# Spanish *algunos* and the Syntactic Sensitivity of Indefiniteness

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#### **Abstract**

This paper argues that the grammar must make it possible for indefinites to take scope outside of syntactic islands in a way that is sensitive to those islands. This is because the Spanish plural indefinite *algunos* gives rise to both collective and distributive readings outside some, though not all, islands. The facts about *algunos* suggest that syntactically insensitive ways of achieving wide scope (e.g., choice functions, as in Kratzer 1998, Matthewson 1999, Reinhart 1997, or Winter 1997; domain restriction to a singleton set, as in Schwarzschild 2002, or to individuals in the speaker's mind, as in Breheny 2003; referential interpretations, as in Fodor and Sag 1982, etc.) are, at the very least, not the only option languages can choose in order to achieve indefinite wide scope. I treat *algunos* as an existential quantifier and derive its wide scope via a QR rule that is sensitive to islands and to the particularities of the quantifiers involved (Relativized QR). I point out that in this kind of approach constraints need to be placed on the distribution of distributivity operators. I suggest that more cross-linguistic empirical work in this area is needed, since often claims about the purported island insensitivity of indefinites are based on data that concern only a rather small set of islands.

#### 1 Introduction

Consider the English indefinites in (1) (for ease of reference, I usually italicize the relevant determiner):

- (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)

As is well known, in all of these cases the indefinite noun phrase, inside a syntactic island, can take scope outside of it. (1a), with the indefinite inside a relative clause, has 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, suggests 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, can 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. I often refer to these readings as "wide scope readings". The examples in (1) 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:

- (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 from examples such as these 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  $\Box$ -closure is not sensitive to syntactic islands and which can be closed off at any point in the derivation<sup>1</sup>. Schwarzschild (2002) argues that indefinites are (unambiguously) quantifiers whose movement is restricted in the same way the movement of other quantifiers is,

<sup>&</sup>lt;sup>1</sup> 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.

but that they are special in that their domain of quantification can be a singleton set<sup>2</sup>. 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<sup>3</sup>. None of these mechanisms for achieving wide scope is naturally amenable to a modification that makes them sensitive to syntactic islands. In fact, in this literature, that they are not naturally so is taken to be advantageous, given the facts in (1)-(3). I refer to all such approaches as "non-syntax-sensitive approaches" to indefinite wide scope.

Additionally, there are other, non-syntax-related arguments for choosing non-movement mechanisms to derive the wide scope of indefinites. For example, in addition to correctly generating indefinite scope across islands in examples such as (1), choice functions (and singleton indefinites) have the virtue of generating only wide collective readings, not wide distributive ones, for plural indefinites. Plural indefinites like *three relatives of mine* give rise to the former kind of reading, not to the latter, as exemplified in (4) and noted by Ruys (1995):

## (4) If three relatives of mine die, I will inherit a house

According to the wide scope reading of (4), I will inherit a house only if these three particular relatives of mine die. This reading is not a narrow scope reading (because not any three relatives count) and, crucially, it is not a wide distributive reading either (because the three of them have to die in order for me to inherit the house; one of them is not enough). As we will see in more detail below and as stressed in Reinhart (1997) and Winter (1997), choice functions cannot combine with distributivity operators, thus preventing non-existent readings, like wide distributive readings, from being generated<sup>4</sup>.

In this paper I show that the Spanish plural indefinite algunos is unlike three relatives of mine in (4) (or its Spanish counterpart tres familiares mios) in that it gives rise to collective

<sup>&</sup>lt;sup>2</sup> Breheny (2003) makes a proposal that is in some ways very close to Schwarzschild's, though the pragmatics that each account deems necessary seems very different.

<sup>&</sup>lt;sup>3</sup> 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. See footnote 23 and §3.3 for more on this.

<sup>&</sup>lt;sup>4</sup> Abusch (1994) and Kempson and Meyer-Viol (2004) note that distributive readings for plural indefinites outside of islands seem to be possible sometimes. See §3.4 for more on this.

readings only outside certain islands, and in that it also gives rise to distributive readings outside of those same islands. These facts suggest that a syntax-sensitive scope mechanism is part of the semantics of *algunos*, and, importantly, that a way for *algunos* to give rise to both wide collective and wide distributive readings outside of islands is needed. This has consequences for the general analysis of indefiniteness: how many wide-scope-achieving mechanisms are made available by the grammar? How many are operative in a given language? If there is more than one, how do languages choose among them?

The organization of the paper is as follows. In §2 I present the island facts concerning *algunos*. In this section I also consider what on the surface looks like an independent empirical generalization about this determiner, concerning its distribution over events. The reason why these facts are relevant is that they highlight the need for distributivity operators in the analysis of this indefinite. §3 develops the main point of the paper, showing that non-syntax-sensitive approaches to the wide scope of indefinites, either by themselves or in combination with syntax-sensitive ones, cannot explain the facts from §2. Two non-syntax-sensitive approaches are discussed in detail, the choice-function approach and the singleton-indefinite approach. A proposal about how to deal with the facts is suggested. §4 is the conclusion. An appendix contains some remarks on *unos*, a Spanish plural indefinite that behaves differently from *algunos* but whose behavior is often used in §2 to bring out the properties of *algunos* better.

### 2 DISTRIBUTIVITY AND SCOPE

The main empirical concern of this paper is the distribution of collective and distributive readings of the Spanish plural indefinite determiner *algunos*<sup>5</sup>. Initial examples with *algunos* are provided in (5); (5b) exemplifies with the existential construction:

(5) a. Llegaron algunos chicos a la oficina arrived some boy s office to the 'Some boys arrived to the office' b. Hay algunos libros sobre la mesa are some books on the table 'There are some books on the table'

<sup>&</sup>lt;sup>5</sup> Algunas in the feminine.

Two important empirical generalizations about this determiner are as follows. First, as mentioned above and shown in detail below, *algunos* can take scope outside of certain islands, giving rise to both collective and distributive readings. The second empirical generalization concerns distribution over events (e-distribution, as I call it): *algunos* can distribute over events. One can observe this property of *algunos* in (5a): it is possible, if, say, three boys came to my office today, that they did so separately (i.e., in three separate arriving events). This behavior of *algunos* contrasts with the behavior of another plural indefinite in the language, *unos*: with *unos*, (5a) can only be true in a situation in which there was one arriving (of as many boys as arrived) event<sup>6,7</sup>.

The remainder of this section presents the details of these generalizations.

## 2.1 Collective and distributive readings outside of certain islands

When considering the scope possibilities of *algunos*, in particular, scope outside of islands, the question of whether the determiner gives rise to wide collective and wide distributive readings arises, since *algunos* is plural. Consider the sentence in (6), based on similar examples by Reinhart (1997) and Gutiérrez-Rexach (1999b: 165):

(6)	Si alguno		ios	hermanos	pequeños	rascan la		
	if	if some cabeza, mi		siblings	younger	mine SE <sup>8</sup>	scratch the	
	cabez			madre se	preocupa			
	head		my	mother SE	worries			

'If some younger siblings of mine scratch their heads, my mother worries'

Both narrow and wide scope readings are possible for *algunos* in this example, and both a wide collective and a wide distributive reading are possible. In the narrow scope reading, any

<sup>&</sup>lt;sup>6</sup> This property of *algunos* cannot be observed in (5b), since in that example the verb is stative; i.e., there is no event involved.

<sup>&</sup>lt;sup>7</sup> Below, I often contrast the behavior of *algunos* with that of *unos*, though I only provide brief notes about *unos* here. See the appendix and footnote 15.

