

THE SEMANTICS OF PLURAL INDEFINITES IN SPANISH AND PORTUGUESE*

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Comments welcome!

In this paper I provide a compositional analysis of three kinds of plural indefinites, in two related languages, European Spanish and Brazilian Portuguese. The three indefinites studied are bare plurals, the *unos* (Spanish)/*uns* (Portuguese) type, and the *algunos* (Spanish)/*alguns* (Portuguese) type. The paper concentrates on five of their properties: whether they are semantically plural, whether they are positive polarity items, whether they give rise to partitivity and event distribution readings, and whether they are context-sensitive. The logic underlying the analysis is that, as items become bigger in their form, they acquire more semantic properties. The paper thus pursues an analysis based on the idea that the match between form and meaning is transparent.

1 Introduction

This paper is concerned with the properties of the indefinites in (1), from E(uropean) Spanish, and (2), from B(razilian) Portuguese:

- (1) *ESpanish*
niños, *unos* niños, *algunos* niños
'children, *unos* children, *algunos* children'
- (2) *BPortuguese*
meninos, *uns* meninos, *alguns* meninos
'children, *uns* children, *alguns* children'

Unos/algunos and *uns/alguns* have feminine versions, *unas/algunas* and *umas/algumas*, respectively, and nouns in the two languages also inflect for gender. The properties of interest here are summarized in Table 1 and Table 2:¹

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¹ E(uropean) Portuguese behaves in many respects more like ESpanish than like BPortuguese. See below. Spanish speakers from the north of Spain (e.g., Basque Country) do not seem to

	BARE PLURALS	<i>UNOS</i>	<i>ALGUNOS</i>
semantic plurality	✗	✓	✓
positive polarity item	✗	✓	✓
event distribution	✓	✗	✓
partitivity	✗	✗	✓
context sensitivity	✗	✗	✓
genericity	✓	✗	✗
existential import	✓	✓	✓

Table 1 *ESpanish*

	BARE PLURALS	<i>UNS</i>	<i>ALGUNS</i>
semantic plurality	✓	✓	✓
positive polarity item	✗	✓	✓
event distribution	✗	✓	✓
partitivity	✗	✗	✓
context sensitivity	✗	✗	✗
genericity	✓	✗	✗
existential import	✓	✓	✓

Table 2 *BPortuguese*

The paper focuses on the first five properties in each table. The tables include two additional properties, existential import and genericity, because, even though I will not be discussing them in detail, I will occasionally make reference to them. A few remarks on the scope of these indefinites are included in sections 3.1 and 3.2 below.

Some of the important issues addressed in the paper are as follows. First, how can we make sense of the fact that there is a scale (bare plural > *unos/uns* > *algunos/alguns*) where semantic properties are generally acquired as we go from left to right²? This is the most important question addressed here, and the answer I adopt is quite straightforward: it is not an accident, since in their form, the items in the scale also get bigger and bigger.

The transparent form-meaning hypothesis limits the explanation space. For example, it forces us to postulate that *unos* and *uns* share a common semantics, and that the same goes for *algunos* and *alguns*. Both *unos* and *uns* have existential import and are positive polarity items and semantically plural. In the present framework, this is related to the fact that they look alike morphologically. The fact that they differ in whether they give rise to event distribution must be treated as a separate property according to the underlying logic (cf. Gutiérrez-Rexach 2001, 2004 on *unos/algunos* and event distributivity). The explanation for the fact that *algunos* and *alguns* make essentially the same contribution has to be that they also look alike in their form. I make sense of this by dividing the work between *alg-*, with very similar semantics in both languages, and *unos/uns*. The lexical semantics of *algunos* and *alguns* is the

agree with the Spanish judgments reported here. I don't know what the situation is for speakers of the different Latin American dialects.

² An exception to this are bare plurals in *ESpanish* (Table 1), since they event distribute and *unos*, which in its form is bigger than them, does not. See below, and also note 3.

same up to a contextual variable that the former, but not the latter, makes use of; this contextual variable is used to explain context sensitivity (cf. Martí 2006 for ESpanish).

