CONTEXTUAL RESTRICTIONS ON INDEFINITES: SPANISH ALGUNOS VS. UNOS¹

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1 Introduction

In this paper I argue that the Spanish plural indefinite *algunos*, an existential quantifier (see Martí 2005 and cf. Gutiérrez-Rexach 1999a, b, 2001 and others), introduces a contextual variable, the way quantifiers like English *every* do (von Fintel 1994, Martí 2003, among others). I blame *alg*- for the context dependence of *algunos*, absent with *unos*. In the analysis, *algunos* is compositionally analyzed as a combination of a contextual variable and existential quantification, introduced by *alg*-, plus the contribution of *unos*, which is treated as semantically vacuous.

A challenge for the claim that context dependence and existential quantification are the only differences between these two indefinites are a number of facts having to do with distributivity that Gutiérrez-Rexach (1999a, b, and in particular 2001) explores. I defend the idea that these additional facts are to be explained without adding any further lexical differences between the two indefinites: the facts follow when *algunos* and *unos* interact with event quantification and a distributivity operator. A second goal of the paper is, then, to account for a fuller range of contrasts between the two indefinites without stipulating additional features in their lexical entries, in a way that allows us to justify the analysis on independent grounds. This discussion also constitutes an argument for the analysis of *unos* as semantically vacuous: this property is crucial in understanding the differences with *algunos* with respect to distributivity.

The empirical concerns of this paper have already been addressed in a number of recent papers by Gutiérrez-Rexach (see specially 2001), and a different account from the one I am proposing here is entertained there, both for (the lack of) context dependence and for the distributivity facts. This paper makes two contributions in this respect: it proposes a simpler analysis than that entertained by Gutiérrez-Rexach, and it establishes the empirical generalizations at issue more solidly.

The proposal made in this paper has consequences for our (cross-linguistic) views on quantification and domain restriction. It interacts in interesting ways with the proposal in Etxeberria 2005, Giannakidou 2004 and Matthewson 2001 that the definite article introduces contextual domain restriction. There is a debate in the current literature (see the references cited above and also Stanley 2002) about where in the quantificational phrase context dependence is located: with the quantifier itself, or with the noun that accompanies the quantifier. The resuls of this study have two major consequences for this debate: first, if *alg*- is responsible for context dependence, then the option of locating context dependence on the quantifier must be allowed; second, if

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we are two draw the distinction between *unos* and *algunos*, context dependence cannot come from the noun in Spanish.

The organization of the paper is as follows. In section 2, I introduce the basic context dependence facts that motivate my treatment of *alg*- as introducing such dependency. The details of the analysis are also provided in this section, as well as an argument that the difference between *algunos* and *unos* does not have to do with presupposition. In section 3, I introduce (some of) the distributivity facts explored in Gutiérrez-Rexach's work. I challenge some of his descriptive generalizations and adhere to others. In this section I offer an account of the interaction of *algunos* and *unos* and distributivity, based on the possibility of existentially closing event and individual variables. In section 4, I compare my analysis to that in Gutiérrez-Rexach (2001). In section 5, I discuss consequences of this proposal for our views on domain restriction and quantification and for the proposal made in Giannakidou 2004 and Etxeberria 2005. Given the well-known subtlety of the judgements involved here, special care has been put in the collection of the data; section 6 discusses the procedure that was followed. Section 7 is the conclusion.

2 The context dependence of *algunos*, and the context independence of *unos*

The semantics of the plural indefinites *algunos* and *unos* has received some attention in the recent literature, most notably in Gutiérrez-Rexach 1999a, b, 2001 but also in Alonso-Ovalle and Menéndez-Benito 2002, Laca and Tasmowski 1996, Martí 2005 and Villalta 1994.² Initial examples with *algunos* and *unos* are provided in (1):

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

As the translations in these examples show, it is often difficult to tease apart the contribution of *unos* from that of *algunos*. As we will see in this paper, however, and as has been also shown before, there are quite a number of interesting differences between the two. This section of the paper concentrates on what I take to be at the heart of the distinction between the two indefinites: the absence of context dependence in the case of *unos*, and the possibility of context dependence in the case of *algunos*. Section 2.1 establishes the facts and section 2.2 provides an analysis for them. Section 2.3 argues that presuppositionality is not what is at stake in differentiating *unos* from *algunos*.

(2003) study the properties of the singular version of algunos, algún.

² Martí (2005) focuses on the scopal properties of the two indefinites, and argues against a choice function analysis for either indefinite. These facts are ignored in the present paper, but the two proposals are compatible. Alonso-Ovalle and Menéndez-Benito

2.1 Initial data

Let us start by considering the examples in (2) (cf. (1a)):

(2) Al llegar al colegio y ver a varios grupos de chicos peleándose, el director, harto ya de ver la misma escena todos los días, murmuró para sus adentros: "Vaya día me espera". Con pánico se dió cuenta de que...

'Upon arriving at the school and seeing several groups of boys fighting, the principal, sick and tired of seeing the same scene every day, mumbled to himself: "What a way to begin the day". In a panic, he realized that...'

a. ...había *unos* chavales demasiado cerca de la carretera there.were boys too close of the road

b. ...había algunos chavales demasiado cerca de la carretera

In (2a), the boys who are too close to the road do not belong to the group of those who are fighting. However, it is possible (though not necessary) to understand from (2b) that the boys who are too close to the road are some of those who are fighting. That is, in (2a), *unos* cannot be related to a group of boys already introduced in the discourse, whereas *algunos* in (2b) is capable of doing just that. The example in (3), which builds on an example by Gutiérrez-Rexach (2001: 140, his (58)), makes the same point:

(3) {A conversation between two pirates. They have just now been talking about a treasure they have found with lots of coins in it. They are trying to buy a drink at a tavern. Pirate A is rummaging in his pockets for money to pay for the drink:}

a. Pirate B: Tengo *unas* monedas en el bolsillo. Déjame have coins in the pocket let.me pagar pay

b. Pirate B: Tengo algunas monedas en el bolsillo. Déjame pagar

Whereas in (3a) the coins offered by Pirate B cannot be coins from the treasure they have just been talking about, it is possible to understand from (3b) that the coins form part of that treasure. If the pirates had struck a deal that they would leave the treasure untouched until they had come up with a good way of investing the money and they hadn't come up with that way yet, Pirate B would run the risk of giving himself away in (3b), but not in (3a). In (3b), Pirate A would be entitled to follow the conversation as in (4), but that would be a strange way of continuing the conversation in (3a):

(4) Pirate A: ¿Me estás diciendo que llevaste monedas te cl³ are saying that took coins cl cuando descubrimos el tesoro? when discovered the treasure

'Are you telling me that you took coins with you when we discovered the treasure?'

[&]quot;...there were some boys that were too close to the road"

^{&#}x27;I have some coins in my pocket. Let me pay.'

³ 'Cl' stands for 'clitic'. *Me* is the 1st person singular clitic; *te* is the 2nd person singular clitic, and *le* (see below in (5)), the 3rd person singular one. Also used below are *les*, the plural version of *le*, and *se*, another clitic that has several functions in the language.