<sup>&</sup>lt;sup>8</sup> Se is a particle with a complex syntactic and semantic life; for a recent overview, see Juarros (2000). Se doesn't have a bearing on the issues that occupy us here.

group of younger siblings of mine scratching their head is enough to cause worry in my mother (she's afraid that my younger siblings will get lice and takes the scratching to be a sign of lice). In the wide scope readings, this is not true: in both of them, there is a particular group of siblings of mine whose actions are worrisome for my mother, so both of these readings are compatible with there being other younger siblings of mine, not included in this selected group, who don't cause worry to my mother, even if they scratch their head (e.g., because she knows that only the youngest children are at risk of lice). In the wide collective reading, all of the members of this one group of younger siblings of mine have to scratch their head in order for my mother to worry. In the wide distributive reading, the conditional statement holds of each of the members of the group and hence it is enough if one of these siblings of mine scratches his/her head for my mother to worry. It is not surprising that *algunos* gives rise to collective readings outside of islands like *if*-clauses, because numerals do so too, as exemplified in (7) (also based on Reinhart and Gutiérrez-Rexach) (cf. (4)):

(7) Si *tres familiares míos* se mueren, heredaré una fortuna if three relatives mine SE die I.will.inherit a fortune 'If three relatives of mine die, I will inherit a fortune'

In the only wide scope reading of this sentence, there are these three particular relatives of mine of which the conditional statement holds; i.e., it is not enough if just one of these relatives dies for me to inherit the money. What is more surprising<sup>9</sup> is that *algunos* gives rise to wide distributive readings outside of *if*-clauses. The sentence in (6) can be followed by a continuation that is only compatible with the wide distributive reading, as shown in (8):

(8) Si *algunos hermanos pequeños míos* se rascan la cabeza, mi madre se preocupa; por ejemplo, con que se rasque la cabeza mi hermano Juan basta para que mi madre se preocupe

'If some younger siblings of mine scratch their heads, my mother worries; for example, it is enough if my brother Juan scratches his head for my mother to worry'

(9) shows that the wide collective reading is available as well:

<sup>&</sup>lt;sup>9</sup> Though see §3.5.

(9) Si *algunos hermanos pequeños míos* se rascan la cabeza, mi madre se preocupa, aunque si se rascan la cabeza mis hermanos Pedro y Antonia, mi madre no se preocupa 'If some younger siblings of mine scratch their heads, my mother worries; though if my siblings Pedro and Antonia scratch their heads, my mother doesn't worry'

Notice that *if*-clauses are islands for quantifiers like *todos* 'every, all' or *la mayoría* 'most', and for *wh*-words<sup>10</sup>:

- (10) a. Si *todos mis hermanos pequeños* se rascan la cabeza mi madre se preocupa; <sup>#</sup>por ejemplo, con que se rasque la cabeza mi hermano Juan basta para que mi madre se preocupe
  - 'If all my younger siblings scratch their heads my mother worries; for example, it is enough if my brother Juan scratches his head for my mother to worry'
  - b. Si *todos mis hermanos pequeños* se rascan la cabeza mi madre se preocupa, <sup>#</sup>aunque si se rascan la cabeza mis hermanos Pedro y Antonia, mi madre no se preocupa
  - 'If all my younger siblings scratch their heads my mother worries, though if my siblings Pedro and Antonia scratch their heads, my mother doesn't worry'

<sup>&</sup>lt;sup>10</sup> In (12), the *if*-clause follows the main clause, whereas it precedes it in examples such as (6). The position of the *if*-clause does not seem to bear on the availability of scope out of it. In (i) (cf. (6)), both wide scope readings are still available for *algunos hermanos pequeños míos*, and in (ii) (cf. (12)), extraction is still impossible (the sentence is worse than (12) because the *wh*-word must be adjacent to the verb; see Torrego 1984 and Uribe-Etxebarría 1992, among others):

<sup>(</sup>i) Mi madre se preocupa si algunos hermanos pequeños míos se rascan la cabeza

<sup>(</sup>ii) \*¿Qué si tus hermanos comen preocupa a tu madre?

- (11) a. Si *la mayoría de mis hermanos pequeños* se rascan la cabeza, mi madre se preocupa; 

  \*por ejemplo, con que se rasque la cabeza mi hermano Juan basta para que mi madre se 
  preocupe
  - 'If most of my younger siblings scratch their heads my mother worries; for example, it is enough if my brother Juan scratches his head for my mother to worry'
  - b. Si *la mayoría de mis hermanos pequeños* se rascan la cabeza, mi madre se preocupa, <sup>#</sup>aunque si se rascan la cabeza mis hermanos Pedro y Antonia, mi madre no se preocupa 'If most of my younger siblings scratch their heads my mother worries, though if my siblings Pedro and Antonia scratch their heads, my mother doesn't worry'
- (12)\*¿Qué preocupa madre si hermanos comen? tu tus a worries what to your mother if your siblings eat 'What worries your mother if your siblings eat?'

Intermediate readings, readings in which the *algunos* noun phrase takes scope outside of an *if*-clause but below another quantifier, like *todos*, are possible, and in fact sometimes preferred. Consider (13), where the intermediate readings, collective and distributive, are very natural:

(13)Todos los profesores se enfadan si algunos alumnos (suyos) all the teachers SE get.angry if some students (of.theirs) copian en el examen cheat in the exam

'Every teacher gets angry if some students (of his) cheat in the exam'

In both of these readings, for every teacher, there is a particular set of students that prompts anger. The two readings are compatible with there being other students for one (or two, or all) of the teachers such that these other students don't prompt anger when they cheat. In the intermediate collective reading, for each of the teachers, all the members of this group of students have to cheat in order for the teacher to get angry. In the distributive reading, it is enough if, for each teacher, one of these students cheats. That the collective reading is available is demonstrated by (14); that the distributive reading is available is demonstrated by (15):

- (14) Todos los profesores se enfadan si *algunos alumnos (suyos)* copian en el examen; y, mira tú por donde, si son Juan y Pedro, el profesor de literatura no se enfada 'Every teacher gets angry if some student (of his) cheats in the exam; and, it is very curious, if it is Juan and Pedro, the literature teacher doesn't get angry'
- (15) Todos los profesores se enfadan si *algunos alumnos (suyos)* copian en el examen. Por ejemplo, si Juan copia en el examen, el profesor de literatura se enfada; si lo hace Benita, se enfada el profesor de matemáticas, y así.

'Every teacher gets angry if some student (of his) cheats in the exam. For example, if Juan cheats, the literature teacher gets angry; if Benita cheats, the math teacher gets angry, etc.'

### (16) and (17) make the same point:

- (16)Todos los vecinos enfadan si algunos niños se all the neighbors SE get.angry if some children les pisan el jardín To.them step the garden
  - 'Every neighbor gets angry if some children step on his garden'
- (17) a. Todos los vecinos se enfadan si *algunos niños* les pisan el jardín, y, mira tú por donde, si son Juan y Pedro, el vecino de la esquina no se enfada
  - 'Every neighbor gets angry if some children step on his garden, and, it is very curious, if it is Juan and Pedro, the neighbor in the corner doesn't get angry
  - b. Todos los vecinos se enfadan si *algunos niños* les pisan el jardín. Por ejemplo, si Juan le pisa el jardín, el vecino de la esquina se enfada; si Benita le pisa el jardín, el vecino de enfrente se enfada, y así
  - 'Every neighbor gets angry if some children step on his garden. For example, if Juan steps on his garden, the neighbor in the corner gets angry; if Benita steps on his garden, the neighbor across the street gets angry, etc.'

Collective and distributive readings for *algunos* noun phrases are also available outside of *wh*-islands. *Wh*-islands are islands for quantifiers like *cada* 'each' and for *wh*-movement, as shown

in (18) and (19). (18) doesn't easily allow a reading in which the guard varies with the paintings<sup>11</sup>:

- Un vigilante quién robó cada del (18)vió cuadro museo a guard saw who stole each painting of.the museum 'A guard saw who stole each painting in the museum'
- (19) ?? ¿ Qué preguntó tu hermana cuándo comeríamos? what asked your sister when we.would.eat 'What did your sister ask when we would eat?'

