Restoring indefinites to normalcy: an experimental study on the scope of Spanish *algunos*

LUISA MARTÍ
CASTL/Universitetet i Tromsø

ABSTRACT. It is widely assumed that the scope of indefinites is island insensitive, i.e., that, generally, an indefinite inside of a syntactic island such as a *wh*-clause or an adjunct is capable of taking scope outside of that island. This paper challenges this assumption by studying the scope behavior of the Spanish plural indefinite *algunos* (roughly, 'some (pl.)'). It presents an experimental study that shows that the scope of *algunos* is not free and depends on its syntactic environment, at least in the dialect of Spanish studied here. The paper discusses some of the implications of the study for current theories about the semantics of indefinites: it points out the obvious problems that choice functions and singleton indefinites have with the Spanish data, and it also discusses the implications for Schwarzschild's (2002) solution to the so-called "Donald Duck" problem.

1 INTRODUCTION

Consider the English indefinites in (1) (italicized):

(1) a. John gave an A to every student [who recited *a difficult poem by Pindar*] (Farkas 1981)
b. [If *some relative of mine* dies], I will inherit a house (Reinhart 1997)
c. Mary dates exactly half the men [who know *a producer I like*] (Fodor and Sag 1982)

A well-known claim is that indefinite noun phrases inside syntactic islands can take scope outside of them. (1a), with the indefinite inside a relative clause, is claimed to have a reading in which there is this one difficult poem by Pindar such that John gave an A to every student who read it; (1b), with the indefinite inside an *if*-clause, is taken to suggest that there is this one relative of mine such that, if s/he dies, I will inherit a house; and (1c), again a case with a relative clause, is claimed to be true in a situation in which Mary dates less than half of the men who know a producer I like, as long as she still dates exactly half of the men who know the same producer. In all of these readings, the indefinite takes scope outside the bracketed phrase. I refer to such readings as wide scope readings, even though sometimes they have been argued to be cases of apparent wide scope readings, and non-scopal analyses have been proposed for them (see section 3 for more discussion on this).

The examples in (1) are taken to contrast with those in (2), where instead of an indefinite, quantifiers like *every new patient* or *most of my relatives* appear in similar contexts:

(2) a. A doctor will examine [the possibility that we give *every new patient* a tranquilizer] (Reinhart 1997)
b. [If *most of my relatives* die], I will inherit a house (based on Reinhart 1997)

Neither *every new patient* nor *most of my relatives* can take scope outside the complex NP or the *if*-clause, respectively. Complex NPs and *if*-clauses are islands for overt syntactic movement as well:

(3) a. *Which patients will a doctor examine [the possibility that we give a tranquilizer]? (Reinhart 1997)
b. *Which patients should a doctor worry [if we sedate]? (Reinhart 1997)

The conclusion drawn in the literature is that the mechanism that generates indefinite wide scope is not the same as the mechanism that generates the scope of quantifiers like *every new patient*. What this other scope-providing mechanism is is a question open for debate. For example, Reinhart (1997) and Winter (1997) propose to use choice functions, whose ∃-closure is not sensitive to syntactic islands and which can be closed off at any point in the derivation.[1] Schwarzschild (2002) argues that indefinites are (unambiguously) quantifiers whose movement is restricted in the same way the movement of other quantifiers is, but that they are special in that their domain of quantification can be a singleton set.[2] Fodor and Sag (1982) argue that indefinites are ambiguous between a quantificational and a referential reading, the referential reading being involved in cases of apparent wide scope.[3] None of these mechanisms is naturally amenable to a modification that makes them sensitive to syntactic islands. In fact, that they are not naturally so is taken to be advantageous, given (1)-(3).

The material in this paper comes from an experiment that was designed to test the hypothesis that the scope of indefinites is unconstrained. The experiment tested, in particular, whether the scope of Spanish *algunos* is sensitive to syntactic islands such as *if*-clauses, *wh*-clauses, relative clauses or coordinations. We will see that for a group of speakers of Spanish from the Madrid (Spain) area, the scope of the plural indefinite *algunos* is indeed syntactically constrained. I do not challenge the generalizations concerning the English examples in (1) or comment on the status of *algunos* in other dialects of Spanish but, given the surprising results obtained here, I do think that better testing needs to be done in other languages and in other dialects.

The organization of the paper is as follows. The experiment is described in detail in section 2. The results are summarized in section 2.6. What these results mean for current theories of indefinite scope is discussed in section 3. Section 3.1 contains some important assumptions I make about the semantics of the sentences tested in the experiment. Section 3.2 discusses choice functions, singleton indefinites and the "Donald Duck" problem. Section 4 is the conclusion.

[1] Matthewson (1999) has argued instead that choice functions are always given maximal scope. For Kratzer (1998), (Skolemized) choice function variables are free. Chierchia (2001) and Schwarz (2001) are recent discussions of the problems and advantages of these various possibilities. All of these approaches belong to the same camp in this paper, since they all use choice functions.

[2] Breheny (2003) makes a proposal that is in some ways very close to Schwarzschild's.

[3] This is not quite true, as Fodor and Sag draw a distinction between wide scope readings and referential readings, but the two are close enough for the purposes of this paper.

2 THE EXPERIMENT

2.1 *Background*

In a pilot study with a small number of speakers from Madrid (Spain) (including myself), it was found that the wide scope of the Spanish plural indefinite *algunos* is not possible in all syntactic environments. The generalization that was arrived at was that *algunos*, in addition to being able to take narrow scope, could take scope outside of *if*-clauses, *wh*-clauses and above the point at which event variables of predicates are hypothesized to be existentially bound. On the other hand, this preliminary study suggested that relative clauses and coordinations are scope islands for indefinites.[4]

2.2 *The informants*

27 subjects were tested in this experiment. All of them are native speakers of Spanish and have spent most of their lives in the area of Madrid and its surroundings. All of them are undergraduate students of Translation or English Philology. The test took place at the Universidad Autónoma of Madrid, in Madrid (Spain). Each subject was paid a total of 25€. The subjects were of course not informed of the goals of the experiment beforehand, but were invited to a debriefing session after the experiment was over in which these goals were explained.

The reason for limiting the experiment to speakers of the Madrid area was the wish to introduce as few variables as possible.

2.3 *The task*

The task carried out by the informants was a truth-value judgement task in the form of a questionnaire.[5] The questionnaire contained a total of 54 items (where item = context+sentence), of which 27 were test items and 27 were fillers. The questionnaire was divided into three parts of 18 items each, which were administered on different days to avoid speaker fatigue.

Careful and clear instructions were provided to the subjects at the beginning of each session, and the first few items in each session were benchmark items[6] that allowed the subject to practice (without her knowledge).