Let us consider a third example, also based on data in Gutiérrez-Rexach (2001: 141). Consider (5) and the continuation in (6):

- (5) a. Juan ha encontrado *unos* libros que le diste has found books that cl gave b. Juan ha encontrado *algunos* libros que le diste
 - 'Juan found some books you gave him'
- (5a) does not entail that there are books you gave to Juan he hasn't found, whereas according to (5b) it is possible that Juan has not found some of the books you gave him. (6) is hence a possible continuation for (5b), though not for (5a):
- (6) ... sin embargo, no ha encontrado otros however not has found others '...however, he hasn't found others'

I interpret these facts as supporting the generalization that, whereas *unos* is not context-dependent, *algunos* can be. In (5a), *unos* does not relate back to an entity potentially introduced in the discourse; it simply introduces a set of books you gave to Juan and asserts that he found them. This leaves no room for Juan not having found some of these books. That is different in (5b), where this possibility is available. Thus, *algunos* is capable of establishing a relationship with a previously-introduced entity.

In the last example, we find a context in which context dependence is enforced, and the use of *unos* is very odd:⁴

- (7) Question asked by reader in on-line interview: In which areas of the world is the AIDS problem the worst?
 - a. Answer by doctor: In Subsaharan Africa, undoubtlessly...

Hay *algunos* países que podrían desaparecer si no there are countries that could disappear if not se les presta ayuda para combatir la enfermedad. cl cl offer help for fight the disease

b. Answer by doctor: In Subsaharan Africa, undoubtlessly...

#Hay *unos* países que podrían desaparecer si no se les presta ayuda para combatir la enfermedad.

'There are some countries that could disappear if they don't receive help to fight the disease'

The beginning of the answer that the doctor gives restricts the context to Subsaharan Africa, and there is an expectation that the continuation of the answer will be about that region as well. *Algunos* has no problem in relating to this previously introduced entity ('Subsaharan African countries'), but *unos* cannot do it. The doctor's answer in (7) is most informative if his statement about countries that can disappear is concerned with countries in Subsaharan Africa. If the countries he mentions are not from this area,

=asc&base=5. Only the example with *algunos* is used here, of course.

⁴ The example is adapted from an on-line interview in *El Pais*, a Spanish newspaper, that took place on December 1st, 2005. The interview can be accessed at: http://www.elpais.es/edigitales/cerrada.html?encuentro=1855&docPage=5&ordenacion

where are they from? And, how does the reader's question get addressed? There is a strong bias in the answer towards Subsaharan Africa, but that is something that only *algunos* can tolerate.

2.2 Analysis

The generalization presented in section 2.1 is, then, that whereas *unos*-phrases cannot be related to an entity previously introduced in the discourse, *algunos*-phrases can. Notice that it would not be correct to say that *algunos*-phrases are necessarily context sensitive, since in all of the examples that we have reviewed *algunos* didn't have to relate to a previously-introduced entity; it merely could do so.

An important intuition behind the analysis I propose below is that *algunos*, when it relates back to a previously-introduced entity, behaves like the pronoun in (8):

(8) Klaus came in. *He* was wearing red trousers.

I propose to treat the context dependence of *algunos* in the same way that the context dependence of *he* is treated. The analysis hence depends on exactly what treatment we choose for pronouns. I do not wish to enter into a debate about this and choose to represent context dependence by means of a variable that is part of the syntactic representation, of the kind assumed in the treatment of generalized quantifiers such as *every* in English (cf. von Fintel 1994, Martí 2003, among others). In making this assumption, I am guided by the idea that we wish to have as few mechanisms for context dependence as possible, and that in principle it makes sense to treat the context dependence of *algunos* the same way the context dependence of *every*, etc. is treated. I don't think, however, that anything crucial hinges on this assumption.

In this section I provide the details of this analysis, discuss what the lexical entry for *algunos* is and address the issue of how the seemingly non-context dependent readings of *algunos* can be generated, i.e., the readings of the examples from section 2.1 in which *algunos* gives rise to interpretations that *unos* can also give rise to.

I take it that the null hypothesis is that alg- is to blame for the additional possibilities of interpretation displayed by algunos, both of which -alg- and the additional interpretations—being absent in unos. 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, indefinites are more or less transparently built up of other parts, be they interrogative words or recognizable parts of interrogative words (e.g., Russian, Romanian, Japanese, German, Dutch, Greek, etc.) or other indefinites or recognizable parts thereof (e.g., German, Dutch, Hindi/Urdu, Turkish, etc.; for a good survey, see Haspelmath 1997). 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 and algunos. 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-. The internal structure of algunos NPs is as in (9), with C a contextual variable:

(9) algunos NP = [QP [Q [alg-C] unos] NP]

Since *unos* is part, I claim, of *algunos*, we need to know what the contribution of *unos* is in order to know what the contribution of *algunos* is. I propose that *unos*-phrases denote sets of plural individuals and that existential closure binds the variable when needed. I assume that plural nouns denote sets of plural individuals (cf. Landman 1989, Link 1983, Schwarzschild 1996, and many others). That is, I assume that *unos* itself does not contribute existential quantification, only existential closure of the variable it introduces does (cf. Heim 1982, Kamp 1981, and subsequent work). An argument for this position is that *unos*, though not *algunos*, can appear in predicative position (Gutiérrez-Rexach 2001: 136):

(10) a. Estos políticos son *unos* idiotas these politicians are idiots 'These políticians are idiots' b. *Estos políticos son *algunos* idiotas

The possibility of (10a) is easily explained if *unos* does not always introduce existential force and *unos* NPs contribute a set of (plural) individuals. (10b) suggests that this is the wrong treatment for *algunos*, i.e., that *algunos* NPs are not sets of (plural) individuals. In the treatment here, *algunos* NPs are quantifiers, that is, of type <et,t>. We will see that the idea that *unos* does not itself contribute existential quantification is crucial in understanding the facts in section 3. There are more details of the analysis of *unos* but I delay a discussion of them until then. What we have so far is enough to understand the facts presented in section 2.1.

The entry for *alg*- is in (11), where C is a contextual variable:

(11)
$$[[alg-]] = \lambda C_{\langle e,t \rangle}.\lambda g_{\langle e,t \rangle}.\lambda f_{\langle e,t \rangle}.\exists x \ C(x) = 1 \ \& \ g(x) = 1 \ \& \ f(x)$$

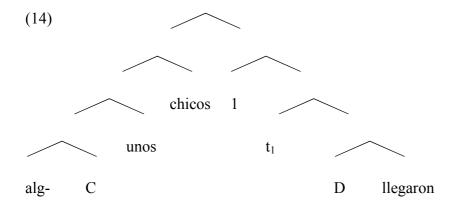
That is, *alg*- takes three arguments, all of which are sets of individuals: a contextually relevant set, the set contributed by the head noun, and the set contributed by the predicate. When it combines with *unos* it obviates the need for existential closure of individual variables. I assume a D-operator that can be inserted in the syntax anywhere where it is type-wise compatible (cf. Landman 1989, Link 1983, Roberts 1987, Schwarzschild 1996, Beck 2000, among others). The contribution of the D-operator is in (12):

(12)
$$[[D]] = \lambda f_{\langle e, \triangleright} . \lambda x. \forall y [(\text{sing ind}(y) \& y \le x) \rightarrow f(y)]$$

I.e., the D-operator takes a predicate and returns another predicate that applies to all the members of a plural individual. This D-operator is useful in understanding how the predicate combines with a plural subject.