However, *algunos* can escape *wh*-islands. In order to show this, a scope-bearing element must be added to the sentence, since otherwise it is not possible to tell whether the indefinite takes scope outside the island or not. Added to this is the impossibility of using monotone quantifiers, such as universal ones, since with them it is impossible to tell whether the purported wide scope reading of the indefinite over the universal is a real reading or not. Finally, for reasons I don't understand, *algunos* noun phrases cannot outscope quantifiers like *justo la mitad* 'exactly half' in simple clauses, but it is with non-monotone quantifiers like this one that wide scope readings of indefinites are logically independent of narrow scope readings. This reduces the possibilities of testing a lot. It is possible to get both kinds of wide scope readings for *algunos* when the indefinite is contained within a *wh*-island that is itself contained within an *if*-clause; the *if*-clause then acts as the other scope-bearing element. Consider (20):

<sup>&</sup>lt;sup>11</sup> The wide scope reading of *cada* is easily available in (i):

<sup>(</sup>i) Un vigilante robó cada cuadro del museo a guard stole each painting of.the museum 'A guard stole each painting in the museum'

sheet

'If I forget who gets into a fight with some children, the kindergarten director writes it down on my sheet'

In addition to the (perhaps slightly odd) narrow scope reading, there are two wide scope readings for *algunos* in this sentence. The wide collective reading is compatible with there being other children such that, if I forget who got into a fight with them, the director doesn't write it down on my sheet, which distinguishes it from the narrow scope reading. For this reading to be true, there has to be a particular group of children for which the conditional statement holds; i.e., this reading in incompatible with the director writing down on my sheet if I forget who got into a fight with just one of these children. But it is precisely this situation that makes the wide distributive reading true. So the readings are logically independent of each other. And, crucially, both the wide collective and the wide distributive are there.

The logic here is that if *algunos* can take scope outside of the *if*-clause, then it must be able to take scope outside of *wh*-islands, since the *wh*-island is contained within the *if*-clause. The same logic applies to cases like (21), in which *algunos*, embedded inside of a *when*-clause which is itself embedded inside of an *if*-clause, can take scope outside of the *if*-clause ((22) shows that *when*-clauses are islands for *wh*-movement):

(21)	Si	cuando algunos		niños lloran los		profesores			
	if	when some		children	cry the		teachers		
	no	reaccionan, el react the historiales sheets		director de la	guarde	ería	lo	apunta	en
	not			director of the kindergarten			cl.	notes	in
	sus								
	their								

'If when some children cry the teachers do not react, the kindergarten director writes it down on their sheets'

One might object to the conclusion that *algunos* can outscope *wh*-islands and *when*-clauses as follows. The only examples that support this conclusion are cases that involve *if*-clauses ((20), (21)). Perhaps the right conclusion to draw is that *if*-clauses are somehow special, not that *algunos* can outscope (certain) islands. Perhaps *if*-clauses, for reasons we do not understand, make it easy to have wide scope readings with *algunos*.

An argument that *if*-clauses are not special in this sense is that *algunos* cannot just outscope any sort of island embedded in an *if*-clause. For example, when *algunos* is contained within a relative clause, it cannot take scope outside of the *if*-clause that contains it:

(23)	Me	preocuparé	si	los	médic	os	empie	zan	a	considerar
	cl.	I.will.worry	if	the	doctor	S	start		to	consider
	la	posibilidad	de	sedar	a	alguno	OS .	pacientes		
	the	possibility	of	sedate	to	some		patien	ts	

<sup>&#</sup>x27;I will worry if doctors start to consider the possibility of sedating some patients'

The sentence in (23) allows for a narrow scope reading (in which the possibility of sedating any patients causes worry), but it doesn't allow for either wide scope reading. The wide collective reading is compatible with no worry being caused by doctors considering the possibility of sedating certain patients (e.g., cancer patients), and the wide distributive reading is compatible with worry being caused by the first patient doctors consider the possibility of sedating, but (23) cannot be understood in these ways. Examples such as (23), then, suggest that *if*-clauses are not special in facilitating wide scope readings for indefinites; what is at stake is whether the indefinite is inside of an island that it is sensitive to. Examples below with coordination ((28)) will help to make the same point.

In fact, it is possible to check for the islandhood of relative clauses without having to embed the relative clause in an *if*-clause but using universal quantifiers: the wide scope of existential quantifiers in the restriction of universals is not a special case of their narrow scope

<sup>&#</sup>x27;What do you say that María gets angry when she sees on TV?'

(cf. Farkas 1981, Reinhart 1997). The sentence in (24) lacks either wide scope reading; (25), with *la mayoría* 'most' in the same position, cannot take scope above *todos los días* 'every day':

(24)días algunos Juan se preocupa todos los que niños Juan SE worries all the days that some children se rascan la cabeza SE scratch their head

'Juan worries every day that some children scratch their head'

(25) Juan se preocupa todos los días que *la mayoría de los niños* se rascan la cabeza 'Juan worries every day that most children scratch their heads'

That is, (24) can only be true in a situation in which any boys' scratching causes worry in Juan. (26) is another example that makes the same point, based on Farkas' 1981 example in (1a):

(26)aprobó a todos los alumnos leyeron Juan que se passed to Juan all the students that SE they.read novelas Cela algunas de some novels of Cela

'Juan passed every student who read some novels by Cela'

(26) lacks a wide collective and a wide distributive reading for *algunas novelas de Cela*. That is, the sentence is not compatible with a situation in which Juan passed all the students who read 'La Familia de Pascual Duarte', 'La Colmena' and 'Mazurca para Dos Muertos' but he didn't pass all the students who read some other novels by the same author (allowed by the wide collective reading) or with a situation in which Juan passed students who read only one of a selected group of novels by Cela (allowed by the wide distributive reading).

*Algunos* noun phrases cannot take scope above a negation in a higher clause<sup>12</sup>. Consider (27):

<sup>&</sup>lt;sup>12</sup> I do not use same-clause negation because it seems that *algunos* is a positive polarity item, as shown by examples like (i):

(27)No dijiste Juan hubiera visto algunos que not said.you that Juan had some seen to niños rascándose la cabeza children scratching the head

The only kind of situation in which this sentence can be true is one in which, according to what you said, Juan saw no children at all scratching their heads. This is the kind of situation that makes the narrow scope reading of *algunos niños* with respect to negation true. The sentence cannot be true in a situation in which, according to what you said, Juan saw some children but not others scratching their head (allowed by the wide collective reading)<sup>13</sup>.

Finally, *algunos* noun phrases cannot take scope outside of coordinations. Consider (28), with the relevant noun phrase embedded in a coordination that is itself embedded in an *if*-clause:

(28)Si mi hermana mayor y algunos hermanos pequeños míos se rascan la if my sister older and siblings younger mine SE scratch the some cabeza, mi madre se preocupa head my mother SE worries 'If my older sister and some younger siblings of mine scratch their head, my mother

worries'

The sentence has neither a wide collective reading ("there is a set X of younger siblings of mine such that if my older sister and the members of X scratch their head, my mother worries") nor a

(i) No se comió *algunas* manzanas not SE ate some apples 'S/he didn't eat some apples'

(i) can only be understood with *algunos* scoping above negation; that is, according to (i), it is possible that s/he did eat some apples. I put these cases aside.

<sup>&#</sup>x27;You didn't say that Juan had seen some children scratching their head'

<sup>&</sup>lt;sup>13</sup> It is hard to tell what sorts of situations make the wide distributive reading true, because in this reading, for each child x in a selected group of children, you must have not said "Juan saw x scratching x's head". That is, for each child, there has to be an event of not saying that s/he scratched his/her head, but I am not sure what would count as such an event.

wide distributive reading ("each x in set of younger siblings of mine is such that if my older sister and x scratch their head my mother worries"). The only reading available is a narrow scope reading, "if my older sister and some younger siblings of mine or other scratch their head, my mother worries". That is, the only kind of situation in which this sentence can be true is one in which my mother worries at the sight of any group of younger siblings of mine together with my older sister scratching their heads. There is no particular group of younger siblings of mine involved (hence, no wide collective reading), and my mother does not become worried the minute she sees one in a particular group of siblings scratching his/her head (hence, no wide distributive reading).