In the instructions, speakers were told a short story about a city with a powerful mafia which has been involved in a number of criminal acts, and which has bribed some witnesses to not tell the truth to the police. Each item in the experiment was judged against this background and contained a description of a situation (a robbery, a murder, etc.), and then a dialog between a POLICE OFFICER and a WITNESS.[7] Every item asked the informant to judge the truth of what the WITNESS said, where what the WITNESS said was or contained the test

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[4] A brief discussion of the results in this study can be found in Martí (2005).

[5] The questionnaire can be downloaded from the author's webpage at http://www.hum.uit.no/a/marti/algunos_experiment.html.

[6] I.e., filler items that are presented in the same order from speaker to speaker. Benchmark items can be used as practice or as a way of making sure the speaker is concentrated on the task.

[7] On some of the reasons for presenting the task in this way, see section 2.5.

sentence. *Algunos* was used only in test sentences, never in the descriptions of the different contexts.

There were 3 examples of each sentence type, and there were 6 sentence types. The sentence types were as follows:

(4) Sentence type I: *algunos* c-commanded by an *only*+numeral phrase
(5) Sentence type II: *algunos* c-commanded by the point at which event variables are existentially closed
(6) Sentence type III: *algunos* embedded inside of a clause-final *if*-clause
(7) Sentence type IV: *algunos* embedded inside of a *wh*-island
(8) Sentence type V: *algunos* embedded inside of a relative clause
(9) Sentence type VI: *algunos* embedded inside of coordination

Here are some of the examples used in the experiment corresponding to these six sentence types:

(10) Ví a una sola persona llevándose *algunos* cuadros
saw to one only person taking.away paintings
'I saw only one person taking some paintings away'

(11) *Algunos* invitados salieron del salón
guests exited of.the living.room
'Some guests left the living room'

(12) Le dijo que le mataría si se llevaba *algunas* joyas
clitic said that clitic would.kill if clitic took jewels
'She said she would kill him if he took some jewels'

(13) Preguntó que cuándo se habían marchado *algunos* invitados
asked that when clitic had left guests
'He asked when some guests had left'

(14) Dijo que recompensaría a todos los que consiguieran
said that would.reward to all the that obtained
algunos indicios sobre su hija
clues about his daughter
'He said that he would reward all who obtained some clues about his daughter'

(15) Dijo que Teresa San Juan y *algunos* hombres habían atracado
said that and men had robbed
el Deutsche Bank
the
'He said that Teresa San Juan and some men had robbed the Deutsche Bank'

Each example belonging to sentence types I, III and V was tested twice (i.e., there were two test items per example sentence in these cases), once for distributive wide scope and once for collective wide scope. This is because originally the idea was to find out also if there were differences in the availability of these readings. However, as two reviewers pointed out, the contexts that I provided in the experiment to test for wide scope distributive readings may not

have made some necessary distinctions[8]. Therefore, I do not draw any conclusions here about collective vs. distributive wide scope readings. When below I say "wide scope ", I generally mean the wide scope collective reading. Since in sentence types I, III and V, there were six test items in each, and in II, IV and VI only three in each, the number of responses per item were converted into percentages throughout.

No test items for narrow scope readings were included, since the existence of narrow scope readings for *algunos* is not under debate.

Here is an example of how sentence type III was tested (everything was presented to the speakers in Spanish, but here I include English for convenience):

(16) In the jewelry store *García Brothers* they have a lot of cheap stuff and they really earn their living on this cheap stuff more than on real jewels. However, they have a collection containing a bracelet, a watch, a ring, and a pair of earrings that is altogether quite expensive, even though each of these items by themselves are not so incredibly expensive. If there were a robbery, it would be terrible if they took the collection. This morning there has been one, and Esteban García, one of the owners, has taken out his gun and has said to the robber: "Take whatever you want from these jewels over here, I don't care. But don't take the collection. If you take it, I will kill you. Look, you can even take the earrings, but don't take the whole collection".

Dialog between policeman and witness:
POLICEMAN: What did Esteban García say to the robber?
WITNESS: Le dijo que le mataría si se llevaba *algunas* joyas
'He said he would kill him if he took some jewels'
Question:
Is the witness telling the truth? YES NO

This item tests for a wide scope reading of *algunos* (actually, for the wide scope collective reading). This reading can be paraphrased as follows: "Esteban García said that a particular group of jewels x is such that he (Esteban) would kill him (the robber) if he (the robber) took x". In this reading, it is not enough to take just any jewels to satisfy the antecedent of the conditional; only taking certain jewels does (i.e., the ones from the collection). This makes the narrow scope reading false in this scenario. This reading can be paraphrased as follows: "Esteban García said that he would kill him if he took some jewels or other".

In the case of (11), (13) and (15), the experiment tested whether *algunos* could scope above the point at which the event variable of the main predicate is hypothesized to be existentially bound. If so, we can obtain different events of leaving ((11)), different events of asking ((13)), and different events of robbing ((15)), one per guest ((11), (13)) or man ((15)). I call such readings event distribution readings. If such a reading is possible for a sentence

[8] One of the reviewers suggests that a wide scope distributive reading of *algunos* in downward-entailing contexts such as *if*-clauses (where it seems reasonable to assume that plural noun phrases contain singularities in their denotation) could really be a reading in which the domain of *algunos* is restricted to one singularity. Another reviewer points out that wide scope distributive readings could actually be wide scope collective readings plus weak distributivity (where only one individual satisfying the predicate is enough, as in *John opened the windows*). I am very thankful for these comments.

like (15), for example, we conclude that *algunos* must be able to scope outside of the coordination, since only then can it scope above the point of existential binding of predicate event variables. Two sample test items for (11) and (15) are in (17) and (18), respectively:

(17) One of the most valuable pieces in the Duchess of Teruel's diamond necklace collection has disappeared tonight during a party. One of the guests is suspected of being responsible. The necklace was in the safe, in the study room, which is adjacent to the room where the party took place. It is important to know who left and entered the party room when. Several guests left the party room, separately, between 6pm and 7pm, the time during which the necklace disappeared.

Dialog between policeman and witness:
POLICEMAN: What happened between 6pm and 7pm?
WITNESS: Que *algunos* invitados salieron del salón.
'Some guests left the living room'

(18) The Deutsche Bank has been robbed several times this year. One of the mafia groups in the city is responsible. In a meeting with his associates at the end of the year, the mafia boss summarized the achievements of the year as follows: "dear friends, our much appreciated Teresa San Juan, accompanied in each occasion by a different new member of our group, has robbed the Deutsche Bank several times this year". One of the boss' projects for this year was to train all new members with Teresa, since she is such a good robber. So he made sure that each time Teresa robbed a bank, one of the new members accompanied her, a different one each time.