The common noun itself will be the locus of the difference in semantic plurality in the two languages, so I will propose that the lexical semantics of common nouns in ESpanish and BPortuguese is different (cf. Laca 1996 and Müller 2002 for discussion of this property). It will turn out that this property is related in an interesting way to the fact that bare plurals can event distribute in ESpanish but not in BPortuguese. This is a welcome result because this property of ESpanish bare plurals is problematic for the logic put forth in this paper: once a feature is acquired in the scale, it shouldn't be lost, but that is exactly what seems to happen in the case of bare plurals and *unos/algunos*.³

The analysis has the interesting consequence, as we will see, that plural morphemes on nouns in the two languages have a different grammatical status.

The organization of the paper is as follows. In section 2, I discuss the data that supports the description provided in the tables above. Section 3 provides the compositional analysis in detail. Section 3.1 identifies some of the core ingredients of the analysis, and section 3.2 discusses those aspects of it where the syntax of the indefinites is in some way relevant, such as event distribution and positive polarity. Section 4 is the conclusion.

2 The empirical generalizations

2.1 Semantic plurality

Consider the data in (3) and (4):

(3) *ESpanish*

a. John: ¿Viste *niños* jugando en el patio?
saw children playing in the garden

‘Did you see children playing in the garden?’

Mary: Yes, I saw one/#No, I saw only one

b. John: ¿Viste a *unos/algunos* niños jugando en el patio?

‘Did you see *unos/algunos* children playing in the garden?’

Mary: #Yes, I saw one/No, I saw only one (based on Laca 1996: 243)

(4) *BPortuguese*

John: Você viu (*umas/algumas*) *crianças* brincando no jardim?
you saw children jumping in-the garden

‘Did you see (*umas/algumas*) children jumping in the garden?’

Mary: #Yes, I saw one/No, I saw only one (cf. Müller 2002)

(3a), with the ESpanish bare plural *niños* ‘children’, is a not a question about a semantic plurality. It can be answered positively even though the speaker saw only one child, and it cannot be answered negatively in that same situation. The opposite is true for ESpanish *unos/algunos*, as shown in (3b), and for the three BPortuguese indefinites, as shown in (4).

³ Genericity also seems problematic from this perspective. I relate this property to the fact that bare plurals denote only sets of individuals in both languages (cf. McNally 2004 for ESpanish). They are either generic or have existential import because one can choose to use generic or existential operators later on in the derivation. This idea is of course not new. I offer a few more details about this in section 3.1 below.

EPortuguese patterns like ESpanish with respect to this property. The generalization about semantic plurality is displayed in Table 3:

	BARE PLURALS	UNOS/UNS	ALGUNOS/ALGUNS
<i>ESpanish</i>	✗	✓	✓
<i>BPortuguese</i>	✓	✓	✓

Table 3 Semantic plurality

2.2 Positive Polarity

Unos and *algunos*, like their BPortuguese (and EPortuguese) counterparts, are positive polarity items. Bare plurals in either language are not. I defend here the idea that *unos* and *algunos* are positive polarity items against previous claims to the contrary and against the concern that, if *unos* and *algunos* are positive polarity items, then they seem to ‘misbehave’ in certain cases.

I first present the data concerning ESpanish, then I go on to BPortuguese. The remarks on polarity apply to the two languages in similar ways.

Consider first the behavior of the three ESpanish indefinites in the scope of negation, an anti-morphic context:^{4, 5}

- (5) A la reunión no asistieron (**unos/algunos*) profesores
to the meeting not come teachers
‘To the meeting there didn’t come (*unos/algunos*) teachers’

Despite the fact that (5) with *unos* sounds initially grammatical, speakers are not able to provide contexts in which the sentence would be true, which suggests that the sentence is semantically anomalous. The sentence with the bare plural is grammatical and true in those situations in which no teachers attended the meeting (i.e., the bare plural gets obligatory narrow scope with respect to negation; cf. Gutiérrez-Rexach 2001, 2004, Laca 1996, McNally 2004). The sentence with *algunos* is grammatical but, interestingly, unambiguous: *algunos* must scope above negation, so that the sentence is true only in those situations in which some teachers attended the meeting and others didn’t, and it sounds strange if no teachers came at all.⁶

⁴ Some well-known references about polarity, both positive and negative, are Giannakidou (1997), Kadmon and Landman (1993), Ladusaw (1979), Linebarger (1987), Nilsen (2004), van der Wouden (1997) and vanden Wyngaerd (1999), among others.