In contrast with *algunos*, the distribution of wide scope readings for *unos* is much more restricted: wide scope readings for *unos* in examples like those considered in this section are impossible. Though the focus of this paper is not *unos*, it is often useful to contrast examples with *algunos* and with *unos*, since the fact that *algunos* has more freedom of interpretation often becomes very clear then. Also, it further supports the conclusion that *if*-clauses do not generally facilitate wide scope readings, since they cannot do so for *unos*.

The distribution of collective and distributive readings for *algunos*, then, is island-sensitive. Both kinds of readings are possible out of *if*-clauses, *when*-clauses and *wh*-islands, and both of them are unavailable with relative clauses, negation in a higher clause, and coordinations<sup>14</sup>.

#### 2.2 *E-Distribution*

Another fact about *algunos* that will be important in the discussion in §3 is that it gives rise to readings in which it distributes over events. Consider (29):

<sup>&</sup>lt;sup>14</sup> Alonso-Ovalle and Menéndez-Benito (2002) show that the scope of the singular version of *algunos*, *algún*, seems to be sensitive to some islands as well: as opposed to *algunos*, *algún* cannot take scope outside of *if*-clauses, but it can outside of relative clauses. I leave the detailed study of the properties of *algún* for another time.

(29)Hoy en el colegio he visto algunos niños a today in school children the I.have seen some to rascándose la cabeza y temo que vayamos tener a scratching head and I.fear that we.would the have to problemas con los piojos problems with the lice

'Today in school I saw some children scratching their heads and I am afraid we are going to have problems with lice'

(29) can describe the following situation. Imagine that I work at a school with small children. Today I saw a total of three children scratching their heads (each child his/her own head): I saw one of the children in the morning in the gym, another one at lunchtime in the cafeteria, and the other one I saw in my afternoon class. I am concerned about lice. *Unos* contrasts with *algunos* in not being felicitous in (29)<sup>15</sup>. *Algunos* does not have to distribute over events, so that the sentence in (29) (and the corresponding one with *unos*) can also describe a variant of the above situation in which I saw the three children scratching their head all at the same time, in the same place.

Another example that makes the same point is (30). This sentence can describe the following situation. Imagine that I really enjoy gardening and I love to keep the grass beautiful and perfectly trimmed. Yesterday, as many as three times I looked out the window and saw one of those annoying neighborhood kids riding his bike across my beautiful lawn. In no case did I see more than one kid at a time, but it is already bad enough as it is:

<sup>&</sup>lt;sup>15</sup> It is often claimed in the literature (e.g., Gutiérrez-Rexach 1999a, b, 2001; Villalta 1994, which I haven't seen) that *unos* cannot combine with distributive predicates like *rascarse la cabeza* 'scratch his/her head' or *ponerse los pantalones* 'put his/her pants on'. This seems not to be true: whereas replacing *algunos* with *unos* in (29) makes the sentence infelicitous, it doesn't make it ungrammatical. Changing the situation appropriately, as done immediately below, makes the sentence with *unos* and the distributive predicate appropriate and, of course, grammatical.

(30)Ayer fue día terrible porque algunos chicos un terrible because yesterday day some boys was a del vecindario pasaron con la bicicleta por el of.the neighborhood rode with the bicycle across the césped lawn

'Yesterday was a terrible day because some neighborhood boys rode their bikes across the lawn'

As above, replacing *algunos* with *unos* produces inappropriateness, and changing the situation so that there is only one event of bicycle riding is fine both with *algunos* and with *unos*.

As mentioned earlier, the existence of e-distribution readings will highlight the need for distributivity operators, since such readings are easily accounted for by having *algunos* scope above such an operator, which in turn scopes above an  $\square$ -quantifier over events. Empirically, the important point is that e-distributive readings are possible even in cases in which the indefinite takes wide scope and is interpreted collectively. Consider again (6), repeated here as (31):

(31) Si algunos hermanos pequeños míos se rascan la if mine SE some siblings younger scratch the cabeza, mi madre se preocupa head mother SE worries my

In the wide scope reading for this sentence, there is a particular group of younger siblings of mine such that, if the members of this group scratch their head, my mother worries. It is not enough if just one of these children scratches their head (which the wide distributive reading allows), all of the members of this group have to do so in order for my mother to worry. Additionally, this reading allows for the possibility that there are other younger siblings of mine that do not cause worry in my mother when they scratch their head. The question now is whether (31) in the wide scope reading of the indefinite says that all of the relevant siblings of mine scratched their head at the same time (no e-distribution) or that they did so separately (e-distribution). Importantly, (31) can be understood either way. That is, e-distribution is independent of the distributivity-collective distinction that arises with wide scope readings of

<sup>&#</sup>x27;If some younger siblings of mine scratch their heads, my mother worries'

algunos. What this means is that, no matter how we account for wide scope readings, if we stick to the account (details of which follow in the next section) of e-distribution that makes use of a distributivity operator, then we need a distributivity operator to account for aspects of the meaning of algunos. This in turn means that if we pursue a movement approach, as I do here, we need to worry about the distribution of this operator, as pointed out by Reinhart (1997) and as discussed below in §3.4.

### THE SYNTACTIC SENSITIVITY OF *ALGUNOS* AND THE SEMANTICS OF INDEFINITENESS

### 3.1 Background assumptions

The argument that follows requires some background assumptions to be made. I take these assumptions to be fairly standard. First, I take plural nouns to denote sets of plural individuals (cf. Landman 1989, Link 1983, Schwarzschild 1996, and many others). Second, I take predicates to contain an event argument (cf. Davidson 1967, Parsons 1991, and many others). The denotation assumed here for, e.g., *llegaron* 'arrived', is as in (32):

(32) 
$$[[llegaron]] = []x.[]e. arrived (x)(e)$$

The event argument does not get saturated (at least, not in many cases) but is existentially closed, following e.g. Chung and Ladusaw (2004). Thus, the LF for a sentence like (33) is as in (34):

(33) El niño llegó the boy arrived 'The boy arrived'

## (34) [el niño [1 [ $\square$ e [ $t_1$ llegó]]]

This LF, combined with suitable assumptions about the definite determiner (see, e.g., Heim and Kratzer 1998) gives rise to the following truth-conditions: "the unique x such that x is a boy is

such that there is an event e in which x came" (and to the presupposition that there exists such a unique boy).

Third, in order to account for distributivity, I use a D-operator that can be inserted in the syntax anywhere where it is type-wise compatible<sup>16</sup> (c.f. Landman 1989, Link 1983, Roberts 1987, Schwarzschild 1996, Beck 2000, among others). The contribution of the D-operator is in (35):

(35) 
$$[[D]] = \prod_{e,t} [x \cdot [y] [(sing ind(y) \& y \mid x) \mid f(y)]$$

I.e., the D-operator takes a predicate and returns another predicate that applies to all the members of a plural individual<sup>17</sup>.

# 3.2 Choice function indefinites

Let us go through the details of a choice-function approach to the semantics of *algunos*<sup>18</sup>. 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:

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

The  $D_E$ -operator takes a predicate with an event argument and returns another predicate with an event argument that applies to all the members of a plural individual.  $D_E$  combined with *llegaron* gives rise to (ii):

(ii) 
$$[[D_E \text{ llegaron}]] = []x.[]e.[]y [(sing ind(y) \& y [] x) [] \quad arrived(y)(e)]$$

As far as this paper is concerned, we can predict all the required readings with the D-operator, as shown in §3.4, so I do not adopt (i) in the main text.