The derivation of a simplified version of example (1a) (with *algunos*) is as follows (to be slightly revised in section 3.2):

(13) Llegaron *algunos* chicos 'Some boys arrived'



Alg- first takes the contextual variable C as its argument. Then this complex combines with *unos*, but *unos* is semantically vacuous, so the denotation of [*alg*- C] is passed up the tree. Then this combines with *chicos*, giving rise to the following denotation:

(15) [[algunos chicos]] =
$$\lambda f_{\langle e,t \rangle}$$
. $\exists x \ C(x) = 1 \& x \text{ is a plural boy individual } \& f(x)$

In the end, we get that (13) is true iff there is a contextually salient plural boy individual and all of its atomic parts arrived.⁵

We can now make sense of one of the readings of (2b), (3b) and (5b), the reading in which the *algunos* NP is interpreted as related to a previously-introduced discourse entity (and of the only reading of (7a)). That entity serves the same kind of function that Klaus serves in (8): it is the discourse antecedent of a pronoun. In the case of *algunos*, the pronoun is a silent variable, required by *alg*-. One possible reading predicted for, e.g., (2b), is that the sentence is true iff there is a contextually salient plural boy individual all of whose atomic parts are too close to the road. C in this reading is a set of fighting boy individuals, which are salient in the context of the sentence.

We also need to understand how the other reading of examples (2b), (3b) and (5b) is derived, the reading in which *algunos* is synonymous with *unos*. I propose that the context independent reading of these sentences is derived from a different choice of value for C, the contextual variable. The idea is that one possible value for C is the whole domain of individuals (i.e., D_e). Notice that this sort of 'default' value has to be invoked with other quantifiers, such as in some instances of *most*:

(16) {Speaker A and speaker B are organizing a commercial expedition to Mount Everest}

Speaker A: Do you think we can rely on our clients' good judgement in case there is a storm the day we are supposed to reach the summit?

Speaker B: Yes, *most*_C people would know what to do in that situation

With this default value for the contextual variable of *algunos*, we get that a sentence like (13) is true iff there is a plural boy individual and all of its atomic parts arrived. The sentence under this meaning has weaker truth-conditions than before, since it is made true by the mere existence of a group of boys who arrived, with whatever other properties (fighting or non fighting, blonde or non-blonde, students of the *Colegio Fuentesanta* or not, or whatever other property we could think of). Importantly, there is

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⁵ I don't take into account the fact that (alg)unos chicos follows the predicate llegaron in (1a).

no reason to assume that the members of this group of boys uniformly conform to any particular additional property (i.e., there is no reason to assume that all of them are fighting, or that all of them are blonde, etc.). Since there is no reason to draw the more restrictive conclusion, speakers don't draw it and no subgroup of boys is intended in this meaning. A reasoning along the same lines is proposed below for *unos*.

The derivation of a simplified version of example (1a) (with *unos*) is as follows (I will come back to this as well in section 3.2):

(17) Llegaron *unos* chicos 'Some boys arrived'

The denotation of *unos chicos* is the same as the denotation of *chicos*, since *unos* is semantically vacuous:

(19) [[unos chicos]] = [[chicos]]

This raises the issue of how *unos chicos*, being of type <e,t>, combines with the denotation of the verb. I follow Chung and Ladusaw's (2004) analysis of the Maori indefinite *he* in that a generalized version of Predicate Modification, which they call Restrict, is available as a semantic operation when Functional Application is unavailable, as in our case. Restrict is in (20):

(20) Restriction: If α is a branching node with β and δ its daughters, and β is a predicate and $\delta \in D_{\langle e,t \rangle}$, then α is a predicate of the same type as β with its domain restricted to elements that have the property δ

This gives rise to the following:

(21) [[unos chicos [1 [t₁ [D [llegaron]]]]]] =
$$\lambda x. \forall y$$
 [(sing ind(y) & y \le x) \rightarrow arrived (y)] & boys (x)

After existential closure, we get the final result in (22):

(22)
$$\exists x. \forall y [(sing ind(y) \& y \le x) \rightarrow arrived(y)] \& boys(x)$$

I.e., (17) is true iff there is a plural boy individual and all of its atomic parts arrived. This is equivalent to the meaning we obtained earlier for *algunos* when the value of its C was the whole set of individuals, and hence the same reasoning we used there to

derive context independence is used here. That is, as before, there is no reason to assume that the members of this group of boys uniformly conform to any particular property other than being boys who arrived. Since there is no reason to draw a more restrictive conclusion, speakers don't draw it and no subgroup of boys is intended. Hence, *unos* and *algunos* can make the same, context independent contribution to a sentence.

2.3 Presuppositionality

In this section I argue that presuppositionality is not a difference between *unos* and *algunos*, that is, that *alg*- is not presuppositional (in addition to being context dependent or as an alternative to context dependence). It is important to show that the information contributed in my analysis by C does not have the status of a presupposition, because otherwise the facts about *unos* and *algunos* might not tell us anything about domain restriction, contrary to what I claim. I also show that another potential presupposition of *algunos*, that the set denoted by the head noun be non-empty, is not a presupposition but an entailment.

In order to understand the tests that I will use to probe into this possibility, consider first the behavior of the presupposition of *both*. *Both* triggers the inference that the cardinality of the set denoted by the head noun is two. For example, (23) triggers the inference that there are exactly two girls:⁶

(23) Both girls have three A's

This inference we call a presupposition. There are at least two other inferences that can be drawn from (23): first, if Mira is one of the girls, then she has three A's; second, both girls have exactly three A's. The first of these two inferences we call an entailment, and the second an implicature. How can we tease presuppositions apart from entailments and implicatures? Presuppositions are special in that they cannot be cancelled (implicatures can) and in that they do not pass the *wonder*-test (entailments do). (24b) shows presuppositions cannot be cancelled:

- (24) Of course both girls have three A's!
 - a. #In fact, Mira has two
 - b. #In fact, there is only one girl
 - c. In fact, Mira has four

Implicatures can be cancelled ((24c)), though entailments, like presuppositions, cannot be cancelled ((24a)). To distinguish entailments from presuppositions, we can use the *wonder*-test:

- (25) Bill wonders whether both girls have three A's
 - a. He is not sure that Mary does
 - b. #He is not sure there are two girls

That is, when Bill wonders about something, he wonders about its entailments, not its presuppositions. Entailments pass this test, not presuppositions.

⁶ The discussion here is based on class notes by Yael Sharvit.

