Subexperiment 1B tested twelve conditional sentences that had an indefinite in their antecedent. In the first version (condition 1) the antecedent of the conditional contained *algún*, and in the second version (condition 2), *un*. Again, half of the items with *algún* featured the partitive version *alguno de los*, and half of the items with *un*, its partitive version *uno de los*, and all indefinite noun phrases contained a possessive pronoun anaphoric to the subject of the sentence. A sample item is provided below:

- (17) a. Condition 1: Si Pedro envía algún artículo suyo, conseguirá la beca.
If Pedro sends ALGÚN paper of-his, will get the grant.
- b. Condition 2: Si Pedro envía un artículo suyo, conseguirá la beca.
If Pedro sends UN paper of-his, will get the grant.
‘If Pedro sends a paper of his, he will get the grant.’

As before, the experimental items were preceded by a context describing a situation that made the target sentence true under the wide scope reading of the indefinite, and false under its narrow scope reading. A sample context corresponding to the item above follows:

- (18) El Ministerio de Educación concede una beca a todos los investigadores que hayan publicado un artículo en una revista extranjera. Para solicitar la beca, es necesario enviar el artículo al comité de selección. Pedro tiene varios artículos publicados, pero sólo uno de ellos está publicado en una revista extranjera.

‘The Education Ministry awards a grant to all researchers who have published an article in a journal abroad. To apply for the grant, it is required to send the article to the selection committee. Pedro has published several articles, but only one of them is published in an international journal.’

Under its narrow scope interpretation, the sentences in (17) are true only in case that Pedro will get the grant if he sends any of his papers. Under its wide scope interpretation, the sentence is true if and only if Pedro gets the grant if he sends at least one of his papers. Since only one of Pedro’s papers qualifies for the grant, the sentences in (17) are true in the scenario in (18) under their wide scope reading, and false under their narrow scope reading.

As before, subjects were presented with a question asking whether the target sentence was an appropriate description of the preceding context.

The experimental materials were fully counterbalanced: For each experiment, two lists were constructed so that each subject saw each experimental item in only one condition. The twenty-four experimental items were interspersed with a set of twenty-four fillers.

The experimental materials were preceded by a set of instructions, in which subjects were asked to read the contexts carefully and to follow their first intuition when answering questions. As practice, before completing the questionnaire, the subjects were asked whether the sentence in (19) was appropriate in a context forcing a sloppy reading (in which Pedro told his own mom about the discussion) and in a context forcing a strict reading (in which Pedro told María’s mom about the discussion.)

- (19) María habló de la discusión con su madre, y Pedro también.
María talked DE the discussion with her Mom, and Pedro too.
‘María talked about the discussion with her Mom, and Pedro too.’

2.3.3. Results.

Table 1 shows the average percentage of ‘yes’ responses in each condition of subexperiment 1A (*algún* and *un* in relative clauses.) The difference between the two conditions was significant by subjects ($t(23) = 6.245, p < .001$) and items ($t(11) = 9.993, p < .001$)

Condition	C1: <i>algún</i>	C2: <i>un</i>
% of ‘yes’ answers	35	86

Table 1: *Algún* vs. *un* in relative clauses.

Table 2 shows the average percentage of ‘yes’ responses in each condition of subexperiment 1B (*algún* and *un* in conditionals.) The difference between conditions was also significant by subjects ($t(23) = 4.460, p < .001$) and items ($t(11) = 4.615, p < .001$)¹⁴

Condition	C1: <i>algún</i>	C2: <i>un</i>
% of ‘yes’ answers	0.1	32

Table 2: *Algún* vs. *un* in conditionals.

2.3.4. Discussion.

When interpreting the results, we will take a positive answer to the question of whether the sentence was an appropriate description of a given context to indicate that the sentence was true in the context. Since our contexts block the narrow scope reading, a positive answer tells us that the wide scope reading (i.e., the exceptional scope reading) is available for the sentence in question.