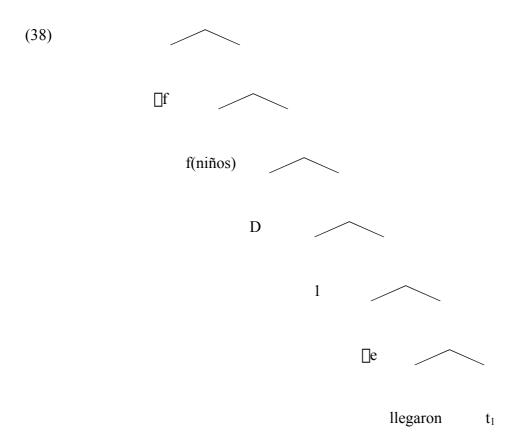
<sup>&</sup>lt;sup>16</sup> This freedom, as discussed in §3.5 and in Reinhart (1997), will cause us problems.

<sup>&</sup>lt;sup>17</sup> 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):

(36) [[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 must be able to 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). The analysis for (37), a variant of (5a), as in (38):

(37) Llegaron *algunos niños* arrived some boys 'Some boys arrived



<sup>&</sup>lt;sup>18</sup> 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 participates in categorical judgments. Neither kind of analysis can accommodate the facts from §2. See below.

In addition to the closure of the choice function variable, the free event variable contributed by the predicate must also be closed. I assume here that this closure of event variables is a process that affects clauses and that it happens, in the case of (37), at the point in the derivation indicated in (38) (cf. Chung and Ladusaw 2004, and see the appendix for more discussion of the point at which this closure might take place). (38) gives rise to the truth-conditions in (39), i.e., there is a choice function f such that for all singular subparts y of the plurality of boys f selects there is an event e such that y arrived in e:

(39) 
$$\Box$$
f [CH(f) &  $\Box$ y (sing ind(y) & y  $\Box$  f(niños))  $\Box$   $\Box$ e (llegaron (y)(e))]

If the event of arriving that (39) chooses is different from child to child, e-distribution results. If the event is the same for all children, there will be no e-distribution.

This approach predicts that collective readings should be possible for *algunos* outside of all sorts of islands. We know that this is not true, but it is still worth emphasizing that choice functions are well suited as generators of collective readings. The (rough) LF for example (31) is in (40a), giving rise to the (rough) truth-conditions in (40b):

(40) a. [☐f [if f(younger siblings of mine) scratch their head, my mother worries]]b. ☐f [CH(f) & (f(younger siblings of mine) scratch their head ☐ my mother worries)]

The sentence is correctly predicted to give rise to the meaning "there is a choice function f such that if the singular subparts of the plurality of younger siblings of mine that it selects scratch their head, my mother worries", the collective reading. The problem for choice functions here is one of overgeneration, since nothing prevents collective readings from being generated with relative clauses or above (high) negation, but we know from §2 that they are not possible in these contexts.

Another problem for an approach that uses only choice functions for the semantics of *algunos* is that wide distributive readings are not predicted. The reason is that the LF that would give rise to such readings, which involves a distributivity operator taking scope over the island and the main clause, is ill-formed:

### \*[\(\sigma\) f [D [if f(younger siblings of mine) scratch their head, my mother worries]]]

(41) is not interpretable: the D-operator must combine with an argument of type <e,t>, but in this LF it is the sister of something of type <t>. The problem resides, of course, in that the constituent the D-operator attaches to did not arise as a result of movement, which, through □-abstraction, would have created a sister of the right type. There was no movement because a choice function was used for the indefinite, so that its quantificational force comes from a □-quantifier that is simply attached anywhere in the structure, not moved there. This is a good consequence for numerals in cases such as (4) and (7)<sup>19</sup>, since these indefinites do not give rise to wide distributive readings. But *algunos* does.

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 is possible to predict distributive readings for the indefinite, and even to make the movement of the quantifier sensitive to islands (see §3.4). But notice that wide collective readings would still be generated with relative clauses and high negation.

Another potential problem with this mixed approach is as follows. QR would have to be modified so as to allow the indefinite under its quantificational meaning to move out of certain islands, since wide distributive readings are possible outside certain islands; this, I suggest in §3.4, might actually be what we need to explore. But notice that modifying this mixed approach in some way so as to solve the problem of the island-sensitivity of collective readings is not enough. Under such an (improved) mixed approach, it is purely accidental that the same islands allow wide collective and wide distributive readings and the same islands prevent them: the two kinds of readings are generated via different mechanisms, so it is not expected that the same constraints will operate on both<sup>20</sup>.

### 3.3 *Singleton Indefinites*

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

<sup>&</sup>lt;sup>19</sup> But see §3.5 for more on this.

<sup>&</sup>lt;sup>20</sup> See Geurts (2000) for additional reasons against choice functions. His conclusion is also (see §3.4) that a movement theory fares better than a choice-function, non-movement approach, though his argument is, I think, more general than mine.

for their ability to take scope outside of islands: their contextually-restricted domain of quantification can be a singleton set. An example such as (42) (from King 1988) is analyzed as in (43), with the added assumption that the domain of quantification of *a book that was deemed pornographic* is a singleton:

- (42) Each author in this room despises every publisher who would not publish *a book that was deemed pornographic*
- (43) [Each author]<sub>1</sub> in this room despises every publisher who would not publish a book he<sub>1</sub> had written that was deemed pornographic

The idea is that  $he_1$  had written is implicit in (42). With these assumptions in place, the reading that is predicted for (42) 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, (42) 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 (44) (a variant of our earlier (4)) and its wide scope paraphrase in (45):

- (44) If three relatives of mine died this year, I will inherit a house
- (45) I have three relatives such that if they all died this year, I will inherit a house

(45) is not immediately true if some individual or other exists (e.g., Donald Duck, who is not a relative of mine). However, (45) is true as long as I have three relatives who did not die this year, and (44) 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 (45) is not true under such weak circumstances. Only those relatives in the domain restriction of the quantifier

count. In Schwarzschild's (2002: 303) words: "...regardless of one's theory of exceptional scope, the existential quantification associated with indefinites must be contextually restrictable".

Whether the domain restriction of the indefinite is a singleton set or not has nothing to do with the syntax in which the indefinite finds itself. This is the reason why *algunos* cannot be a singleton indefinite. In order to predict collective 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 collective readings, i.e., restriction of the domain of quantification down to a singleton, would have to be sensitive to islands. But there is no reason to think that this mechanism would be sensitive to something like that.

Furthermore, there is no way in this account to explain wide distributive readings; these simply cannot be generated under these assumptions. The reason is similar to the case of choice functions. The LF for the wide distributive reading for the famous example (46), from §2, is as in (47) under these assumptions:

(46)	Si algunos		eos	hermanos	pequeños	n la	
	if	some		siblings	younger	mine SE	scratch the
	cabeza,		mi	madre se	preocupa		
	head		my	mother SE	worries		

<sup>&#</sup>x27;If some younger siblings of mine scratch their heads, my mother worries'

(47) \*[D [if algunos younger siblings of mine scratch their head, my mother worries]]]

But (47) is ill formed for two reasons: first, the argument of the D-operator must be of type <e, t>, and it isn't, and the type of the root node must be <t>, but it isn't either. Even if the latter problem could be solved somehow (but assuming that the function does, after all, get saturated), the first problem, as was the case with choice functions (see §3.2), cannot be resolved.

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 (46) would move the existential quantifier outside of the island,

<sup>&</sup>lt;sup>21</sup> See Schwarzschild (2002: §5) for notes on how to draw the distinction between the domain restriction of indefinites and that of other quantifiers.