Let us start by testing *unos*. According to the results of the tests in (26) and (27), *unos* does not presuppose that the set denoted by the head noun, *gorilas asiáticos* 'Asian gorillas' is non-empty:

- (26) Trajeron *unos* gorillas asiáticos al zoo. #De hecho, no queda ninguno 'They brought some Asian gorillas to the zoo. In fact, there are none left'
- (27) Juan se pregunta si habrán traído *unos* gorilas asiáticos al zoo. No está seguro de que quede ninguno 'Juan wonders whether they brought some Asian gorillas ('futuro perfecto') to the zoo. He is not sure there are any left'

This piece of information is rather an entailment, since it behaves like one: it cannot be cancelled, but it can be wondered about. *Algunos* patterns like *unos* here:

- (28) Trajeron *algunos* gorilas asiáticos al zoo. #De hecho, no queda ninguno 'They brought some Asian gorillas to the zoo. In fact, there are none left'
- (29) Juan se pregunta si habrán traído *algunos* gorilas asiáticos al zoo. No está seguro de que quede ninguno 'Juan wonders whether they brought some Asian gorillas ('futuro perfecto') to the zoo. He is not sure there are any left'

Now we test whether *algunos* presupposes the information that is contributed by C in my analysis in section 2.2. That is, for a sentence like (2b), the presupposition induced by *algunos* would be that there are boys fighting; for (3b), that there are coins in the treasure the pirates found, and for (7a), that there are countries in Subsaharan Africa. It is important to note that it is unclear how exactly these presuppositions would be derived without at some point assuming that there is something (e.g., a variable) that is sensitive to contextual information (because the presuppositions will change with the context). But since it is possible to show that these bits of information do not behave like presuppositions, we do not have to worry about this problem.

I use the example in (7) to test for this possibility because in that example we can be sure that the *algunos* we are testing is being used in its context dependent use (recall that *unos* was impossible in this context). (7a) is repeated here:

(30) Question asked by reader in on-line interview: In which areas of the world is the AIDS problem the worst?

Answer by doctor: In Subsaharan Africa, undoubtlessly...

Hay *algunos* países que podrían desaparecer si no se les presta ayuda para combatir la enfermedad.

'There are some countries that could disappear if they don't receive help to fight the disease'

We test whether the following modified versions of (30) are felicitous. The modifications have to do with the fact that, given real-world knowledge, it would be rather strange to deny or wonder about the existence of certain countries, but not about the existence of governments with the necessary resources to fight AIDS:

(31)Question asked by reader in on-line interview: In which areas of the world is the AIDS problem the worst?

Answer by doctor: In Subsaharan Africa, undoubtlessly...

> Hay algunos gobiernos con los recursos necesarios que se están preparándo para prestar ayuda. #De hecho, no existen gobiernos con los recursos necesarios en el África

Subsahariana

'There are some governments with the necessary resources that are getting ready to help. In fact, there exist no governments with enough resources in Subsaharan Africa'

(32)Question asked by reader in on-line interview: In which areas of the world is the AIDS problem the worst?

Answer by doctor:

In Subsaharan Africa, undoubtlessly. Our attempts at containment in this area have so far failed, and...

los políticos de los países ricos se están preguntando si algunos gobiernos con los recursos necesarios estarían preparados para prestar ayuda. No están seguros de que existan gobiernos con tales recursos en el África Subsahariana 1

'Policitians in rich countries are wondering whether some governments with the necessary resources would be prepared to help. They are not sure there exist governments with such resources in Subsaharan Africa'

We understand the doctor's answer to mean that policitians wonder whether some governments with the necessary resources in African Subsaharan countries would be prepared to help, and that they are wondering about this because they are not sure whether such governments exist. Hence, it is possible to wonder about this piece of information, and this, together with (31), tells us that the information that there exist governments with the necessary resources in Subsaharan Africa is an entailment, not a presupposition, of the sentence with algunos.

Notice, incidentally, that the analysis in section 2.2 guarantees, for both unos and *algunos*, the entailment that the set denoted by the head noun is non-empty, and the additional entailment, for algunos, that the information contributed by the contextual variable is the case.

3 **Distributivity**

Gutiérrez-Rexach (2001) notes an additional contrast between unos and algunos having to do with distributivity. This section presents a second argument, based on these facts, for the idea, presented in section 2, that unos does not itself contribute existential quantification, as opposed to algunos. The vacuity of unos makes it dependent, in some cases, on the mechanism of existential closure of variables, and it is this in turn that enables us to describe its interaction with distributivity in the appropriate way.

⁷ The continuation "In fact, there exist no governments with the necessary resources" is impossible in (31), and in (32) it is possible to follow up with "They are not sure there exist governments with such resources", suggesting, again, that algunos does not presuppose that the set denoted by the head noun is not empty. It just entails this bit of information.

I claim that nothing other than what I have discussed in section 2 is to be built into the lexical semantics of *unos* and *algunos*. I make the additional, distributivity facts follow from the semantics in section 2 plus its interaction with independent assumptions, having to do with the D-operator and with events, and with how these objects are treated by the grammar.

3.1 Facts

An important contrast between *unos* and *algunos* is that whereas *algunos* can "distribute over events", *unos* cannot. It is possible to observe this difference already in (1a), repeated here:

(33) Llegaron *algunos/unos* chicos a la oficina arrived boys to the office 'Some boys arrived to the office'

The sentence with *algunos* can describe two kinds of situations. In one of them, the situation is such that the boys who arrived at the office did so one by one. In another situation, they all arrived together. The sentence with *unos* can only describe this latter kind of situation. I adopt the following terminology: the reading that makes the sentence with *algunos* true in the first kind of situation is a reading in which *algunos* distributes over events, making reference to the idea that it is possible to conceive of the different arrivals as different events. The other kind of reading is a reading in which *algunos* (or *unos*) does not distribute over events, i.e., in which we take the arrival of the boys as a single event. An argument that it is right to think about these readings in terms of event distribution is that there is no difference between *unos* and *algunos* in sentences that are not eventive, such as (1b), repeated here:

(34) Hay *algunos/unos* libros sobre la mesa 'There are some books on the table'

There is no contrast in terms of event distribution between *unos* and *algunos* here. Characterizing the difference between the two indefinites in (34) in terms of event structure helps to understand why there is no distinction in this respect in (34): a crucial difference between the two sentences is that the former is eventive, while the latter is not, it is merely stative.

Event distribution (or lack thereof) can be observed in other examples and I offer more here. First, consider (35):

(35)Hoy en el colegio he visto algunos niños today in the school have children seen to rascándose cabeza y tener la temo que vayamos a scratching head would the and fear that to have 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'

(35) 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 (35).⁸

Algunos does not have to distribute over events, so that the sentence in (35) (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 (36). 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:

(36)Ayer fue terrible porque algunos chicos un día yesterday was day terrible because some boys a del vecindario la bicicleta pasaron con 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 before, 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*.

Not surprisingly, as suggested by Gutiérrez-Rexach (2001), *unos* is incompatible with *cada uno* 'each', an expression that forces distribution:

(37) Unos estudiantes se comieron una tarta entre todos/*cada uno students se ate a pie among all/ each one 'Some students ate a pie together/each'

Both entre todos and cada uno are of course possible with algunos.