Recall what the predictions of the initial hypothesis are: according to Schwarzschild, indefinites can only get exceptional scope when their domain is a singleton. In section 2.2, we have argued that *un* can be a singleton indefinite but *algún* cannot. Thus, we would expect exceptional scope readings to be available for *un* but not for *algún* in both relative clauses and conditionals. That means that in both subexperiments we should get a significant difference between *un* and *algún*, with a very low percentage of ‘yes’ responses for *algún* and a high percentage of ‘yes’ responses for *un*. Table 3 summarizes these predictions.

¹⁴An ANOVA test looking at both experiments together revealed a significant main effect of *un* vs. *algún* ($F(1,23) = 59.213, p < .001, \eta^2 F(1,22) = 102.859, p < .001$), a significant main effect of syntactic environments (conditionals vs. relative clauses) ($F(1,23) = 49.286, p < .001, F(1,22) = 101.669, p < .001$) and a significant interaction ($F(1,23) = 6.273, p < .05, F(1,22) = 11.017, p < .01$). Of course, the by-items analysis is of limited use here, since the items were not minimal variants of one another.

	Relative Clauses	Conditionals
<i>un</i>	yes	yes
<i>algún</i>	no	no

Table 3: Predictions of the proposal in Schwarzschild (2002).

Our experiment, however, yields a somewhat different pattern. While exceptional scope is significantly more available for *un* than for *algún* in both subexperiments, the pattern departs from Schwarzschild’s predictions in two respects. First, *algún* still gets a 35% of ‘yes’ responses in the relative clause experiment (vs. 0% of ‘yes’ responses in conditionals.) This suggests that, in relative clauses, exceptional scope readings are available for this indefinite to some extent (assuming that they are not would amount to disregarding a third of our data as experimental ‘slop’.) Second, there is a big numerical difference between conditionals and relative clauses: the percentage of ‘yes’ responses is much lower in relative clauses than in conditionals for both types of indefinites. Contrary to expectations, exceptional harder seems hard for *un* in this context. Table 4 summarizes these findings (bold-face signals mismatch between the prediction and the results.)¹⁵

	Relative Clauses	Conditionals
<i>un</i>	yes	hard
<i>algún</i>	yes	no

Table 4: Experiment 1 results.

The difference between relative clauses and conditionals shown in Table 4 is not only challenging for the initial hypothesis, but also for most well-known theories of exceptional scope.¹⁶ These theories are designed to capture the behavior of indefinites that exhibit the same scopal properties across islands, and hence cannot handle indefinites that are sensitive to island-type without further assumptions. In the next section, we will put forward an account of this puzzling contrast which makes crucial use of the Hamblin semantics for indefinites presented in Kratzer and Shimoyama 2002, and comment on the contrast between *un* and *algún* in relative clauses,

¹⁵Interestingly, Martí (2007) argues that the scope of *algunos*, the plural version of *algún*, is constrained by a wide range of syntactic islands. The data that she presents suggests that wide scope readings are harder for *algunos* in conditionals. This might reflect the same type of difference that we find for *algún*. However, it is not clear to which extent we can draw a comparison between her data and ours: Alonso-Ovalle and Menéndez-Benito (in progress) document several semantic differences between *algún* and *algunos* that go beyond what we would expect if *algunos* were simply the plural version of *algún*.

¹⁶See, among others, Reinhart 1995; Kratzer 1998; Winter 1997 and Matthewson 1999.

which we think is not due to a difference in their scope behavior.

3. A Hamblin style analysis for *un* and *algún*.

In the Kratzer and Shimoyama (2002) analysis, indefinites introduce sets of alternatives that expand until they meet a suitable operator. The scope of an indefinite will appear to extend up to the position occupied by the operator it ‘associates’ with. Thus, an indefinite will be trapped within a particular syntactic environment only if that environment contains an operator that prevents the alternatives from projecting further up. This gives us a way of understanding why different types of islands might differ with respect to indefinite scope: only the islands that contain an operator that stops alternative expansion will appear to limit the scope of indefinites.

In what follows, we will present an account of our experimental pattern based on this set-up. The main pieces of the analysis are the following: (i) both *un* and *algún* are Hamblin indefinites; (ii) conditionals introduce a universal propositional operator that stops alternative expansion (as argued in Alonso-Ovalle (2006)) and therefore blocks exceptional scope readings; (iii) relative clauses do not block alternative expansion and, thus, allow for exceptional scope, and (iv) *un* can introduce a singleton set of alternatives, but *algún* cannot.