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, then, to reject a nice attempt at dealing with the "Donald Duck" problem, a problem that, despite appearances, does not get solved with choice functions<sup>22</sup>. To repeat, the reason is that, despite the fact that something like it seems to be necessary to prevent truth-conditions that are too weak (recall (44)-(45)), the domain restriction of indefinites being a singleton set is not something that can naturally be made to depend on the syntactic environment that the indefinite finds itself in. Just as Schwarzschild does with other quantifiers, something must be built into their semantics or pragmatics that prevents their domain from being a singleton<sup>23</sup>. This leaves us without a solution to the "Donald Duck" problem. In what follows, however, and pending a new solution to the problem, it is the stronger truth-conditions that are intended when paraphrases are given<sup>24</sup>.

(i) Everyone in the Italian department is happy with Cipriano's proposal, since there is just one person in the Italian department and that is Cipriano

At the moment I think all possibilities are open for indefinites, pending further study: the non-singletonness could be also something more semantic.

<sup>24</sup> 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.

<sup>&</sup>lt;sup>22</sup> See Haida (2003) for another way of showing that the "Donald Duck" problem does not go away with the help of choice functions.

<sup>&</sup>lt;sup>23</sup> Schwarzschild (2002: §5) claims that this is a conversational implicature in the case of quantifiers like *every*, since non-singletonness can be cancelled, as in (i):

### 3.4 Relativized QR

In this section I first start by proposing a quantificational approach to the semantics of *algunos* that fails on its inability to predict collective readings. Then, I modify this approach so that these readings can also be predicted. The discussion of this approach concerns also some of its shortcomings, in particular, the problems that the freedom of insertion for the D-operator raises, which are important for the main argument of this paper. At this point, what I have to offer is more a description rather than an explanation of the facts, as I will not be able to provide principled answers to certain important questions. My goal is, therefore, more humble: it is to point out that something like the account of *algunos* I propose, with the appropriate, justified restrictions, is right.

(48) treats *algunos* as a quantifier with access to singular individuals<sup>25</sup>. Notice that this treatment of *algunos* 'builds' distributivity into its meaning; let us assume for the moment that this is the only meaning of *algunos*:

$$(48) \qquad [[algunos]] = [g_{\langle e,t \rangle}.[f_{\langle e,t \rangle}.[x g(x) = 1 \& [y (sing ind(y) \& y [x) f(y) = 1]]$$

In order to predict the existence of wide distributive readings outside of the right islands, we need to adopt a relativized version of QR, where this kind of movement, just like overt movement, is sensitive to some islands and not others. Notice that, in the case of *algunos*, this entails formulating QR in such a way that some quantifiers (*algunos* in (48)) though not others (e.g., *todos* 'all') can scope outside of *if*-clauses, *when*-clauses and *wh*-islands, and (presumably) all quantifiers are prevented from scoping outside other islands (relative clauses, negation). So

<sup>&</sup>lt;sup>25</sup> (48) is equivalent to the more standard semantics in (i), except that (48) takes into account the fact that the argument of the quantifier is plural, whereas (i) doesn't (to do justice to the meaning of *algunos*, we would have to add to (i) the requirement that there be more than one x that yields true for both properties):

<sup>(</sup>i)  $[[algunos]] = [g_{e,t}] \cdot [f_{e,t}] \cdot [x \ g(x) = f(x) = 1 ]$ 

this approach entails quite a fine-grained view on QR: it must be made sensitive both to the kind of quantifier involved and the kind of island involved<sup>26</sup>.

Let us assume that such an approach is viable, bearing in mind of course that we still need to work out its details and, importantly, restrict it appropriately. What are its consequences? *Algunos* is correctly predicted to give rise to wide distributive readings outside certain islands and not outside others. *Algunos* is correctly predicted to give rise to e-distributive readings. In fact, since *algunos* is by definition distributive, there is no need to make use of the D-operator in order to predict e-distribution in certain cases, the LF in (49) suffices<sup>27</sup>:

# (49) [ [algunos ni $\tilde{n}$ os] 1 [ $\Box$ e [ $t_1$ llegaron]]]

If (48) is the only meaning for *algunos*, however, *algunos* is not predicted to give rise to wide collective readings, since (48), as mentioned above, has distributivity built in.

As argued for at the end of §§3.2 and 3.3, an approach that combines choice functions/singletonness and quantificational meanings like (48) is not adequate. So let us try something else. Suppose we say that (48) is not the only quantificational meaning of *algunos*; in fact, let us say that *algunos* is ambiguous between (48) and (50) ('X' ranges over plural individuals):

(50) 
$$[[algunos]] = [g_{e,t}] f_{e,t} [X g(X) = 1 \& f(X) = 1]$$

QR, I should point out that it is not surprising that constraints on movement are sensitive to the kind of island involved and the kind of element that moves, since other kinds of movement (e.g., wh-movement; see Starke 2001 for an overview) are sensitive to these kinds of constraints. Also, papers in Szabolcsi (1997), e.g., Beghelli and Stowell (1997), explore the possibility that QR does not apply uniformly to all quantifiers, where the syntax plays an important role in determining this; perhaps it is possible to make sense of the data in this paper within such a framework. It is because of issues such as these that, at the moment, the account in this section is more descriptive than explanatory.

<sup>&</sup>lt;sup>27</sup> Notice that lack of e-distribution can still be predicted, because nothing forces events of arriving that are different from child to child.

(50) makes singular individuals inaccessible. So what (48) and (50) do is make *algunos* ambiguous between a quantifier with access to singular individuals and a quantifier without that access<sup>28</sup>.

Wide distributive readings, their (im)possibility across some islands, and the possibility of e-distribution are predicted with (48) plus Relativized QR, as before. If *algunos* can also mean (50), and if this other quantificational meaning of the determiner is subject to the same movement constraints as (48) is, wide collective readings are correctly predicted across the same islands that allow wide distributive readings<sup>29</sup>. (52) is the LF for the wide collective reading of (31), repeated as (51):

(51)	Si	algunos some		hermanos	pequeños	míos se	rascan la
	if			siblings	younger	mine SE	scratch the
	cabeza,		mi	madre se	preocupa		
	head		my	mother SE	worries		

<sup>&#</sup>x27;If some younger siblings of mine scratch their heads, my mother worries'

$$(i) \qquad [[\&]] = \Box Q_{\langle et, \langle et, t \rangle}. \Box h_{\langle e, t \rangle}. \Box i_{\langle e, t \rangle}. Q(h) (\Box y. \Box z \text{ (sing ind(z) \& z } \Box y) \Box i(z) = 1)$$

Alternatively, we can assume that (50) is the only meaning of *algunos* and that (48) arises as a result of the combination of (50) with the  $\aleph$ -operator in (i), a quantifier-version of the D-operator:

<sup>&</sup>lt;sup>29</sup> Notice that it does not do to assume that all QR movements are subject to the same movement constraints, since *todos* 'all' still behaves different from the two *algunos*. This somewhat weakens the potential of this double-quantificational approach to account for the fact that wide distributive and wide collective readings go hand in hand, since the behavior of *todos* leaves open the possibility that the two *algunos* behave differently from each other with respect to island constraints. Yet, the situation of this approach is better than it was for the case of choice functions, because with choice functions we do not have any reasons to begin with to expect island sensitivity.

(52) [algunos hermanos pequeños míos] [1 [si [t₁ [D [1 [ ]e [t₁ se rascan la cabeza]]] mi madre se preocupa]]

As before, e-distribution results from choosing different scratching events for each one of my younger siblings, and lack of e-distribution results from choosing the same scratching event for all of them.

## 3.5 *The problem of wide distributive readings*

Neither of the two non-syntax-sensitive approaches discussed above can predict the existence of wide distributive readings, i.e., distributive readings outside of syntactic islands. We saw that this is not a welcome result with *algunos*, since *algunos* gives rise to distributive readings outside some islands. But, is it also an unwelcome result more generally?