(38) and (39), from Gutiérrez-Rexach (2001: 133, 147), make the same point in a slightly more complex way, since there is another indefinite in the sentences, *una mesa* and *un regalo*, respectively:

(38) a. *Unos* estudiantes levantaron una mesa students lifted a table

b. Algunos estudiantes levantaron una mesa

'Some students lifted a table'

-

⁸ See section 4 for remarks on the purported impossibility of *unos* to combine with distributive predicates like *ponerse los pantalones* 'put one's pants on', or *rascarse la cabeza* 'scratch one's head'.

(39) a. Le dí un regalo a *unos* estudiantes cl gave a present to students b. Le dí un regalo a *algunos* estudiantes 'I gave a present to some students'

Whereas in (38b) there are potentially several table-liftings involved (of the same table or different ones), there is only one table-lifting, a group lifting, in (38a). In (39a), only one present, a group present, is involved, but in (39b), there can be several events (and hence several presents) of giving.

3.2 Analysis

There are two assumptions we need to add to the system in section 2.2 that will enable us to explain the facts in section 3.1. It is important to note that these two assumptions are independent of the lexical semantics of the indefinites under scrutiny here. Adding these assumptions will make us revise slightly the account of *unos* and *algunos* presented in section 2.2, but not in any fundamental respect; the explanation of the context (in)dependence of *unos* and *algunos* remains the same.

I have described the facts in section 3.1 in terms of distribution over events but I have not said so far how I assume events come into play. I assume that predicates contain an event argument (cf. Davidson 1967, Parsons 1991, and many others). The denotation assumed here for, e.g., *llegaron* 'arrived', is as in (40):

(40) [[llegaron]] =
$$\lambda x.\lambda e.$$
 arrived (x)(e)

Two auxiliary assumptions must now be made. First, we need to know what happens with the event variable at the end of the derivation. Second, we need to propose an additional, event-sensitive distributivity operator, since as it is, our definition of the D-operator in (12), repeated here, cannot apply to *llegaron*; yet, as far as I can tell, all proponents of the D-operator intend it to be able to apply directly to simple predicates:

(41)
$$[[D]] = \lambda f_{(e,t)} \cdot \lambda x. \forall y [(sing ind(y) \& y \le x) \rightarrow f(y)]$$

I assume, as is commonly done, that event variables like the one introduced by *llegaron* do not get saturated in the syntax but get existentially closed (in the normal case). I think that the minimum assumption is that there is only one process of existential closure and that when it comes into play, it closes off all variables that remain open, be they event variables or individual variables. This will mean, crucially, that whenever the individual variable of *unos*-phrases gets existentially closed off, the event variable introduced by the predicate (e.g., *llegaron* 'arrived') also gets closed off.

The event-sensitive D-operator, the D_E -operator, is very similar to the regular D-operator and there is no problem in writing a type-shifting rule that will relate the two ($\langle E \rangle$ is the type of events):

(42)
$$[[D_E]] = \lambda f_{\langle e, \langle E, \triangleright}.\lambda x.\lambda e. \forall y [(\text{sing ind}(y) \& y \le x) \rightarrow f(y)(e)]$$

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 (43):

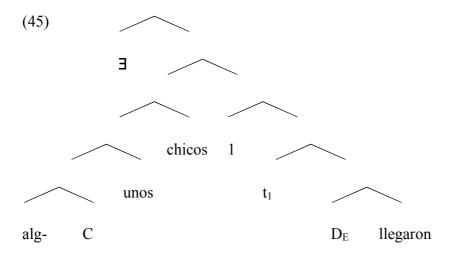
(43)
$$[[D_E \text{ llegaron}]] = \lambda x. \lambda e. \forall y [(\text{sing ind}(y) \& y \le x) \rightarrow \text{arrived}(y)(e)]$$

The D-operator is used if it is required above the point at which the existencial closure of event variables occurs.

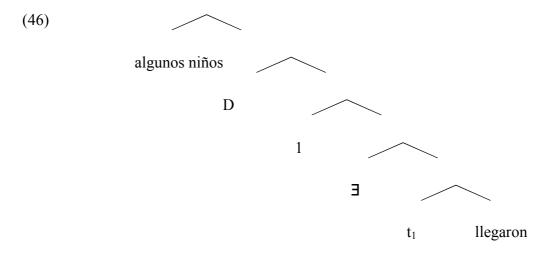
The analysis presented in section 2.2 for *algunos* changes slightly. Consider (44):

(44) Llegaron *algunos* chicos 'Some boys arrived'

One possible syntax for this example is (45):



This gives rise to one of the possible readings of the sentence: (44) comes out true iff there is an event e and there is a contextually salient plural boy individual x such that all of the atomic parts of x arrived in e. This, in effect, is the reading of (44) in which there is no distribution over events. But there is another possibility for *algunos*:



That is, nothing prevents *algunos niños* from moving to a position that is higher than the point of existential closure of free variables. We can also use the D-operator instead of the D_E -operator. This gives rise to the following: (44) is true iff there is a contextually

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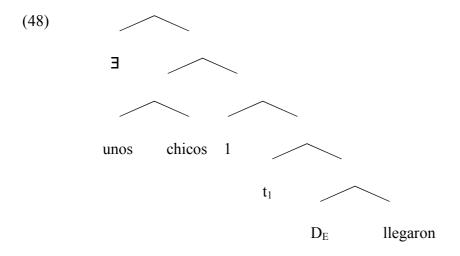
⁹ The C of (45) can of course be either a contextually salient set of individuals, or just D_e. Context (in)dependence is independent of event distribution readings.

salient plural boy individual x such that for all of its atomic subparts y, there is an event e such that y arrived in e. If the events chosen for each of the atomic subparts (i.e., each of the boys) are different, then we get the reading in which *algunos* distributes over events. This is then the account of the *algunos* facts presented in section 3.1.¹⁰

The revised analysis of *unos* is as follows:

(47) Llegaron *unos* chicos 'Some boys arrived'

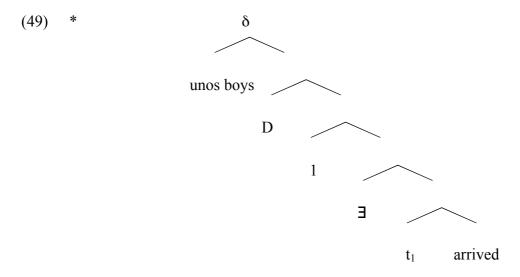
Llegaron combines with the D_E-operator and the two free variables, the event variable introduced by *llegaron* and the individual variable introduced by the *unos*-phrase, get existentially closed at the same time:



This gives rise to a meaning very similar to the one we obtained before, except that now we make reference to events: (47) is true iff there is a plural boy individual x and an event e such that all singular subparts of x arrived in e.

Now notice, crucially, that since the point at which the existential closure of variables takes place closes off <u>both</u> individual <u>and</u> event variables, *unos* cannot cannot distribute over events. The LF in (49), which would allow *unos* to distribute over events, is ruled out because the denotation of the top node, in (50), is not a proposition but a property, properties not being the semantic type needed for sentences:

¹⁰ The system is free, of course, to choose the same event for all of the atomic subparts of the plural boy individual, in which case the no e-distribution reading is generated. This is fine, it is just another way of getting the no e-distribution reading. Notice that the fact that the no e-distribution reading entails the e-distribution reading means that we have to make sure that the LF in (46) is generated; the LF in (45) is not really necessary, but it is a perfectly good LF given the technology introduced so far, and I don't think much would be gained by introducing statements to the grammar that ban it.