We will first introduce the core features of Kratzer and Shimoyama 2002’s framework in section 3.1) and then discuss how the behavior of *un* and *algún* in conditionals and relative clauses can be accounted for within this framework in section 3.2.

3.1. Hamblin indefinites.

In the Hamblin semantics put forth in Kratzer and Shimoyama 2002, expressions of type τ are mapped into sets of denotations in D_τ . Indefinite noun phrases denote sets of individual alternatives, as illustrated in (20) below for an English *a*-noun phrase.

$$(20) \llbracket \text{a man} \rrbracket^{w,g} = \{x \mid \mathbf{man}_w(x)\} = \{\text{Juan, Carlos, Pedro} \dots\}$$

Other lexical items denote singleton sets that contain their standard denotations, as illustrated below for the verb *arrived*:

$$(21) \llbracket \text{arrived} \rrbracket^{w,g} = \{\lambda x \lambda w' . \mathbf{arrived}_{w'}(x)\}$$

In this framework, Functional Application is defined pointwise, as in Hamblin (1973): the result of combining an expression α denoting a set of functions of type $\langle \sigma, \tau \rangle$ with an expression

β denoting a set of objects of type σ is the set of objects of type τ that we get by applying each of the functions denoted by α to each of the objects denoted by β .

The individual alternatives introduced by indefinites into the semantic derivation ‘expand’ (i.e., give rise to alternatives of a higher type) via pointwise functional application. The combination of the indefinite in (20) with the verb in (21), for instance, gives us the set of propositions in (22).

$$(22) \quad \llbracket \text{arrived} \rrbracket^{w,g}(\llbracket \text{a man} \rrbracket^{w,g}) = \{p_{\langle s,t \rangle} \mid \exists x[\mathbf{man}_w(x) \ \& \ p = \lambda w'. \mathbf{arrived}_{w'}(x)]\} = \\ \{\text{that Juan arrived, that Carlos arrives, that Pedro arrived, } \dots \}$$

Alternatives keep expanding until they meet one of several operators that take sets of propositional alternatives as arguments. The denotation of the sentence in (23a), for example, is the result of combining the set of propositions in (22) with the Existential Closure operator in (23b), which gives us the (singleton containing the) proposition in (23c).

- (23) a. A man arrived.
 b. For any set of propositions \mathbb{A} : $\llbracket [\exists] \rrbracket^{w,g}(\mathbb{A}) = \{\lambda w'. \exists p \in \mathbb{A} \ \& \ p(w')\}$
 c. $\{\lambda w'. \exists p \in (22) \ \& \ p(w')\} = \{\text{that at least one man arrived}\}$

3.2. The proposal.

We contend that both *un* and *algún* are Hamblin indefinites, in the Kratzer and Shimoyama 2002 sense, and thus, that they both introduce sets of alternatives. In section 2, we saw that *un* and *algún* differ in that *un* can be a singleton indefinite and *algún* cannot. In the current framework, this means that an *un* noun phrase can denote, in a given world, a singleton set, but an *algún* noun phrase cannot.

- (24) a. $\llbracket \text{algún } (f(\text{estudiante})) \rrbracket^{w,g} = \{x \mid (g(f)(\mathbf{student}_w))(x)\}$
 (if $|\{x \mid (g(f)(\mathbf{student}_w))(x)\}| > 1$, undefined, otherwise.)
 b. $\llbracket \text{un } (f(\text{estudiante})) \rrbracket^{w,g} = \{x \mid (g(f)(\mathbf{student}_w))(x)\}$

We will next see how the alternatives that these indefinites denote behave in the course of the semantic derivation of conditionals and relative clauses.