According to Reinhart (1997), it is a virtue of the choice function approach that wide distributive readings are not predicted (recall §3.2), because such readings are absent in cases such as (4) (repeated as (53)), (7) (repeated as (54)), or (55):

- (53) If three relatives of mine die, I will inherit a house
- (54) Si *tres familiares míos* se mueren, heredaré una fortuna if three relatives mine SE die I.will.inherit a fortune 'If three relatives of mine die, I will inherit a fortune'
- (55) If some relatives of mine die, I will inherit a house

According to her, the fact that D-operators are combinable with lexical entries like (50) is a problem for cardinals like *three*, since *three* does not give rise to wide distributive readings. Nothing prevents the combination of a collective reading for *tres* 'three', similar in the relevant respects to that in (50) for *algunos*, with the high attachment of the D-operator, giving rise to a

wide distributive reading for (54). It is not a problem for *algunos*, though, since the LF in (56) gives rise to a reading that the sentence in (51) has:

[algunos hermanos pequeños míos] [D [1 [ [si [  $\Box$ e [t<sub>1</sub> se rascan la cabeza]]] mi madre se preocupa]]

This LF together with (50) gives rise to a wide distributive reading, with or without edistribution, depending on whether different events are chosen for each of the siblings or not.

On the other hand, Abusch (1994) and Kempson and Meyer-Viol (2004) point out that wide distributive readings are available in (57) and (58):

- (57) Every critic who reviewed *two books by Henry Miller* panned them (Abusch 1994: 118)
- (58) If three of my friends get a first, I will be surprised; and if they all do, I will be amazed (Kempson and Meyer-Viol 2004: 564)

So is it or isn't it a good thing that choice functions do not predict wide distributive readings? And, is it or isn't it a good thing that the relativized QR approach predicts wide distributive readings? If it is true that wide distributive readings exist in examples such as (57) and (58), then choice functions should be abandoned for these cases, because they are not capable of generating such readings, just as they should be abandoned for *algunos*. That the relativized QR approach can at least generate the readings in question should be seen as advantageous, but, of course, care must be taken because these readings are not always available (cf. (53), (54), (55)). If no such readings exist in (57) and (58), then *algunos* is special in highlighting the need to generate wide distributive readings in some cases, and the relativized QR approach, or something like it, is still needed to account for its properties<sup>30, 31</sup>.

<sup>&</sup>lt;sup>30</sup> An important empirical question that remains, and which I do not attempt to answer here, is how come cardinals such as *three* sometimes do and sometimes don't give rise to wide distributive readings, if Reinhart, Abusch and Kempson and Meyer-Viol are all right in their empirical claims.

In either case, it seems that the relativized QR approach, or (again) something like it, is needed. However, the task left for the relativized QR approach is not easy in this respect, and it is a particular fact about *algunos* that highlights this: e-distribution can co-exist together with wide collective readings (cf. (52)). What this means is that a potential solution that presents itself in this approach, i.e., abandoning the D-operator altogether<sup>32</sup>, is not viable. The problem posed by *algunos* in (51)/(52) is that there is work for the D-operator that (48) cannot do, since (48) cannot be used to generate wide collective readings<sup>33</sup>. So it seems that a better strategy to take is to maintain the analysis of e-distribution in terms of a D-operator. If so, the task for the relativized QR approach like the one the Spanish facts seem to suggest is to investigate whether there are any restrictions on the placement of the D-operator that do the required work; if the facts in (53)-(58) are right, these restrictions might need to be sensitive to particular lexical items (i.e., some indefinites, but not others). Such a restriction would prohibit attachment as high (if height is the right factor) as in the LF in (56) in the case of (53)-(55), though not in the case of (57) and (58). The question that remains, as pointed out by Reinhart 1997, is whether such a constraint on the attachment of the D-operator can be defended.

<sup>&</sup>lt;sup>31</sup> Schwarzschild's (2002) approach is like the choice function approach in that the mechanism he proposes for indefinite wide scope is not capable of generating wide distributive readings, as discussed in §3.3.

<sup>&</sup>lt;sup>32</sup> Notice that part of its work is already done by (48), and that for cases like (57) or (58) one could perhaps posit a lexical, distributive-collective ambiguity in the determiner.

<sup>&</sup>lt;sup>33</sup> Of course, it is possible that scope above an existential operator over events plus distribution in the form of a D-operator or in the form of (48) is the wrong analysis of e-distribution, though I don't know of another way to account for it. Even then, of course, we would have to make sure that the other parts of the grammar that make use of the D-operator can be dealt with in an alternative way, not an easy task at all.

#### 4 CONCLUSION

As matters stand, we do not yet have a satisfactory account of the properties of algunos, partly because I have not offered a principled way of restricting relativized QR so that facts concerning quantifiers other than algunos are predicted, partly because it seems that the distribution of the D-operator needs to be restricted as well but we don't know how. My more humble goal, however, has been achieved: only a system which, like this one, makes the scope of algunos sensitive to the syntactic environment it finds itself in is capable of accounting for the generalizations presented in §2. In this paper I have pointed out the importance of the algunos scope facts for a choice-function and a singletonness approach to the semantics of indefinites. The main problem for such approaches is that wide collective readings of algunos are island sensitive, but choice functions or the domain restriction of a quantifier being a singleton are not the kind of mechanism that one expects to be sensitive to syntactic islands. A related point was the existence of wide distributive readings, unexpected under a conception of QR in which there is no possibility of escaping islands. Yet another related point is that collective and distributive readings are sensitive to the same kinds of islands. These facts, I suggested, call for an analysis of algunos in which it is treated as an ambiguous existential quantifier, with one of its lexical entries capable of accessing individuals and the other one incapable of doing that. It is only if algunos takes scope by movement that we can begin to understand why its wide scope readings are sensitive to the kind of syntactic environment it finds itself in.

Importantly, if one needs to make these fine-grained adjustments to the quantifier story anyway, the fact that (some) indefinites can escape (some) islands is no longer an argument for non-movement approaches to the semantics of indefinites. The important question that arises then is whether we can do away with choice functions/singletonness altogether. I.e., perhaps indefinite quantifiers in other languages are less (or more) restricted in their movement than Spanish *algunos*. At any rate, the cross-linguistic picture that emerges is one in which either UG does not make choice functions/singletonness available as an analysis for indefinites, or, else, languages can choose between several options. In either case, a quantifier approach like the one discussed in §3.4 is either the only option or, at the very least, one of the options. Important questions arise: in the second kind of scenario, can a given language choose one analysis for one quantifier and a different one for another one? In the first kind of scenario, the issue of justifying the restrictions on movement that are necessary for indefinites is very important.

While I have not attempted to answer these difficult questions here, I think that the discussion in this paper suggests, at the very least, that the islandhood argument for non-movement approaches to the semantics of indefinites needs to be reconsidered. E-distribution turns out to be relevant in this reconsideration, since it shows that the force of the islandhood argument does not affect the distributivity argument for choice functions/singletonness. Given that it is rare to find an exhaustive empirical study of the island-violating behavior of indefinites, more thorough empirical work is needed in this area before conclusions about islandhood are reached.

# **Appendix** Unos: Restriction and □-closure of arguments (Chung and Ladusaw 2004)

The focus of this paper is not on *unos* but at several points in the discussion I have made reference to its behavior, mainly to contrast it with that of *algunos*. This appendix includes brief remarks on the analysis of the properties of *unos* described here.

Contrary to *algunos*, *unos* cannot outscope any island. As pointed out in §2, *unos* cannot take scope outside any of the islands discussed there. In addition, it was also pointed out that *unos* couldn't e-distribute. The interpretation possibilities of *unos* in these two respects are thus much more limited than for *algunos*.