(50)
$$[[\delta]] = \lambda x. \forall y [\text{sing ind}(y) \& y \le x) \rightarrow \exists e \text{ arrived } (y)(e)] \& \text{boys } (x)$$

This is then the explanation of the e-distribution difference between *unos* and *algunos*. E-distribution results when the D-operator, and hence the noun phrase, scopes <u>above</u> the point of existential closure of variables. It is impossible for *unos* to do this, because its individual variable needs to be below the point of existential closure.

The account extends straightforwardly to the more complex cases in (38) and (39): the readings that are unavailable with *unos* are readings in which it –and the Doperator— would have to scope above existential closure. Notice that there is no need in this system, as opposed to what happens in Gutiérrez-Rexach's, to say that *unos* has special scope properties: the lack of e-distribution follows here not from an inherent impossibility of *unos* to take scope, but from a conspiracy between its lack of inherent existential contribution and the assumption that existential closure closes off all free variables (event <u>and</u> individual variables) when it applies. We don't have to say anything about its lexical semantics other than what we already said in section 2.

4 Gutiérrez-Rexach (2001)

Gutiérrez-Rexach (2001) also attempts an explanation of facts like those in sections 2.1 and 3.1. To account for the context dependence facts, he argues that the distinction between *unos* and *algunos* is that between a determiner, *unos*, that introduces a thetic judgement, in the sense of Kuroda (1972), and another determiner, *algunos*, that introduces a categorical judgement. Additionally, he assumes that *algunos* can optionally establish a formal link with a discourse referent, a device that achieves, as far as I can tell, the same result that is achieved in the above analysis with C, the contextual variable. Given that I have argued above that these facts can be explained by making use of this variable, it seems undesirable to add to the explanation of the difference between *unos* and *algunos* a distinction in terms of thetic and categoric judgements. Thus, section 2.2 above can be viewed as an argument that such a distinction does not actually seem to play a role in the semantics of these indefinites.¹¹

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¹¹ Gutiérrez-Rexach (see page 124) links the purported distinction between the two indefinites in terms of thetic and categoric judgements to their (im)possibility to appear as subjects of individual level predicates:

To account for the distributivity facts in section 3.1, Gutiérrez-Rexach adds a further constraint to the semantics of *unos* (p. 137): *unos* NPs "introduce a plural discourse referent denoting a group and access to their atoms is blocked". *Unos* NPs can never give rise to event distribution readings, since in those readings the atoms of the referent are accessed. I have shown above, however, that it is possible to account for (the lack of) event distribution readings without appealing to further lexical differences between *unos* and *algunos*, but by appealing to the interaction of assumptions we used in explaining the other, context (in)dependence facts, with assumptions, to some extent independently justified, about event and individual variable existential closure and distributivity operators. Recall also the desire to correlate the morphological shape of the two indefinites with their semantics: if *algunos* is "bigger" than *unos*, it must be that the semantics of *algunos* is more heavily loaded than that of *unos*. Hence, we cannot allow ourselves the possibility of adding constraints to the semantics of *unos* that we don't observe also in *algunos*, or that we don't have a more or less natural way of ruling out from *algunos*.

I should point out that it is often claimed in the literature (by Gutiérrez-Rexach 1999a, b, 2001 but also by others, such as Villalta 1994) that *unos* cannot combine with distributive predicates like *rascarse la cabeza* 'scratch his/her head' or *ponerse los pantalones* 'put his/her pants on'. It is partly because of this claim that Gutiérrez-rexach (2001) claims that *unos* does not allow individual access to the group discourse referents it introduces. This generalization, however, does not seem to hold upon closer scrutiny. First, recall examples like (35) or (36): while using *unos* instead of *algunos* in these examples makes the sentences infelicitous, the sentences with *unos* are not ungrammatical. Changing the situation appropriately, as done there, makes the sentences with *unos* and the distributive predicate appropriate and, of course, grammatical. So *unos* NPs can indeed combine with distributive predicates (and the way that is achieved is along the lines of (48)). I do think that Gutiérrez-Rexach is right in pointing out that an example like (51) is slightly odd:

(51) [?]*Unos* niños se pusieron los pantalones 'Some boys put their pants on'

But I don't think this has to do with whether the predicate is distributive or not. (52), with an unambiguously collective predicate, is also slightly odd:

(52) 'Unos chicos' se reunieron cl met 'Some boys met'

For reasons I do not understand, both (51) and (52) improve if there is more material in the sentence. (35) and (36) already exemplified this; consider also (53) and (54):

(i) Algunos/*unos atletas son inteligentes athletes are inteligent 'Some athletes are inteligent'

However, as far as I can tell, this is done via stipulation, it doesn't follow from his assumptions about thetic and categoric judgements. It is of course possible to add the relevant stipulation to my system.

- (53) *Unos* chicos se pusieron los pantalones al llegar al gimnasio 'Some boys put their pants on as soon as they arrived to the gym'
- (54) *Unos* chicos se reunieron en la oficina 'Some boys met in the office'

Furthermore, it seems that syntactic position has an influence here, since (55a) is worse than (55b):

(55) a. [?]*Unos* chicos llegaron b. Llegaron *unos* chicos 'Some boys arrived'

I conclude from this that *unos* probably has some special (probably syntactic) requirements that make it odd in certain configurations, and that this does not force us to assume that there are semantic differences between *unos* and *algunos* other than those assumed in section 2.1.

5 Consequences for domain restriction

There is a debate in the current literature (see Etxeberria 2005, Giannakidou 2004, Martí 2003, Stanley 2002; see also Matthewson 2001) as to whether the context dependence of quantification should be modelled on the quantifier itself or on the noun that usually accompanies this quantifier. If I am right in treating *alg*- as introducing context dependence, then we have an argument that the grammar must make it possible for context dependence to reside on the quantifier. Furthermore, in a language like Spanish, it cannot be the case that context dependence resides covertly in the noun, for otherwise *unos* NPs would be predicted to behave in exactly the same way as *algunos* NPs: this behavior would be the responsability of *alg*- in the case of *algunos* NPs, and the responsability of the noun in the case of *unos* phrases.

This, of course, does not close the door to the possibility that in other languages, the context dependence of quantificational phrases comes from nouns, or from both quantifiers and nouns. Let us examine some of the recent claims that have been made about the location of context dependence inside quantificational phrases. Matthewson (2001) suggests, on the basis of data from St'át'imcets (Lillooet Salish) that, universally, domain restriction is introduced by a determiner that combines with nouns, i.e., that, in all languages, domain restriction is located on nouns. (56) shows some of the crucial data from St'át'imcets; the discontinuous determiner *i...a* (*ti...a* in the singular) is obligatory throughout ('det' stands for 'determiner'; 'pl' for 'plural'):

```
(56) St'át'imcets

a. tákem i smelhmúlhats-a
all det.pl woman(pl.)-det
'all the women'
b. zí7zeg' i sk'wemk'úk'wm'it-a
each det.pl child(pl.)-det
'each of the children'
```

The claim is that the determiner i...a introduces domain restriction in addition to producing an argument of type <e> for the quantifiers $t\acute{a}kem$ 'all' and $z\acute{i}7zeg$ ' 'each'.