3.2.1. Conditionals: a universal intervener.

Exceptional scope readings in the antecedent of conditionals were found to be hard for *un* and virtually impossible for *algún*. In order to account for this result, we will draw a parallel between the behavior of these indefinites and disjunction. A number of recent studies (Aloni 2003; Simons 2005; Alonso-Ovalle 2006) have argued that disjunction should be analyzed as introducing a set of propositional alternatives into the semantic derivation. Additionally, Alonso-Ovalle (2006) claims that a universal propositional operator stops the expansion of the alternatives introduced by disjunction in that environment. In what follows, we briefly present Alonso-Ovalle's analysis, which will then be extended to indefinites.

There is a well-known problem concerning the interpretation of disjunctions in the antecedent of counterfactuals. The problem, in a nutshell, is this: if we adopt a standard Lewis-Stalnaker ordering semantics for counterfactuals and a standard semantics for disjunction, the truth-conditions that we predict for counterfactuals with disjunctive antecedents are too weak.¹⁷ As an illustration, consider the sentence in (25).

- (25) If we have had good weather this summer or the sun had grown cold, we would have had a bumper crop. (Alonso-Ovalle 2006, a minimal variation on an example from Nute 1975.)

According to a minimal change semantics for counterfactuals of the Lewis-Stalnaker variety (Lewis, 1973), *would*-counterfactuals are true in a world w if and only if the worlds w' in which the antecedent is true that are closest to w , are all worlds where the consequent is true.¹⁸ According to the standard semantics for disjunction, *or* maps two propositions to their set theoretical union. Under this semantics, the antecedent of the counterfactual in (25) denotes the union of the set of worlds where we have a good summer and the set of worlds where the sun grows.

- (26) $\llbracket \text{we have had a good summer or the sun had grown cold} \rrbracket^{w,g} =$
 $\{w' \mid \text{we have a good summer in } w'\} \cup \{w' \mid \text{the sun grows cold in } w'\}$

Given all that we have said so far, the counterfactual in (25) should denote the proposition that is true in a world w if and only if all worlds w' in (26) that are closest to w are worlds where

¹⁷For overview and discussion see Nute 1984; for an early response to the problem see Lewis 1977.

¹⁸We are making what Lewis calls 'The Limit Assumption' (Lewis, 1973), namely that given a proposition p , there will always be a non-empty set of worlds w' in which p is true that come as close as possible to the world of evaluation. Ties in similarity are allowed. For a survey of the different flavors a minimal change semantics might come in, see Nute 1984.

we have a bumper crop. These truth-conditions are too weak. According to the intuitive notion of similarity under which we are likely to evaluate the sentence in (25), the worlds where we have a good summer are more similar to the actual world than the worlds where the sun grows cold. Thus, all the worlds in (26) that are closest to the actual world are worlds where we have a good summer. Therefore, (25) is predicted to be true in the actual world if and only all the closest worlds in which we have a good summer are worlds in which we have a bumper crop. The sentence in (25) is intuitively false in the actual world, but we predict it to be true.¹⁹

Alonso-Ovalle (2006) shows that the problem can be solved by (i) assuming a Hamblin semantics for disjunction, and (ii) assuming that conditionals are correlative constructions (von Stechow, 1994; Izvorski, 1996; Bhatt and Pancheva, 2006; Schlenker, 2004) that convey universal quantification over the propositions introduced by the disjunction.²⁰ If *or* introduces a set of propositional alternatives into the semantic derivation, the disjunction in the antecedent of (25) denotes the set in (27).

$$(27) \llbracket \text{we have had a good summer or the sun had grown cold} \rrbracket^{w,s} = \\ \{ \lambda w'. \text{we have a good summer in } w', \lambda w'. \text{the sun grows cold in } w' \}$$

A universal quantifier can now range over these propositional alternatives. In Alonso-Ovalle's analysis, the counterfactual in (25) denotes the proposition that is true in a world w if and only if the consequent holds for *every* proposition p in the set of propositions introduced by the disjunction. That means that for (25) to be true in a world w , both conditions in (28) have to be met. Since the condition in (28b) is not satisfied, we capture the intuition that (25) is false in the actual world.

- (28) a. In all worlds w' where we have a good summer that are the closest to the world of evaluation w we have a bumper crop.
- b. In all worlds w' where the sun grows cold that are the closest to the world of evaluation w we have a bumper crop.