Something that I think any analysis of *unos* and *algunos* should address is the fact that, at least on the surface, the two indefinites seem to be morphologically related: *algunos* seems to be composed of *unos* and *alg*. While I don't think *alg* is a morphological unit that is recognizable as such by native speakers of Spanish, it is not possible to ignore the fact that, in language after language (see e.g. the survey in Haspelmath 1997), indefinites are more or less transparently built up of other parts, such as interrogative words or recognizable parts of interrogative words, or other indefinites or recognizable parts thereof. Within the context set up by the ultimate goal of arriving at a theory of universal grammar, this fact cannot be overlooked and informs the analysis presented here for *unos*. That is, I treat the properties of *algunos* as a conjunction of properties that can be independently argued for *unos* plus plausible properties attributable to *alg*.

How can the incapability of *unos* to outscope (all) islands and its incapability to edistribute be explained, and at the same time make *unos* part of the analysis defended in the main body of this paper for *algunos*. Here is one possibility.

Assume that *unos* is semantically vacuous, as suggested in (59):

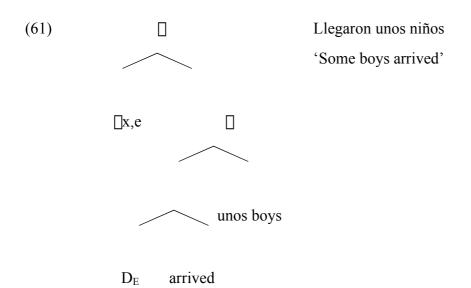
(59) 
$$[[unos niños]] = [[niños]]$$
 (cf. Heim 1982 and others)

That is, the denotation of *unos niños* 'some children' is just the denotation of the noun, the set of children (including plural individuals). Assume, in addition, that a special combination operation, Restriction (Chung and Ladusaw 2004) is available to interpret structures in which a predicate (of any type) combines with a property, as shown in (60):

(60) Restriction: If  $\square$  is a branching node with  $\square$  and  $\square$  its daughters, and  $\square$  is a predicate and  $\square$   $\square$   $\square$   $\square$   $\square$   $\square$  is a predicate of the same type as  $\square$  with its domain restricted to elements that have the property  $\square$ 

Restriction is a generalized version of Predicate Modification and can be thought of as a resource to appeal to when Functional Application is not possible.

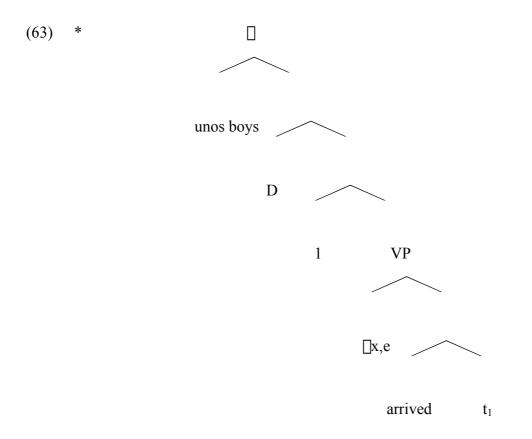
The issue of the interpretation of indefinites is not only how the combine with the other words and pieces in the sentence, but as discussed at length above and in much of the literature on the topic, where the existential force comes from. Chung and Ladusaw propose that the arguments of a predicate must be semantically saturated by the time the "event level" is reached, and that, if nothing else has saturated the argument, □-closure is used as default. Whereas Chung and Ladusaw include only participants in this rule, not events, I include events, given the role they play in the analysis of e-distribution. The analysis of (59) then looks as in (61):



The denotation of the  $\square$  and  $\square$  nodes of (61) is as in (62):

(62) 
$$[[\]] = \] x. \] e. \] y [(sing ind(y) & y \] x) \] arrived (y)(e)] & boys (x)$$
$$[[\]] = 1 iff \] x, e \] y [(sing ind(y) & y \] x) \] arrived (y)(e)] & boys (x)$$

This gives rise to the desired reading, 'there is a plural boy individual x and an event e such that all singular subparts of x arrived in e'. This analysis also makes sense of the two main generalizations concerning *unos*. First, since the point at which the  $\square$ -closure of variable takes place closes off both participant and event variables, *unos* cannot outscope the  $\square$ -closure of event variables and hence it cannot e-distribute. The LF in (63) is ruled out because the denotation of the top node, in (64), is not a proposition but a property, properties not being the semantic type needed for sentences:



Second, since the scope of *unos* is clause-bound (i.e., since, unless some other quantifier does so,  $\square$ -closure of the relevant participant variable will occur at the "event level", which I have taken here to be, roughly, the clause level), *unos* cannot outscope islands; the  $\square$ -closure of the relevant variable always occurs inside the islands.

Going now back to the analysis of *algunos* in the main text, the claim then is that *algunos* is decomposed into *unos*, which is semantically vacuous, and *alg. Alg* is the quantifier suggested in the text<sup>34</sup>, which takes the noun as its argument. Notice that Restriction does not arise in this case: Functional Application is perfectly capable of taking care of the combination (and, in any case, Restriction would probably not be able to operate here, given that *alg* is not a predicate, or perhaps it would be able to apply but would give rise to something incoherent).

At least two issues remain to be addressed. First, contrary to fact, this analysis predicts that (65) is appropriate in the following situation: suppose that I work at a school with small children. Today I saw a total of five children scratching their heads (each child his/her own head): I saw one of the children in the morning in the gym, another one at lunchtime in the cafeteria, and the three others I saw in my afternoon class. I am concerned about lice.

(65) <sup>#</sup>Hoy en el colegio he visto a *unos* niños rascándose la cabeza y temo que vayamos a tener problemas con los piojos

'Today in school I saw some children scratching their heads and I am afraid we are going to have problems with lice'

This is predicted to be appropriate as a description of the above situation because the analysis of *unos* presented here requires there to be a group of children scratching their heads as part of the same event, and such is the case in that situation. Observe, however, that in (65), the group of three children in my afternoon class does not correspond to the group of five children I have seen in total. I claim that there is nothing wrong with the analysis presented in this appendix, and that the infelicity of (65) should be blamed on the fact that (65) is not informative enough for an accurate description of the facts. That is, (65) is strictly speaking true in the above scenario, but it violates the Gricean maxim of quantity.

Second, as opposed to *algunos*, *unos* seems to be able to take scope above quantifiers in its own clause, as shown in  $(66)^{35}$ :

Notice that the analysis of *unos* is independent of this particular aspect of the analysis of *algunos*. I.e., *alg* could have been the choice function variable that was rejected in the main text. Gutiérrez-Rexach (1999, 2001) makes the same claim but uses the wrong examples: they involve an indefinite in the scope of a universal quantifier, and such examples do not warrant the conclusion that indefinites can take non-overt scope (see, e.g., Reinhart 1997: 340-3).

(66) Justo la mitad de los profesores compró *unos* libros en la librería del museo 'Exactly half the teachers bought some books in the museum bookstore'

Here we have a wide scope, collective reading ('there is a set X of books such that exactly half the teachers bought the members of X in the museum bookstore', compatible with the other half having bought other books) and a narrow scope reading ('exactly half the teachers bought some books or other in the museum bookshop'). The sentence does not have a wide scope reading, 'each x in a set of books is such that exactly half the teachers bought x in the museum bookstore', since it cannot be felicitous if one half bought one book and the other half bought another book. While it is the case that *unos* cannot take scope above quantifiers in higher clauses, as shown by the impossibility of any kind of wide scope reading in (67), it does not do to make the claim that *unos* DPs are clause-bound quantifiers, since that predicts them to edistribute:

(67) Justo la mitad de los profesores dijeron en la encuesta que compraron *unos* libros en la librería del museo

'Exactly half the teachers said in the poll that they had bought some books in the museum bookstore'

The solution seems to be to claim that the point at which  $\square$ -closure of participant and event variables is high, at least high enough to outscope e.g., quantifiers in subject position.

At this point, the analysis of *unos* is quite descriptive and raises a number of questions for which answers must still be sought. My goal in this appendix, however, has been reached: the idea was to find an analysis that was capable of describing the facts presented here and that allowed an analysis of *algunos* as a complex indefinite formed on the basis of *unos*.

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