Dialog between policeman and witness:
POLICEMAN: You say that, while you were cleaning in the adjacent room, you listened to some of the things that were said in the meeting. What did the mafia boss say?
WITNESS: Que Teresa San Juan y *algunos* hombres habían atracado el Deutsche Bank
'(He said) that Teresa San Juan and some men had robbed the Deutsche Bank'

As we will see, only a wide scope reading of *algunos* over the point at which event predicate variables are existentially bound can make the readings induced in these two contexts true. Notice that emphasis is placed in these contexts in events occurring at different times. I assume time to be crucial in event identification in these cases. A reviewer challenges this assumption: one could, e.g., in the case of (17), consider that the whole party is one extended event, with multiple participants leaving at different times. However, as we will see in sections 2.6 and 3.1, for a well-defined group of my speakers, not using time as event identifier cannot have been an option, since they reject (18) and accept (17). If time was not necessary in event identification in these cases, they would have accepted (18), since they would have considered the year during which the bank was robbed several times to be one extended robbing event, with different pieces of the robbing event occurring at different times.[9]

[9] This suggests that the event of building of Rome or the event of pruning the roses, which, as one of the reviewer points out, would normally be temporally extended events with different pieces of the event occurring at different times, is conceptualized differently from the event

As for sentences (10) and (14), the wide and narrow scope readings are logically independent of each other (notice that in (14), *algunos* is in the restriction of *todos* 'all'). In addition, (10) allows us to see if *algunos* can scope above a focused item, and (14) if *algunos* can scope outside of a relative clause. Two sample test items for (10) and (14) are in (19) and (20), respectively:

(19) There has been a robbery in the art gallery *Goya*. The perpetrators were three women and one man. The man transported, all by himself, five small paintings, all of them at the same time. The women joined forces and transported a huge and heavy painting together, as well as a smaller yet still heavy one. Several people have witnessed the whole operation.

Dialog between policeman and witness:
POLICEMAN: You say you saw the whole operation. What did you see?
WITNESS: A una sola persona llevándose *algunos* cuadros
'(I saw) only one person taking some paintings away'

(20) The daughter of one of the richest mafia bosses in the whole city, Esteban Iturralde, was kidnapped last week. Some of the details of the kidnapping are known: where it took place, at what time, and that the girl is alive. Yesterday, Mr. Esteban met with several of his men and said: "There is a reward for every one of you who manages to find out certain things about my daughter. I want to know who kidnapped her, where she is, and if she is well fed. But I must know all of these things; only those who tell me everything will get the reward. Don't come telling me that she is alive, because I already know that."

Dialog between policeman and witness:
POLICEMAN: You say that, while you were cleaning in the adjacent room, you heard some of the things that were being said at the meeting. What did Mr. Esteban say?
WITNESS: Que recompensaría a todos los que consiguieran *algunos* indicios sobre su hija.
'(He said) that he would reward all who obtained some clues about his daughter'

In the wide scope reading tested in (19), it is possible that there were several different people involved in the robbing of the paintings. The reading is also compatible with there being paintings that were each taken by more than one person. This is the situation that is depicted in the context in (19); the women take two paintings together, the man takes five paintings all by himself. There are, then, some paintings that were all taken by a single person (the man). The narrow scope reading of the sentence is false in this situation: in this reading, there can only have been one person involved in painting taking, but in the situation described there are

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of leaving the party or the event of robbing the bank, which somehow cannot be temporally extended and composed of different pieces occurring at different times. This can be seen in other examples, such as *He robbed the bank once* (Klaus Abels, p.c.): the sentence has the implicature that there was only one time that he entered the bank, took the money and left.

three. In the wide scope reading tested in (20), there has to be a particular group of clues such that all of those who obtain them get rewarded. This reading is true in the scenario described here. The narrow scope reading is false: according to this other reading, obtaining any set of clues is enough.

Some of the theoretical assumptions I make about the semantics of these sentences are explained in section 3.1.

The same pattern that was followed in the test sentences was followed in the fillers: each test sentence was provided one or two times with different contexts. Of the 27 filler items, 14 were predicted to be answered "yes" and 13 "no", so there was a balance of *no* and *yes* responses in the filler items.

2.4 *The hypothesis*

The null hypothesis was that *no* responses are equally likely in the two groups of sentence-types: if the wide scope of *algunos* is not constrained syntactically, then the likelihood of obtaining a *no* response for sentence-types I/V/VI should be as likely as obtaining a *no* response for sentence-types II/III/IV. The experimental hypothesis was that the likelihood is different: a *no* response should be more likely in I/V/VI than in II/III/IV.

A two-tailed paired t-test comparing *no* responses for I/V/VI vs. II/III/IV was used.[10] As explained in the next section, the hypotheses entertained in the experiment are based on *no* responses rather than on *yes* responses because of the need to control for certain interfering factors.

2.5 *Controlling for errors*

2.5.1 *Controlling for type I errors*

To make sure that the experiment was guarded against concluding that the experimental hypothesis is correct when in fact it is the null hypothesis that is correct (a type I error), a conservative test of the experimental hypothesis was conducted.

In the truth-value judgement task carried out here, sentences were presented with a context. The context in each case is such that it makes only the wide scope reading of *algunos* available, in a natural and pragmatically plausible way. For those cases that are hypothesized to lack a wide scope reading, the answer in the task should be "no". The test of the experimental hypothesis is conservative because it is conducted in such a way that wide scope readings, which according to the experimental hypothesis should not always be there, are given as many chances as possible. All the relevant contexts in the questionnaire are carefully constructed so as to facilitate them. Confirmation of the experimental hypothesis happens then via *no* responses, protecting the experiment for the subjects' natural tendency towards *yes* responses.

[10] A paired t-test is a statistical analysis that compares the values of two different test situations. Such a test is two-tailed because the experimental hypothesis predicts an outcome in which the likelihood of a particular response in one of the test situations is greater or smaller than the likelihood of the same response in the other test situation; in a one-tailed test, these likelihoods are only predicted to be different.

2.5.2 *Plausibility of dissent*

Experimental studies on the acquisition of language by children have found that plausibility of dissent can affect the results of an experiment (Crain and Thornton 1998, though see Drozd 2004[11]). In the truth-value judgement task, children have been found to be sensitive to whether or not both answers to the *yes-no* question asked of them ("is the test sentence true or false?") are plausible within the situation described to them. Children might get confused if only one of the answers is plausible, since then it is unclear why it is that anybody would ask the question. I have no evidence of the relevance of plausibility of dissent with adults but I took a conservative approach and built it in. The way it works in the questionnaire is as follows. When the WITNESS utters the sentence in question and speakers are asked whether he is telling the truth, both answers to the question are in principle plausible: if the WITNESS is telling the truth, then he is not one of those bribed by the mafia; if he is not telling the truth, then it is because he has been bribed by the mafia.

2.5.3 *Controlling for order effects*

Nine different orders for the questionnaire were provided. They involved both shuffling test items within one session and shuffling sessions. Filler items were interspersed with the test items at regular intervals, except for the benchmark items, which were the first four items in each one of the sessions.

2.6 *Results*

The overall group results are in Table 1:

[11] Thanks to Tom Roeper for this reference.