Applying this analysis to conditional sentences whose antecedent contains *algún* derives the

¹⁹The problem arises with *might* counterfactuals, and, in general, with other conditionals for which an ordering semantics is assumed (a downward monotone analysis licenses the inference from $(p \vee q) \rightarrow r$ to $p \rightarrow r$ and $q \rightarrow r$, but see Alonso-Ovalle 2006 for reasons to believe that the inference we are after is not a downward entailing inference.)

²⁰Alonso-Ovalle 2004, van Rooij 2006 and Herburger and Mauck 2007 discuss alternative solutions.

narrow scope reading that we get in these cases. To see why, let us compute the denotation of the sentence in (29).

- (29) Si Juan hubiera mandado algún artículo suyo, hubiera conseguido la beca.
 If Juan had sent ALGÚN article of his, pro would have gotten the grant
 ‘If Juan had sent some article of his, he would have gotten the grant.’

Assume that Juan has written three articles in w : “Principles of A”, “Principles of B” and “Principles of C” and that the context does not narrow down the domain of *algún*.²¹ Under our current assumptions, the denotation of the indefinite noun phrase *algún artículo de Juan* will be (30):

- (30) { “Principles of A”, “Principles of B”, “Principles of C” }

Combining this set with the denotation of the verb (disregarding tense and mood), and the result with the denotation of the subject, yields the set of propositions in (31).

- (31) $\llbracket \text{Juan hubiera mandado algún artículo suyo} \rrbracket^{w,g} = \left\{ \begin{array}{l} \lambda w'. \text{Juan sends “Principles of A” in } w', \\ \lambda w'. \text{Juan sends “Principles of B” in } w', \\ \lambda w'. \text{Juan sends “Principles of C” in } w' \end{array} \right\}$

Given our assumptions about the semantics of conditionals, the conditional in (29) will be true in the actual world if and only if the three conditions in (32) below are satisfied:

- (32) a. In all the worlds closest to the actual world in which Juan sends “Principles of A”, he gets the grant.
 b. In all the worlds closest to the actual world in which Juan sends “Principles of B”, he gets the grant.
 c. In all the worlds closest to the actual world in which Juan sends “Principles of C”, he gets the grant.

This means that (29) will be true in the actual world if and only if Juan would have got the grant if he had sent *any* of his papers. The semantic computation, then, yields a “narrow scope reading.” This, we contend, explains why subjects rejected the *algún* sentences in Experiment 1B. Recall

²¹This means, under our assumptions, that the value of the subset selection function variable introduced by *algún* is the identity function.

that in Experiment 1B subjects were asked to evaluate the conditionals in scenarios that made them false under a narrow scope reading of the indefinite.

Things are somewhat more complicated in the case of *un*. As long as *un* introduces two or more alternatives, it will only have a narrow scope reading in the antecedent of conditionals, just like *algún*. However, we have seen in section 2.2 that *un* can be a singleton indefinite. In the current framework, this means that *un* noun phrases can denote a set containing just an individual alternative. When that happens, we should get the illusion of exceptional scope, as Schwarzschild explains. Suppose, for instance, that (33) is uttered in a context that makes salient the article “Principles of C”. This sentence will be then true in the actual world if and only if in all the closest worlds where Juan sends “Principles of C”, he gets the grant. In that case, there will be a particular paper of his that will get him the grant, just as if the indefinite had scoped out the antecedent of the *if*-clause.

- (33) Si Juan manda un artículo suyo, conseguirá la beca.
If Juan sends UN paper of his, pro will get the grant
'If Juan sends a paper of his, he will get the grant.'

In our experiment, however, exceptional scope readings for *un* were difficult in the antecedent of conditionals (there was a 32% of ‘yes’ answers in the antecedent of conditionals, as opposed to 86% of ‘yes’ answers in relative clauses.) This means, then, that restricting the domain of *un* to a singleton is difficult in that context. Why should this be so? Note that universal quantifiers generally reject singleton domains, as illustrated by the oddity of the examples below.