Matthewson (2001: 159) claims that "St'át'imcets provides us with overt evidence about the nature and the position of the domain restriction of quantifiers", i.e., domain restriction is effected on the noun, a position that Stanley (2002) has also adhered to. The Spanish data show three things. First, domain restriction and the definite determiner are not necessarily related, since alg- is not obviously a definite determiner and yet, I claim, alg- introduces context dependence. Second, and perhaps more importantly, we must allow domain restriction to be located with the quantifier in order to explain the properties of algunos. And, third, and also quite importantly, in some languages, (covert or overt) nominal restriction (exemplified overtly by St'át'imcets in (56)) must be disallowed, since otherwise we predict similar behavior for unos and algunos, contrary to fact. The issue here is not only the question of how to reconcile Spanish and St'át'imcets but, more generally, what the right approach is to the variation we find in the different languages, and within particular languages. The data discussed in this paper poses a challenge for Matthewson's (2001, §§3 and 7) no-variation hypothesis that "there are certain fundamental semantic structures or properties which all languages should share" (p. 156).

Giannakidou (2004) has also recently challenged the conclusions in Matthewson (2001). She takes the definite determiner to introduce domain restriction, like Matthewson, but argues, on the basis of Greek data, that both the St'át'imcets option in (56) and the Greek option in (57) must be allowed:

```
(57) Greek
a. o kathe fititis
det.masc.sg every student
'each student'
b. *kathe fititis, *kathe o fititis
```

As Giannakidou reminds us, it seems necessary to say that even in St'át'imcets, domain restriction can be located on quantifiers, as the following data suggests:

```
(58)
      St'át'imcets
       a. i
                      tákem-a
                                    smúlhats
         det.pl
                      all-det
                                    woman
       'all the women'
                                            (see Matthewson 2001: 151, footnote 5)
       b i
                     kalhélhs-a
                                    míxalh
                      three.det
                                    bear
         det.pl
       'three bears'
                                            (Matthewson 1999: 96, her (29))
```

Etxeberria (2005) shows that the quantifier option must be allowed for Basque as well:

```
a. Mutil guzti-ak
boy all-det.pl
'all the boys'
b. *Mutil guzti, *mutil-ak guzti
c. Ume bakoitz-ak
child each-det.pl
'each child'
d. *Ume bakoitz, *ume-ak bakoitz
```

Basque seems to make a distinction between 'strong' and 'weak' quantifiers, since with the latter, it is the nominal option that seems to be chosen:¹²

(60)Basque

a. Ikasle-etatik zenbait student-det.pl some 'some student'

b. *ikasle zenbait-ak/-etatik

c. Ikasle-etatik asko student-det.pl many

'many students'

d. *ikasle asko-ak/-etatik

To sum up. In the formulation of a parameter that would tell us why the different languages make the choices that they make, then, it must be the case that (i) domain restriction is allowed on quantifiers (perhaps across the board) (Greek, Basque 'strong' determiners, algunos, St'át'imcets), (ii) domain restriction on the noun is allowed in some languages but not in others (yes in Basque and St'át'imcets, not in Spanish). Notice that these consequences are independent of the particular way we choose to model context dependence (with or without a variable, with the variable in the syntax or not, etc.).

The idea that domain restriction is tied to the definite article raises the question of what the right analysis of algunos de los 'some of the' is. Algunos can be combined with of the, and in the works cited above this would be taken as an indication that (a) algunos by itself is not domain restricted, and (b) los effects (nominal) domain restriction. We have seen evidence above that (a) is not correct. Now I want to briefly look at the behavior of algunos de los and ask whether (b) is the case. Note that, if (b) is

¹² Etxeberria claims that weak quantifiers in their 'cardinal' (non proportional) reading are incompatible with the definite article and hence with domain restriction. That is, in (i), only cardinal interpretations are possible; in (60), only proportional interpretations are possible:

(i) Basque

a. Zenbait politikari politician some 'Some politician(s)'

b. *Zenbait-a-k politikari

c. Politikari asko politician many

'Many politicians'

d. *Politikari asko-a-k

Etxeberria takes the fact that the Basque definite article, -a-, is absent with weak quantifiers in their cardinal reading to be an indication that the hallmark of these readings is lack of domain restriction. The behavior of algunos described in this paper would seem to suggest that this cannot be true: no matter what the reading, algunos is always accompanied by domain restriction (i.e., algunos is always accompanied by alg). Cardinal readings, it would seem, can be readings derived from LFs that contain contextual variables. Further research is needed to clarify this issue.

true, then there would be two contextually sensitive items in *algunos de los*. This is relevant because both Giannakidou (2004) and Etxeberria (2005) ban 'double' domain restriction.

Algunos de los is necessarily interpreted as relating to an existing discourse referent. We can see this by observing the effect that using algunos de los has in the examples from section 2. Using algunos de los in (3) gives rise to (61), and with (5) it gives rise to (62):

- (61) {A conversation between two pirates. They have just now been talking about a treasure they have found with lots of coins in it. They are trying to buy a drink at a tavern. Pirate A is rummaging in his pockets for money to pay for the drink:} Pirate B: Tengo *algunas de las* monedas en el bolsillo. Déjame pagar 'I have some of the coins in my pocket. Let me pay.'
- (62) Juan ha encontrado *algunos de los* libros que le diste 'Juan found some books you gave him'

In (61), Pirate B refers back to the previously-introduced coins, that is, those that belong to the treasure they found (and hence Pirate B necessarily gives himself away and there is no doubt that Pirate A is entitled to the continuation in (4)). In (62), just as was the case in one of the readings of bare *algunos*, Juan has not found some of the books you gave him, and the sentence can be followed by a continuation (such as (6)) that makes this explicit.

Algunos de los, as opposed to algunos, cannot appear in the existential construction:

(63) a. *Hay algunos de los libros sobre la mesa

'There are some of the books on the table'

b. *Había algunos de los chavales demasiado cerca de la carretera

'There were some of the boys too close to the road'

c. *Hay *algunos de los* países que podrían desaparecer si no se les presta ayuda para combatir la enfermedad

'There are some of the countries that could disappear if they don't receive help to fight the disease'

It is not possible to treat *algunos de los* as the spell out of one of the readings of *algunos* (cf. Gutiérrez-Rexach 2001), because then we fail to predict that *algunos*, but not *algunos de los*, can appear in the existential construction. Notice that there is nothing wrong with the context dependent reading of *algunos* in the existential construction: we know from examples (2) and (7) that such a reading is possible in that construction. We must blame some other property of *algunos de los* for this behavior, a property lacking in plain *algunos*. An obvious candidate is the contribution of *los*, the definite article. There is evidence that *los* in *algunos de los* introduces the presupposition that the set denoted by the head noun is non-empty. Consider (64) and (65) and compare them with (31) and (32), respectively:

(64)Question asked by reader in on-line interview: In which areas of the world is the AIDS problem the worst?