Speaker	% of *no* in I/V/VI	% of *no* in II/III/IV
1	83.3	38.9
2	55.6	33.3
3	44.4	33.3
4	61.1	11.1
5	94.4	77.8
6	77.8	33.3
7	55.6	33.3
8	66.7	44.4
9	88.9	61.1
10	72.2	50
11	88.9	72.2
12	61.1	72.2
13	61.1	27.8
14	88.9	22.2
15	100	88.9
16	83.3	44.4
17	72.2	33.3
18	88.9	77.8
19	72.2	66.7
20	33.3	27.8
21	77.8	33.3
22	72.2	11.1
23	100	77.8
24	72.2	66.7
25	94.4	33.3
26	83.3	61.1
27	83.3	77.8
	Mean: 75.3	Mean: 48.5

Table 1 Overall results

Recall that for the experimental hypothesis to be correct, a *no* response should be more likely in the first column (corresponding to I/V/VI) than in the second column (corresponding to II/III/IV). This predicted contrast was robustly significant by paired t-test: $t(26)=7.06$, two-tailed $p<.0001$. This means that the difference obtained between the two columns is highly unlikely to have arisen by chance. On average, the likelihood of a *no* response in I/V/VI is 75.3%, whereas the likelihood of a *no* response in II/III/IV, on average, is 48.5%, and this difference is statistically very significant. For the null hypothesis to be correct, there should have been a statistically insignificant difference between the two columns, or no difference at all.

It is instructive to look at individual speakers and at individual sentence types. Looking back at Table 1, the best speakers from the perspective of the experimental hypothesis are numbers 1, 2, 4, 6, 7, 8, 10, 13, 14, 16, 17, 21, 22, 25 and 26. For these 15 speakers, Group A, the difference between I/V/VI and II/III/IV is at least 20%,[12] with speakers 4, 14, 22 and 25 being extreme cases (+50%) and the number of overall *no*

[12] The difference between the mean of I/V/VI and II/III/IV is 26.7.

responses is not overwhemingly high (not more than around 60% on average per speaker). There is a group of 9 speakers, Group B, for whom the difference between I/V/VI and II/III/IV is not very big (less than 20%) but the percentage of *no* responses is very high (+60% on average per speaker). These are speakers 5, 9, 11, 15, 18, 19, 23, 24 and 27. There is a group of 2 speakers, Group C, for whom the difference between I/V/VI and II/III/IV is not very big (less than 15%), but the percentage of *no* responses is not that high (less than 60% on average per speaker). These are speakers 3 and 20.[13] And then there is one speaker, speaker 12, for whom a *no* response is more likely in II/III/IV than in I/V/VI, though the difference between the two is small (11.1%). These results are summarized in Table 2:

	Speakers	**Mean of difference I/V/VI vs. II/III/IV[14] (indiv. diff. ≥ 20%)**	**Mean of *no* responses[15]**
Group A	1, 2, 4, 6, 7, 8, 10, 13, 14, 16, 17, 21, 22, 25, 26	39.6%	53.9%
Group B	5, 9, 11, 15, 18, 19, 23, 24, 27	13.6%	80.9%
Group C	3, 20	8.3%	34.8%
Group D	12	-11.1%	66.7%

Table 2 Groups

Group A, which represents 55.5% of the speakers tested, is the group that best conforms to the experimental hypothesis: on average, the difference between I/V/VI and II/III/IV is quite high, and these speakers are not overwhelmingly *no* responders. Group B is problematic because of the high incidence of *no* responses and because, on average, the difference between I/V/VI and II/III/IV is quite low. This last feature they share with Group C, though the speakers of Group C are not overwhelmingly *no* responders.

While both Group B and Groups C/D can be considered problematic from the perspective of the experimental hypothesis, I would like to draw a distinction between the two. In particular, I think that the speakers from Group B, which represent 33.3% of the speakers tested, should be considered separately from those in Groups C/D. I currently have two hypotheses about these speakers. One hypothesis is that, for Group B, *algunos* is a narrow scope indefinite. This would account for the overwhelming number of *no* responses, and for the fact that the number of *no* responses for both I/V/VI and II/III/IV is so similar. If this hypothesis is correct, the experimental hypothesis is not in trouble: these speakers are just irrelevant.

There is a second hypothesis about Group B that can be entertained.[16] In the debriefing session, one of the speakers expressed the following concern. The dialogs in the

[13] Speakers 19 and 24, from Group B, might be classified in Group C, since they are only slightly above the 60% average on *no* responses (for both of them, this average is 69.5%).

[14] I calculated this figure by obtaining the difference between I/V/VI and II/III/IV for each speaker and then calculating the mean of these differences.

[15] I calculated this figure by obtaining the mean of *no* responses in I/V/VI together with II/III/IV for each speaker and then calculating the mean for each group.

experiment are between a POLICEMAN and a WITNESS, and because of this situation, full cooperation on the part of the WITNESS is expected. In many of the descriptions of the scenarios, the number of, say, suitcases that got stolen, or the number of people that got murdered, was very precise. The WITNESS, in answering with "*algunas* suitcases" or "*algunas* persons" is being more vague than he could be; he could be more cooperative and give the precise number. This apparently led this speaker to answer a lot of the items with *algunos* with "no". If this is what the speakers of Group B were doing, then the experiment suffers from a type II error: the experimental hypothesis might be right, but it is the null hypothesis that actually comes out right for these speakers. While, as explained in section 2.5.1, the experiment is guarded against a *yes* bias, it is not guarded against a *no* bias.

Distinguishing these two hypotheses requires a second experiment specifically designed for this purpose, something I have not undertaken. In any case, the results of the experiment, as reported above, are statistically significant even with Group B factored in.

Group C cannot be explained away in the manner that Group B was and, together with Group D, is the most problematic from the perspective of the experimental hypothesis.[17] These two groups taken together represent 11.1 % of the speakers tested. Again, the important thing is that the results of the experiment are still statistically significant even when the speakers from Groups C and D are factored in.

The results per sentence type are summarized in Table 3:

[16] The general form of this hypothesis was suggested to me by Tom Roeper.

[17] Depending on one's measure of "high number of *no* responses", Group D might be included with Group B. Since there is only one speaker in it, I will not speculate about this.