- (34) a. Everyone at the party voted to watch every movie that Phil said was his favorite.
(Schwarzschild 2002, 48)
- b. When Peter grows up, he always inherits a fortune.
- c. When John dies, his family always throw a party.

We would like to suggest that this anti-singletonness condition is triggered not only by determiner quantifiers like *every* or adverbial quantifiers like *always* but also by universal propositional quantifiers.²² On this view, universal propositional quantifier introduced by a conditional structure requires the domain to contain at least two propositions. Our results indicate that overriding this constraint is possible, but costly.

²²See Schwarzschild 2002 for arguments that this anti-singletonness condition is a conversational implicature.

3.2.2. Relative clauses: alternatives can freely expand.

The results of Experiment 1A show that in relative clauses exceptional scope is possible for both *un* and *algún*, although it is significantly harder for *algún*. The availability of exceptional scope readings for both indefinites can be accounted for if we assume (i) that relative clauses do not (necessarily) block the expansion of alternatives and (ii) that the Existential Closure operator is freely available up to interpretability.²³ The behavior of Japanese indeterminate pronouns might be taken to support the first assumption. Kratzer and Shimoyama (2002) argue that Japanese indeterminates are Hamblin indefinites, i.e., that they denote sets of alternatives (see section 3.1). These alternatives are able to expand beyond relative clause boundaries, as illustrated by the example in (35). In this sentence, the indeterminate *dono*, which is inside a relative clause, gets a universal interpretation via association with the universal quantifier *mo*, outside the relative clause. Given what we have seen so far, this can only happen if the alternatives generated by *dono* grow past the relative clause boundary.

- (35) [[**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.' (Kratzer and Shimoyama 2002)

The behavior of disjunction provides evidence for both of our assumptions. Rooth and Partee (1982) show that, just like indefinites, disjunction can have "exceptional" scope. The sentence in (36), for instance, can be read as claiming that for every Englishman *x* there is an individual (either the King of *x* or the Queen of *x*) such that *x* always cherishes the conviction that that individual was noble and pure.

- (36) Every Englishman always cherished the conviction that his King or his Queen was noble and pure. (Rooth and Partee 1982, fn.6)

On this reading, the disjunctive noun phrase *his King or his Queen* has scope under the subject quantifier *every Englishman* and over the adverbial quantifier *always*. Since the disjunctive noun phrase *his King or his Queen* is inside a relative clause, we cannot get this interpretation by moving the disjunction to a position above the universal quantifier.

Let us assume that disjunctive phrases denote sets of alternatives, as suggested in a number of recent works (see section 3.2.1). On this view, the phrase *his King or his Queen* would introduce

²³Of course, a process of free Existential Closure has been proposed before. See, for instance, Reinhart (1997)

into the semantic derivation a set containing two definite descriptions:

(37) { the King of x , the Queen of x }

As we have illustrated before, these alternatives will grow by pointwise functional application. We will be able to get the reading above if the alternatives can expand past the relative clause boundary, and if they can be existentially closed right below the universal quantifier, yielding the truth conditions in (38) below:

(38) λw . For every Englishman x
 $\exists p \left[p(w) \ \& \ p \in \left\{ \begin{array}{l} x \text{ always cherishes the conviction that } x\text{'s King is noble and pure} \\ x \text{ always cherishes the conviction that } x\text{'s Queen is noble and pure} \end{array} \right\} \right]$

Let us then go back to our indefinites. Consider again the example in (39). We are assuming that our indefinites introduce propositional alternatives into the semantic derivation. Given the behavior of the alternatives introduced by disjunction, we expect the alternatives introduced by indefinites to expand past relative clause boundaries. If the Existential Closure operator is freely available up to interpretability, it could be inserted in two positions, namely in the two sites where it can combine with a set of propositional alternatives: right above the lower IP or above the higher IP. The first configuration yields a narrow scope reading, the second a wide scope reading.

(39) [IP₁ El profesor López ha enviado al concurso de redacción todos los trabajos
 The professor López has sent to-the contest of writing all the papers
 que [IP₂ le entregó {algún / un} estudiante suyo.]]
 that to-him gave {ALGÚN / UN } student of-his
 ‘Professor López has sent to the writing contest all papers that a student of his gave him.’