Answer by doctor: In Subsaharan Africa, undoubtlessly...

> Algunos de los gobiernos con los recursos necesarios se están preparándo para prestar ayuda. #De hecho, no existen gobiernos con los recursos necesarios (en el África

Subsahariana)

'Some of the governments with the necessary resources are getting ready to help. In fact, there exist no governments with enough resources (in Subsaharan Africa)'

(65)Question asked by reader in on-line interview: In which areas of the world is the AIDS problem the worst?

Answer by doctor:

In Subsaharan Africa, undoubtlessly. Our attempts at containment in this area have so far failed, and...

los políticos de los países ricos se están preguntando si algunos de los gobiernos con los recursos necesarios estarían preparados para prestar ayuda. #No están seguros de que existan gobiernos con tales recursos (en el África

Subsahariana)

'Policitians in rich countries are wondering whether some of the governments with the necessary resources would be prepared to help. They are not sure there exist governments with such resources (in Subsaharan Africa)'

Algunos de los presupposes that the set denoted by the head noun is non-empty (the presupposition comes in two flavors, depending on whether context dependence is taken into account or not). This, as we saw in section 2.3, is different with algunos.

Following Zucchi (1995) and others, we can say that there is an incompatibility between this presupposition and the existential construction, whichever way we may want to actually formulate the incompatibility. Note that (66) is out:

(66)*Hay los libros sobre la mesa

'There are the books on the table'

According to this analysis, then, algunos de los introduces a presupposition that is lacking in *algunos* and that is blamed on *los* on the basis of independent evidence. That *los* has this role to play does not, of course, mean that it doesn't also effect context dependence. There is independent evidence that it indeed introduces context dependence as well, just like e.g., English the:

(67)Los alumnos suspendieron el examen the students failed the exam 'The students failed the exam'

The sentence in (67), just like its English counterpart, is not interpreted as a statement about the biggest set of students there is (that is, the whole set of such individuals), but as a statement about a particular subset thereof, the subset of students that is relevant or salient to the context in which (67) occurs.

We have evidence, then, that algunos de los induces presuppositions that are lacking in algunos and also that los itself introduces context dependence. Since both alg- and los introduce context dependence, there is double context dependence in algunos de los and such an option must be allowed by the grammar, contra Giannakidou and Etxeberria.

Going now back to one of the main points of this section, notice that in order to distinguish *unos* from *algunos*, we need to ban covert nominal restriction. Overt nominal restriction, as in *algunos de los*, seems to be fine.

6 Data collection

This paper is based on a pilot study run with two native speakers of Iberian Spanish (both of them from the Madrid area; one of them is the author). There is a more comprehensive and better experiment in preparation that will test the judgements presented here with more native speakers and with more developed questionnaires.

The questionnaire used in the pilot study elicited judgements about truth-conditions or about contextual appropriateness, the most commonly used ways to probe semantic intuitions. In the items in the questionnaire, a context is first described to the speaker (in this case, in the native language of the speakers, Spanish), after which the test sentence (known independently to be grammatical) is provided, and the subject is asked to judge whether the sentence is true in the given context or an appropriate description of the events in this context. For example, in testing whether the plural indefinite *unos* distributes over events (recall section 3), the (Spanish version of the) context in (68) is provided first, and the subject is then asked whether the test sentence in (69) appropriately describes the events in (68):

- (68) 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.
- (69) 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'

The negative answer obtained for (68)-(69) leads to the claim that *unos* does not distribute over events (and the positive answer obtained when *unos* is replaced with *algunos* leads to the claim that *algunos* does).

Other times, certain questions about the contribution of the sentences were asked. For example, in (2), repeated here, speakers were asked whether the boys that were too close to the road were also fighting or not:

(70) Al llegar al colegio y ver a varios grupos de chicos peleándose, el director, harto ya de ver la misma escena todos los días, murmuró para sus adentros: "Vaya día me espera". Con pánico se dió cuenta de que...
'Upon arriving at the school and seeing several groups of boys fighting, the principal, sick and tired of seeing the same scene every day, mumbled to himself: "What a way to begin the day". In a panic, he realized that...'

- a. ...había *unos chavales* demasiado cerca de la carretera
- b. ...había algunos chavales demasiado cerca de la carretera
- "...there were some boys that were too close to the road"

Another strategy for finding out about the meaning of sentences is illustrated in (5)-(6), repeated here:

(71) a. Juan ha encontrado *unos* libros que le diste books that cl gave

b. Juan ha encontrado *algunos* libros que le diste

'Juan found some books you gave him'

Speakers were asked whether the sentences in (71) could be followed by the continuation in (72):

(72) ... sin embargo, no ha encontrado otros however not has found others '...however, he hasn't found others'

Notice that the continuation in (72) is compatible only with a reading in which the preceding sentence, (71a) or (71b), states that Juan found some but not all the books that you gave him. Since the continuation is felicitous only in the case of (71b), it is concluded that *unos* cannot be related to a subgroup of a bigger group, whereas *algunos* can

For more remarks on methodology see e.g., Beck (2005), Matthewson (1999, 2001, 2004) and Martí (2003).

7 Conclusion

It has long been recognized that quantificational expressions in natural language are context sensitive, but the attention has generally focused on so-called 'strong' quantifiers like English *every*. In this paper I have looked instead at the context sensitivity of indefinite quantifiers. Spanish is a good language to look at because, if I am right, it has two kinds of morphologically related indefinites: one, *algunos*, is context dependent; the other, *unos*, is not.

In this paper I have argued that the semantics of *algunos* differs from the semantics of *unos* in only two respects: (a) *algunos* is a quantifier; *unos* is not, and (b) *algunos*, like other quantifiers, comes with a contextual variable; *unos* does not. This hypothesis explains the behavior of these indefinites in contexts in which a discourse referent is introduced. Additional properties attributed to them, such as the fact that *algunos*, but not *unos*, can distribute over events, are made to follow from independent assumptions, related to the treatment of event quantification and distributivity. Crucially, these assumptions are not assumptions about the lexical contribution of the indefinites.

Having argued for a treatment of *algunos* in which *alg*- introduces context dependence, I turned to consider the consequences of this proposal for our views on domain restriction and quantification. The analysis of the Spanish data seems to suggest that Matthewson's (2001) approach to cross-linguistic quantification, based on the structure of quantificational phrases in St'át'imcets, cannot be right. Spanish *algunos* shows that the grammar must allow domain restriction to be a property of quantifiers,

and *unos* shows that the grammar must make it possible for a language to ban nominal domain restriction. I suggested above that we need to revisit the debate about the cross-linguistic nature of quantification and domain restriction in the light of the Spanish data. What exactly the principles or universal properties are in this respect, as well as exactly what the parameters are, remain as open questions. This is an issue that can only be solved by deepening our understanding of quantification in the languages discussed here as well as in other languages, an enterprise that this paper, like many of the others discussed in it, aimed at contributing to.

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