Speaker	% of *no* in I	% of *no* in II	% of *no* in III	% of *no* in IV	% of *no* in V	% of *no* in VI
1	100	0	83.3	33.3	83.3	66.7
2	83.3	0	100	0	83.3	0
3	100	0	66.7	33.3	33.3	0
4	100	0	33.3	0	16.7	66.7
5	100	66.7	100	66.7	83.3	100
6	100	0	100	0	66.7	66.7
7	100	0	100	0	33.3	33.3
8	100	0	100	33.3	100	0
9	100	100	83.3	0	66.7	100
10	83.3	33.3	83.3	33.3	100	33.3
11	66.7	33.3	83.3	100	100	100
12	100	66.7	83.3	66.7	50	33.3
13	66.7	33.3	83.3	0	16.7	100
14	100	0	33.3	33.3	66.7	100
15	100	66.7	100	100	100	100
16	83.3	33.3	100	0	100	66.7
17	100	0	100	0	83.3	33.3
18	100	33.3	100	100	100	66.7
19	83.3	33.3	100	66.7	100	33.3
20	66.7	33.3	50	0	33.3	0
21	83.3	0	100	0	83.3	66.7
22	100	0	33.3	0	50	66.7
23	100	100	100	33.3	100	100
24	100	0	100	100	83.3	33.3
25	100	0	100	0	83.3	100
26	100	66.7	83.3	33.3	50	100
27	83.3	33.3	100	100	100	66.7
	Mean: 91.7	Mean: 27.1	Mean: 83.3	Mean: 33.3	Mean: 71.7	Mean: 56.7

Table 3 Sentence types

There are some interesting contrasts in Table 3. For example, there is a clear difference between sentence types I, III and V vs. sentence types II and IV (though the status of sentence type VI is not so clear). However, I think that we need to restrict our attention to those speakers that show sensitivity to islands, i.e., Group A (the other three groups, as discussed before, either don't show such sensitivity to begin with or some other problem could be involved). If we restrict our attention to these speakers, the results become sharper:

Speaker	% of *no* in I	% of *no* in II	% of *no* in III	% of *no* in IV	% of *no* in V	% of *no* in VI
1	100	0	83.3	33.3	83.3	66.7
2	83.3	0	100	0	83.3	0
4	100	0	33.3	0	16.7	66.7
6	100	0	100	0	66.7	66.7
7	100	0	100	0	33.3	33.3
8	100	0	100	33.3	100	0
10	83.3	33.3	83.3	33.3	100	33.3
13	66.7	33.3	83.3	0	16.7	100
14	100	0	33.3	33.3	66.7	100
16	83.3	33.3	100	0	100	66.7
17	100	0	100	0	83.3	33.3
21	83.3	0	100	0	83.3	66.7
22	100	0	33.3	0	50	66.7
25	100	0	100	0	83.3	100
26	100	66.7	83.3	33.3	50	100
	Mean: 93.3	Mean: 11.1	Mean: 82.2	Mean: 11.1	Mean: 67.8	Mean: 60

Table 4 Sentence types (Group A)

What percentage of *no* responses makes a sentence type an island? Let us adopt the following rationale for determining islandhood: roughly 60% of *no* responses or higher indicates that a particular sentence type is an island; roughly 15% of *no* responses or lower indicates that a particular sentence type is not an island; values in between 15% and 60% are undecided. According to this, sentence types I, III, V and VI are islands for the scope of *algunos*. The contrast between *no* responses to sentence types I, III, V and VI vs. *no* responses to sentence types II and IV is robustly significant by paired t-test: $t(14)=14.42$, two-tailed $p<.0001$.

Sentence type VI is an island for the speakers of Group A. The reason is that the contrast between *no* responses to sentence types I, III and V vs. *no* responses to sentence type VI is not significant by paired t-test: $t(14)=1.77$, two tailed $p=.098$ (which is greater than .05 and hence not significant). That is, there is no contrast in *no* responses between sentence types that are clearly islands for these speakers and sentence type VI. In addition, there is a robust contrast between sentence types II and IV vs. sentence type VI by paired t-test: $t(14)=5.63$, two tailed $p<.0001$. That is, there is a contrast in *no* responses between sentence types that are clearly not islands for these speakers and sentence type VI.

The results from Table 3 and Table 4, albeit not fully compliant with the details of the experimental hypothesis, are welcome because they indicate that the scope of *algunos* is indeed sensitive to syntactic islands.[18]

[18] In fact, sentence type III seems better classified as an island than not, since *if*-clauses are adjuncts. This suggests that the results of the experiment make more sense than those of the pilot study (see section 2.1).

3 *ALGUNOS* AND LINGUISTIC THEORY

3.1 *Assumptions*

Before proceeding to explore what the consequences of these findings are for current theories of indefinite scope, I will be more explicit about some of the assumptions I have made about the semantics of the sentences tested in the experiment.

I assume, as is quite standard, that our semantics can manipulate plural and singular individuals (cf. Landman 1989, Link 1983, Schwarzschild 1996, and many others). Following Martí (under review), I assume a plural common noun like *niños* 'boys' in Spanish to have the denotation in (21) and *algunos* to have the denotation in (22):[19, 20]

(21) [[niños]] = λx. x is a singular child individual

(22) [[algunos]] = $\lambda P_{<et>}.\lambda Q_{<et>}.\exists x[\text{pl ind } (x) \ \& \ \forall z[z<x \rightarrow P(z)] \ \& \ Q(x)]$

(21) is justified because it is possible to show that plural common nouns in Spanish are semantically singular. This is because of examples such as (23), from Martí (under review):

(23) John: ¿Viste *niños* jugando en el patio?
saw children playing in the garden
'Did you see children playing in the garden?'
Mary: Yes, I saw one/#No, I saw only one

Furthermore, (24) is not true if Juan has just one child, something that comes out correctly if *hijos* has singularities in its denotation:

(24) Juan no tiene hijos
not have children
'Juan has no children'

(22) says that *algunos* is an existential generalized quantifier that quantifies over plural individuals instead of singularities. When *algunos* combines with nouns such as *niños*, it takes atomic or singular individuals and puts them together to form plural individuals and existentially quantify over them. Thus, *algunos* phrases in Spanish are semantically plural, something that is justified by evidence such as that in (25), from Martí (under review)[21]:

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[19] The denotation of *algunos* is actually more complex, but (22) is good enough for our purposes. See Martí (under review) for more details.

[20] I have no evidence that *niños* contains plural individuals (in addition to singular individuals) in its denotation. Martí (under review) assumes that the plural marker in *niños* is there just for agreement reasons (cf. Sauerland 2003, Schwarzschild 1996, among others). *Algún niño*, in the singular, differs considerably in its meaning from the plural, *algunos niños*, in ways that have nothing to do with plurality (for some discussion, see Alonso-Ovalle and Menéndez-Benito 2003).

[21] Notice that (i) only has a wide scope reading of *algunos*. As argued for in Martí (under review), *algunos* is a positive polarity item:

(25) John: ¿Viste a *algunos* niños jugando en el patio?
'Did you see *algunos* children playing in the garden?'
Mary: #Yes, I saw one/No, I saw only one

I take verbal predicates to contain an event argument (cf. Davidson 1967, Parsons 1991, and many others). The denotation assumed here for, e.g., *llegaron* 'arrived (pl.)', is as in (26):

(26) [[llegaron]] = λx.λe. arrived (x)(e)

The event argument does not generally get saturated but is existentially bound at some point in the derivation, following standard practice (for a recent discussion, see Chung and Ladusaw 2004).