To sum up, relative clauses crucially differ from conditionals in that the latter contribute an operator that stops the expansion of the alternatives introduced by the indefinites (hence, blocking exceptional scope), while the former can let alternatives project up. Putting this together with the hypothesis that Existential Closure is freely available up to interpretability predicts that exceptional scope should be available for *un* and *algún* when they are in a relative clause.

This leaves us with the issue of how to explain the significant difference between *un* and *algún* found in Experiment 1A. We contend that this difference does not correspond to the exceptional scope behavior of the indefinites, but that it is due to an independent factor. Alonso-Ovalle and

Menéndez-Benito (forthcoming) show that *algún* (but not *un*) conveys an ignorance component. The sentence in (40), for instance, makes an existential claim (that there is a student that María married), and additionally conveys that the speaker doesn't know which student María married. Hence, adding the continuation *namely, Pedro*, which explicitly identifies the witness, results in oddity, witness (41). In contrast, the 'plain' indefinite *un* allows for this type of continuation, as (42) shows.²⁴

(40) María se casó con algún estudiante del departamento de lingüística.
 María se married with ALGÚN student of the department of Linguistics.
 'María married a Linguistics student.'

(41) ‡ María se casó con algún estudiante del departamento de lingüística:
 María se married with algún student of the department of Linguistics:
 en concreto con Pedro
 namely with Pedro.
 'María married a Linguistics student, namely Pedro.'

(42) María se casó con un estudiante del departamento de lingüística: en concreto
 María se married with UN student of the department of Linguistics: namely
 con Pedro.
 with Pedro
 'María married a Linguistics student, namely Pedro.'

All contexts in our experiment singled out a particular individual of the type described by the indefinite noun phrase in the target sentence. Consider for instance the context in (43), which corresponds to the target sentence in (39) above. The contexts singles out a particular student of López: his favorite.

(43) El profesor López ha enviado al concurso de redacción todos los trabajos que le entregó su alumno favorito, y no ha enviado ninguno de los trabajos que le entregaron sus otros alumnos.
 'Professor López has sent to the writing context all the papers that his favorite student gave him, and he has not sent any of the other papers that the rest of his students gave him.'

²⁴Alonso-Ovalle and Menéndez-Benito (forthcoming) analyze this ignorance component as a conversational implicature derived by the anti-singleton constraint imposed by *algún*.

It is possible that subjects disliked *algún* in our items because the description used in the contexts could suggest that the speaker is able to identify the individual that satisfies the existential claim in the target sentence. The ignorance component of *algún*, which conveys that the speaker does not know which individual satisfies the existential claim, would then clash with this assumption.

Evidence for the claim that the difference between *un* and *algún* in relative clauses does not have to do with their exceptional scope behavior comes from an off-line study reported in Alonso-Ovalle and Menéndez-Benito 2008a. The study looked at the availability of intermediate scope readings for *un* and *algún* in relative clauses and outside an island. It tested twelve experimental items in four conditions. In conditions 1 and 2 the indefinites were inside a relative clause, as in (44a), and in conditions 3 and 4 the indefinites were not in an island, as (44b) illustrates (the items contained *algún* in conditions 1 and 3, and *un* in conditions 2 and 4).²⁵

- (44) a. Todos los profesores de lengua enviaron al concurso de redacción todos
 all the:PL professor:PL of language sent:3PL to-the contest of writing all
 los trabajos que les entregó algún alumno suyo.
 the:PL paper:PL that to-them sent:3S ALGÚN student of them
 ‘All the language teachers sent to the writing contest all the papers that a student of
 theirs gave them.’
- b. Todos los profesores de lengua enviaron todas sus publicaciones a algún
 all the:PL professor:PL of language sent:3PL all their publication:PL to ALGÚN
 alumno suyo.
 student of them
 ‘All the language teachers sent all their publications to a student of theirs.’