In order to account for event distributivity, I use a D-operator that can be inserted in the syntax anywhere where it is type-wise compatible (c.f. Landman 1989, Link 1983, Roberts 1987, Schwarzschild 1996, Beck 2000, among others). The contribution of the D-operator is in (27):

(27) $[[D]] = \lambda f_{<e,t>}.\lambda x.\forall y\,[(\text{sing ind}(y) \,\&\, y \leq x) \rightarrow f(y)]$

What the D-operator does is collect into a set all of those individuals whose singular parts are such that they apply to a predicate like *llegaron*. Since *llegaron* comes with an event variable, what it will do is collect plural individuals into a set, and it will express that for each of their singular subparts, there is an event in which each singular part came. This gives us event distribution.[22] I propose an LF like that in (28), where the *algunos* phrase has moved above D, which results in the truth-conditions in (29):

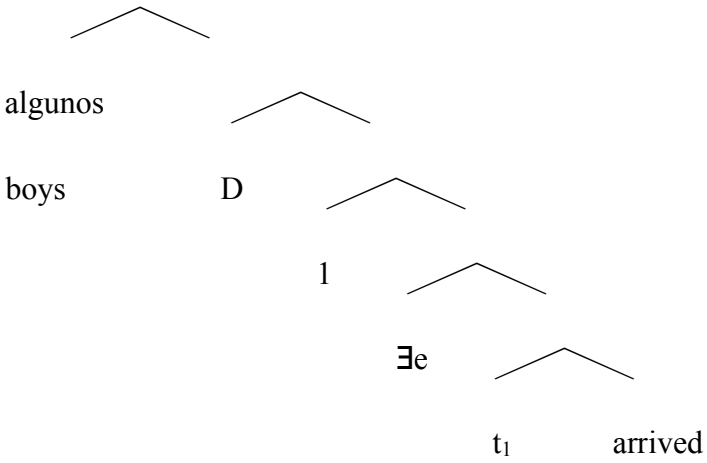
(i) A la reunión no asistieron *algunos* profesores
to the meeting not came teachers
'To the meeting there didn't come some teachers'

[22] The D-operator as originally conceived is supposed to be able to combine with lexical predicates, not only with derived ones, but this is no longer possible within our assumptions, given that lexical predicates now contain event arguments. It is possible to assume an additional operator, D_E, an event-sensitive version of D, as in (i):

(i) $[[D_E]] = \lambda f_{<e,<E,t>}.\lambda x.\lambda e.\forall y\,[(\text{sing ind}(y) \,\&\, y \leq x) \rightarrow f(y)(e)]$

As far as this paper is concerned, we can predict all the required readings with the D-operator, so I do not adopt (i) in the main text.

(28)



(29) [[algunos boys arrived]] = 1 iff there is a plural boy individual x and for all of its singular subparts y, there is an event e such that y arrived in e

(29) says that the sentence is true iff there is a plural boy individual x and for all of its singular subparts there is an event e such that each of the singular subparts came in e. Suppose we choose different events for each singular subpart. We then get event distribution.

Suppose, on the other hand, that we choose the same event: then we get non-event-distribution. Even though the experiment reported in section 2 did not test for non-event-distribution readings, I think it is fairly uncontroversial that a sentence like *algunos niños llegaron* can also be true in a situation in which there is a single event of arriving for all of them; i.e., they all arrived at the same time.

For a sentence like (30), the potential event distribution reading, in which *algunos* takes wide scope, is in (31):

(30) Llegaron *algunos* niños y la maestra
'Some boys and the teacher arrived'

(31) $\exists x$ [pl ind (x) & $\forall z$ [z < x → boys (z)] & $\forall y$ [(sing ind(y) & y ≤ x) → $\exists e$ [y and the teacher arrived in e]]]

This reading is true in case there is a plural boy individual and for each of its singular subparts there is an event in which each of the singular subparts and the teacher came (recall that the sentence, though, has no such reading). This would be true in a situation in which boy 1 and the teacher came at one particular time, boy 2 and the teacher came an hour later, boy 3 and the teacher came two hours after that, etc.

Let us be explicit about all the logical possibilities and also return to the issue of time as an identification criterion for events. Consider again sentences (11), (13) and (15), repeated here:

(32) *Algunos* invitados salieron del salón
'Some guests left the living room'

(33) Preguntó que cuándo se habían marchado *algunos* invitados
'He asked when some guests had left'

(34) Dijo que Teresa San Juan y *algunos* hombres habían atracado el Deutsche Bank
'He said that Teresa San Juan and some men had robbed the Deutsche Bank'

There are two different contexts to consider. In one of them, the one provided to the subjects of the experiment, the guests left one by one, at different times ((32), (33))/the men robbed the bank one by one, each one of them accompanied by Teresa San Juan ((34)). In the other context, the guests all left at the same time and there is a single event of leaving/the men robbed the bank all together and were accompanied by Teresa San Juan on that occasion. With the technology introduced above, we obtain the following situation:

(35) a. *algunos* scopes above ∃e; D-operator (wide scope)
if different e are chosen → different leavings/robbings
if same e is chosen → same leaving/robbing
b. *algunos* scopes below ∃e; no D-operator (narrow scope)
same leaving/robbing

Assuming that time is a necessary criterion for event identification, the important thing to notice is that, even though there is an implication relation between the wide scope reading and the narrow scope reading, only the wide scope case can match the situation in which there are different leavings/robbings. If all we generated was the narrow scope reading of *algunos* with respect to the point at which existential binding of predicate event variables takes place, we would not be able to predict that a sentence like (32) can be true in a situation in which different guests left at different times. In the experiment, sentences like (32) and (33) turned out to be true in the situation in which there are different leavings, whereas sentences like (34), for a well-defined group of speakers (Group A), were false. This means that in (32) and (33) a wide scope reading of *algunos* must be available, and that in (34), it must not. In (32) there are no syntactic islands, so we expect *algunos* to be able to take wide scope. In (33) there is a *wh*-island, and the relevance of this is discussed in section 3.2. In (34), *algunos* is embedded inside of a coordination, and we know independently that coordinations are islands.

If time were not crucial in the identification of events, with the technology for event distribution introduced above, (35) is modified as in (36). The difference between the two is underlined:

(36) a. *algunos* scopes above ∃e; D-operator (wide scope)
if different e are chosen → different leavings/robbings
if same e is chosen → <u>different leavings/robbings</u> or same leaving/robbing
b. *algunos* scopes below ∃e; no D-operator (narrow scope)
<u>different leavings/robbings</u> or same leaving/robbing

If time is not an event identifier, we can, within the same event, e.g., the party viewed as a big leaving event, have different leavings taking place at different times. Hence, in the wide scope case in (36a), if we choose the same event for all the guests, we can still predict that a sentence like (32) is true in the situation provided to the subjects of the experiment. Likewise, if we were simply to choose (36b), we would be in the same situation. The problem would be that then we would not need to generate a wide scope reading for *algunos*, and sentences like (32)-(34) would tell us nothing about the wide scope capabilities of this indefinite.