Table 5 summarizes the results of this subexperiment: we can see that intermediate readings are possible both inside and outside a relative clause. An ANOVA test yielded a marginally significant effect of *un* vs. *algún* by items ($F = 3.6$, $p = .08$), and a practically significant effect by subjects ($F = 3.9$, $p = .055$). There was no significant main effect of syntactic environment (relative clause vs. indirect object), and no significant interaction between type of indefinite and syntactic environment (islands vs. no island) either. This means that the contrast between *un* and *algún* is independent of whether they are inside an island or not.

²⁵As in experiment 1, each sentence was preceded by a paragraph describing a situation forcing the intermediate scope reading of the sentence (the reading under which the indefinite is interpreted scoping under the subject quantifier but over the universal quantifier in object position.) As above, each context was followed by a question asking subjects whether the target sentence was an appropriate description of the scenario.

	relative clauses		no island	
	<i>algún</i>	<i>un</i>	<i>algún</i>	<i>un</i>
<i>Condition:</i>	C1	C2	C3	C4
% 'yes'	36	48	36	45

Table 5: Experiment 2B in Alonso-Ovalle and Menéndez-Benito (2008a) (relative clauses vs. no islands): results.

4. Open issues and concluding remarks.

Before concluding, we would like to point out an open issue for our analysis. Kratzer and Shimoyama distinguish between non-selective indefinites, which can associate with any operator (e.g., Japanese indeterminate pronouns) and selective indefinites, which impose restrictions in the type of operator they associate with. Both *un* and *algún* are selective, as illustrated by (45a) and (45b) below. The sentence in (45a) shows that neither indefinite can be interpreted under the direct scope of sentential negation. In the current framework, this means that the alternatives they introduce cannot be captured by the negation operator. The sentences in (45c–45d) show that neither *un* nor *algún* can get an interrogative reading—they cannot associate with the question operator.

- (45) a. No leyó ningún libro.
 pro not read NINGÚN book
 ‘She didn’t read any book.’
- b. No leyó algún libro
 pro not read ALGÚN book
 There is some book he didn’t read. / *He didn’t read any book.
- c. ¿Leyó un libro?
 pro read UN book
 Did he read a book? / *What book did he read?
- d. ¿Leyó algún libro?
 pro read ALGÚN book
 Did he read any book? / *What book did he read?

However, according to our analysis, *un* and *algún* are not completely selective either: we have assumed that the alternatives they introduce can combine either with the Existential Closure operator, or with the universal propositional operator introduced by conditionals. This would

mean that *un* and *algún* are partially selective Hamblin indefinites.²⁶ As we discussed in section 2, Kratzer and Shimoyama 2002 analyze the selectivity of Hamblin indefinites as morphological agreement. Casting the partial selectivity of *un* and *algún* in terms of agreement does not seem straightforward. We will have to leave this issue open for future research.

Let us sum up. The main empirical contribution of this paper is the finding that indefinites may display different scope possibilities depending on the type of syntactic environment that they are in: in conditionals, exceptional scope readings are impossible for *algún*, and possible (but hard) for *un*; in relative clauses, intermediate scope readings are available for both indefinites. We have presented an analysis of this puzzling data that makes crucial use of the Hamblin Semantics put forward in Kratzer and Shimoyama (2002). In our analysis, the difference between relative clauses and conditionals is due to the different operators that these two environments make available.

The results that we have presented raise the issue of whether there are other indefinites that might also be sensitive to different types of islands. We hope to be able to explore this possibility experimentally in future work. In the meantime, we hope that the generalizations that we have presented will help to define the full range of exceptional scope possibilities across languages, and that, therefore, they will contribute to the characterization of a semantic typology of natural language indefinites.

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²⁶With adverbs of quantification, *un* shows quantificational variability effects, but *algún* has constant existential force, as illustrated below:

- (i) a. Un estudiante {siempre, normalmente, nunca} tiene dinero.
UN student {always, usually, never} has money
'All, most, no students have money.'
- b. Algún estudiante {siempre, normalmente, nunca} tiene dinero.
ALGÚN student {always, usually, never} has money
'Some student always, normally, never has money.'

This is still compatible with both items having existential force: in the analysis of adverbs of quantification entertained in von Fintel 1994 and von Fintel 1995, indefinites always have existential force in these contexts, even in cases like (ia) above.

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