However, it turns out that the subjects of the experiment were indeed assuming that time is a necessary event identifier. Recall that, for the speakers from Group A, (34) was not true in the situation in which there were different robbings happening at different times, one

per new mafia member. If time was not a crucial event identifier, they should have said that the sentence is true in that situation: they would have been able to consider that there was a big robbing of the Deutsche Bank event, taking up the whole year, with different parts of the robbing taking place at different times. And that is not what they did. Therefore, the only logical possibilities we have to worry about are those in (35). It can't be that in a sentence like (32), we predict the different leavings scenario via a narrow scope LF or a wide scope LF in which the same event is chosen for all of the guests.[23] The sentences under discussion, then, do tell us something about the wide scope possibilities of *algunos*.

I assume that the potential wide scope (collective) readings of (the relevant parts of) sentences (10), (12) and (14), repeated here, is as in (40), (41) and (42), respectively:

(37) Ví a una sola persona llevándose *algunos* cuadros
'I saw only one person taking some paintings away'
(38) Le dijo que le mataría si se llevaba *algunas* joyas
'She said she would kill him if he took some jewels'
(39) Dijo que recompensaría a todos los que consiguieran *algunos* indicios sobre su hija
'He said that he would reward all who obtained some clues about his daughter'

(40) $\exists x$ [pl ind (x) & $\forall z$ [z < x → paintings (z)] & 'one person took x' is the only true proposition out of the set of propositions {one person took x, two people took x, three people took x, ...}]
(41) $\exists x$ [pl ind (x) & $\forall z$ [z < x → jewels (z)] & (take (r, x)→ kill (E, r)]
(42) $\exists x$ [pl ind (x) & $\forall z$ [z < x → clues (z)] & $\forall y$ [obtain (y, x) → reward (b, y)]]

In (37), I assume that the numeral *un(a)* 'one, masc./fem.' is focused, and that there is a version of *solo/a* 'only, masc./fem.' that attaches to quantifiers (type <et,t>) and that can associate with material inside of them. The last conjunct in (40) renders this part of the meaning of the sentence semi-formally. The sentence is predicted to be true in case there is a plurality of paintings such that its singular subparts were taken by just one person (not two, three, etc.). This is the wide scope reading of *algunos*, and it is compatible with a situation in which there were more people taking paintings, something that is incompatible with the narrow scope reading.

The potential wide scope reading of (38), in (41), requires there to be a particular plurality of jewels such that if the robber ('r' in the representation) takes it, Esteban García ('E') kills the robber. I assume that *if*-clauses are translated using logical implication and that all the problems that arise from the use of this connective as a translation of natural language *if...then* are orthogonal to the issue at hand. (42) would be the wide scope reading of (40), which says that there has to be a particular plurality of clues (about the mafia boss' daughter) such that all those who manage to obtain them get rewarded by the mafia boss ('b' in the representation). The semantics of clauses which contain indefinites inside of the restriction of a quantifier like *every* is very similar to that of clauses which contain indefinites inside of an *if*-clause, hence the similarity between (41) and (42).

[23] In the case of the scenario in which all of the guests leave at the same time, we have two ways of predicting truth: via the narrow scope LF, and via the wide scope LF (presumably when the events chosen for all the leaving guests are the same event). This does not affect the logic in the main text.

Recall that none of (40), (41) or (42) was found to allow wide scope (collective) readings in the experiment described in section 2.[24]

3.2 *'Algunos' and theories of indefinite scope*

The most important empirical generalizations from section 2 are as follows:

(43) whether one looks at the overall group results, at the results per speaker, or at the results per sentence type, the generalization is that *algunos* cannot freely take wide scope, contrary to what the received wisdom on indefinites suggests. There is no speaker in the study that allows *algunos* to freely take wide scope.

(44) there is a group of speakers, Group A, for whom *if*-clauses, relative clauses, coordinations and *sólo un N* 'only one N' phrases are islands for the scope of *algunos*

In the next two subsections I concentrate on (43), and I return to (44) in the conclusion.

3.2.1 *Choice function indefinites*

Let us go through the details of a choice-function approach to the semantics of *algunos*.[25] This analysis says that *algunos* denotes a choice function variable, of type <<e, t>, e>, which takes a set of plural individuals and returns one of these pluralities as output:[26]

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[24] It is possible to test whether *algunos* can give rise to wide scope distributive readings, following Winter (1997). First, *algunos* quantifies over plural individuals, so combining it with a predicate that cannot be true of a group should be odd (cf. #*Algunas mujeres dieron a luz a Juan*, 'Some women gave birth to Juan'). Then, we can embed *algunos* combined with such a predicate in an *if*-clause, a relative clause, or under *sólo un N* 'only one N'; a wide scope distributive reading of such sentences is pragmatically acceptable, but the narrow scope reading or the wide scope collective readings are not. A preliminary survey suggests that such sentences are odd:

(i) #Si *algunas* mujeres que conozco fueron las que dieron a luz a Juan, entonces podemos concluir sin ninguna duda que Juan tiene una madre estupenda
'If some women I know are the ones who gave birth to Juan, we can then conclude without a doubt that Juan has a great mother'
(ii) #Todos los artistas que nacieron en *algunas* ciudades son famosos
'All the artists who were born in some cities are famous'
(iii) #Sólo un artista de renombre internacional ha nacido en *algunas* ciudades españolas
'Only one artist of international fame was born in some Spanish cities'

(i)-(iii) suggest that *algunos* cannot take wide distributive scope; if it did, the sentences would not be odd. Thanks to a reviewer for pressing me on this issue.

[25] Gutiérrez-Rexach (1999a, b) pursues such an analysis for *algunos*. Gutiérrez-Rexach (2001) claims that a number of properties of *algunos* can be explained if it is assumed that it

(45) [[algunos niños]] = f([[niños]]) = a plural individual with boys as singular subparts

To account for the possibility of scope out of islands, this choice function variable can be existentially closed at any point in the derivation (Reinhart 1997, Winter 1997; closing it only at the top, as in Matthewson 1999, won't do, since *algunos* can also give rise to narrow scope readings).

This approach predicts that wide scope (collective) readings should be possible for *algunos* outside all sorts of islands, since the process of existential closure of choice function variables is not sensitive to islands. The (rough) LF for example (38) is in (46a), giving rise to the (rough) truth-conditions in (46b):

(46) a. [∃f [if take (r, f(jewels)), kill (E, r)]]
b. ∃f [CH(f) & (take (r, f(jewels)))→ kill (E, r)]

The sentence is predicted to give rise to the meaning "there is a choice function f such that if the singular subparts of the plurality of jewels that it selects are taken by the robber, Esteban García kills the robber". The problem for choice functions here is one of overgeneration, since nothing prevents wide scope collective readings from being generated with *if*-clauses, relative clauses or above *sólo un N* 'only one N'.

Of course, as is often argued in the literature, a choice function approach is not incompatible with the idea that indefinites such as *algunos* are ambiguous between a choice function meaning and a quantificational meaning. With a quantificational meaning it might be possible to make the movement of the quantifier sensitive to islands, but notice that wide scope readings would still be generated across the board, thanks to the choice function option.

3.2.2 *Singleton Indefinites*[27]

In Schwarzschild (2002), indefinites are unambiguously generalized existential quantifiers, but there is a peculiarity that sets them apart from other quantifiers and that is (partly) responsible for their ability to take scope outside of islands: their contextually restricted domain of quantification can be a singleton set. It is worthwhile discussing this proposal here because, on top of suffering from the same problem choice functions were found to suffer in section 3.2.1, singleton indefinites suffer from an additional, interesting problem when considered together with the results from section 2.

An example such as (47) (from King 1988) is analyzed as in (48), with the added assumption that the domain of quantification of *a book that was deemed pornographic* is a singleton:

(47) Each author in this room despises every publisher who would not publish *a book that was deemed pornographic*

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participates in categorical judgments. Neither kind of analysis can accommodate the facts from section 2.

[26] I simplify and assume that in this account *niños* would denote a set of plural individuals; this detail is orthogonal to the issue discussed in this section.

[27] The conclusions drawn in this section are also drawn in Martí (2005).

(48) [Each author]$_1$ in this room despises every publisher who would not publish a book he$_1$ had written that was deemed pornographic

The idea is that *he$_1$ had written* is implicit in (47). With these assumptions in place, the reading that is predicted for (47) is the intermediate reading, i.e., something like, "each author x in this room is such that x despises every publisher y such that y would not publish x's potentially pornographic book" (without the bound variable, (47) would be assigned the widest scope interpretation).

Importantly, Schwarzschild argues that the assumption that the domain of indefinites can be a singleton set is needed independently. It has been known at least since Heim (1982) that simple existential quantification outside of islands is not enough; this is known since Reinhart (1997) as the "Donald Duck" problem. One of the things that choice functions do is "pull out" the restriction of the indefinite from the island, which begins to address the problem. However, Schwarzschild argues that that is still not enough. To see why wide scope of the indefinite together with the overt noun restriction alone is not enough, consider (49) and its wide scope paraphrase in (50):

(49) If *three relatives of mine* died this year, I will inherit a house
(50) I have three relatives such that if they all died this year, I will inherit a house

(50) is not immediately true if some individual or other exists (e.g., Donald Duck, who is not a relative of mine). However, (50) is true as long as I have three relatives who did not die this year, and (49) isn't. But, if the domain restriction of *three* is a singleton set (i.e., a set containing a single plural individual that consists of three relatives), it is guaranteed that (50) is not true under such weak circumstances. Only those relatives in the domain restriction of the quantifier count.[28]

Whether the domain restriction of the indefinite is a singleton set or not has nothing to do with its syntactic environment. This is the reason why *algunos* cannot be a singleton indefinite. In order to predict wide scope readings out of the islands that allow them and at the same time not predict them in the cases that don't, the mechanism that gives rise to wide scope readings, i.e., restriction of the domain of quantification down to a singleton, would have to be sensitive to islands. But there is no independently justified reason to think that this mechanism would be sensitive to something like that.

A mixed account overgenerates: while in Schwarzschild's story the domain of quantification of indefinites can be a singleton set, nothing *forces* it to be so. So a possible derivation for an example like (38) would move the *algunos* quantifier outside of the *if*-clause, but its domain restriction would not be a singleton set, giving rise to truth-conditions that are too weak.

The facts about *algunos* force us, importantly, to reject a nice attempt at dealing with the "Donald Duck" problem.[29] To repeat, the reason is that, despite the fact that something like singleton indefinites seems to be necessary to prevent truth-conditions that are too weak (recall (49)-(50)), the domain restriction of indefinites being a singleton set is not something

[28] See Schwarzschild (2002: §5) for notes on how to draw the distinction between the domain restriction of indefinites and that of other quantifiers.
[29] See Haida (2003) for another way of showing that the "Donald Duck" problem does not go away with the help of choice functions.

that can naturally be made to depend on the indefinite's syntactic environment. Just as Schwarzschild does with other quantifiers, something must be built into their semantics or pragmatics that prevents their domain from being a singleton[30, 31].

Before concluding, let me note that it is immaterial to the main point of this paper whether, in the end, what I have been calling wide scope readings are genuinely wide scope or not. What matters is that the interpretation possibilities of *algunos* are constrained by syntactic islands, no matter how those interpretations are generated.[32]

4 CONCLUSION

Generalization (44) would seem to suggest that indefinites really behave like any other item that moves, since *if*-clauses (generally, adjunct clauses), relative clauses, and coordinations generally constrain movement (and perhaps also focused items such as *sólo un N* 'only one N', à la Beck 2006). Thus, generalization (44) indicates that *algunos* does not need to be considered in a special scope category, separate from items that move. The scope properties of *algunos* are just like the scope properties of these other items.

What does it mean to find out that the scope of *algunos* is syntactically restricted? It means that a syntactically sensitive mechanism for *algunos* to achieve wide scope is necessary. Do we then add this mechanism to the list of scope achieving mechanisms for indefinites? Perhaps English uses choice functions and Spanish does not. Or perhaps there are different kinds of indefinites, requiring different scope mechanisms, even within the same language. Both kinds of conclusions seem problematic if our goal is to arrive at an explanatorily adequate theory of indefinite scope. Before pursuing either, then, I suggest that we review and test experimentally our empirical generalizations about the scope of indefinites in other languages, and other indefinites in Spanish, following methodology similar to the one proposed here. Consider that, initially, *algunos* was also thought to be able to freely take wide scope (see for example Gutiérrez-Rexach 1999a, b).

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[30] As pointed out in footnote 2, Breheny (2003) makes a proposal similar to Schwarzschild's in some respects, particularly in their common use of the domain restriction of indefinites. The same criticism that applies to Schwarzschild applies to him.

Fodor and Sag (1982), as pointed out in footnote 3, draw a distinction between wide scope readings and referential readings which can perhaps be understood in terms of the singleton-set analysis. Be that as it may, it seems easier to argue against them on the basis of *algunos* than to do so against Schwarzschild, since the machinery needed for their referential readings doesn't seem to be justified independently. Anyway, their theory cannot predict intermediate readings, as is well known.

[31] The recent proposal in Schlenker (2006) seems problematic too, since it is an attempt at relating the assumed scope independence of indefinites to other properties of indefinites (so-called branching readings).

[32] Both choice functions and singleton indefinites may have problems generating wide scope distributive readings, depending on what else one assumes (cf. footnote 8). Since the experiment described in section 2 did not properly test for wide scope distributive readings, I do not draw conclusions about them here.

AUTHOR'S ADDRESS:
LUISA MARTÍ
Center for Advanced Study in Theoretical Linguistics (CASTL)
Faculty of Humanities
Universitetet i Tromsø
NO-9037 Tromsø, Norway
E-mail: luisa.marti@hum.uit.no

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