⁵ A function f is anti-morphic iff: (i) $f(a \wedge b) = f(a) \vee f(b)$ and (ii) $f(a \vee b) = f(a) \wedge f(b)$. Sentential negation as in (5) is anti-morphic because (i) ‘John didn’t sing and dance’ is equivalent to ‘John didn’t sing or John didn’t dance’, and (ii) ‘John didn’t sing or dance’ is equivalent to ‘John didn’t sing and John didn’t dance’. If an item has property (i), it is anti-multiplicative. If it has property (ii), it is anti-additive. Negation is then both anti-multiplicative and anti-additive.

⁶ Focus on the indefinite, as in (ia), or the addition of a relative clause to the indefinite noun phrase, as in (ib), can improve (5):

Negation is of course one of the contexts that licenses negative polarity items such as the idiomatic *decir ni pío* ‘to say anything’:

- (6) a. Pepita no dijo ni pío
 not say not-even chirp
 ‘Pepita said nothing’
 b. *Pepita dijo ni pío

The contrasts in (5) and the ones below are quite clear, and the speakers I have consulted have confirmed my own intuitions. It is important to point this out because this is contra the received wisdom in the literature. Gutiérrez-Rexach (2001: 146, 2004: 442), Laca (1996: 253) and McNally (2004: 120) all claim that both *unos* and *algunos* can scope under negation, so that the only difference between them and bare plurals is that bare plurals do so obligatorily. This description, however, does not seem to be correct.⁷

The behavior of these indefinites in anti-additive contexts, which have been identified in the literature as polarity contexts as well, further confirms the status of *unos* and *algunos* as positive polarity items.⁸

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- (i) a. A la reunión no asistieron *UNOS* profesores
 b. A la reunión no asistieron *unos* profesores que conozco
 ‘To the meeting there didn’t come *unos* teachers that I know’

That focus improves otherwise anomalous sentences with positive polarity items has been noted before (see, e.g., vanden Wyngaerd 1999) and is hence not surprising. That relativization plays a role has been noted before for negative polarity items (a phenomenon known as *subtrigging*; cf. Dayal 1998) and is true for the English positive polarity item *some*:

- (ii) a. *I didn’t see some students
 b. I didn’t see some students that I know

We will have to take this into account in our theories of positive polarity items. I don’t think, however, that the fact that no theory of (positive) polarity can make sense of this fact is grounds for rejecting the status of *unos*, *algunos* or *some* as positive polarity items.

⁷ It may of course be that we have identified two different dialects, one with the judgements I report and the other with the judgements reported in the literature. We need to determine whether that is the case and then consider the consequences. For the moment, I will stick to the judgements I have been able to confirm.

⁸ For example, *refuse* is anti-additive (see footnote 4) because ‘John refused to eat or drink’ is equivalent to ‘John refused to eat and John refused to drink’. It is not, in addition, anti-morphic because ‘John refused to eat and drink’ is not equivalent to ‘John refused to eat or John refused to drink’. ‘John refused to eat and drink’ means that he refused to do both things, but ‘John refused to eat or John refused to drink’ can be true in a situation in which he refuses to do only one of the two and does the other.

- (7) a. Todos los estudiantes que compraron (**unos/algunos*) apuntes
all the students that bought notes
suspendieron el examen
failed the exam
‘All the students who bought (*unos/algunos*) notes failed the exam’
b. Noelia vino a la fiesta sin (**unas/algunas*) botellas
came to the party without bottles
‘Noelia came to the party without (*unas/algunas*) bottles’
c. Teresa se negó a besar a (**unos/algunos*) estudiantes
clitic refused to kiss to students
‘Teresa refused to kiss (*unos/algunos*) students’

The examples in (7) with *unos* are semantically anomalous. With the bare plural they are all fine (and they get only narrow scope readings of the indefinite, as expected). With *algunos*, only wide scope readings obtain. For example, (7b) with *algunos* is not true in a situation in which Noelia came without bottles, she needs to have brought some and left others. Compare the status of (7b) and (7c) with the ‘positive’ and non-anomalous (8a) and (8b), respectively:

- (8) a. Noelia vino a la fiesta con (*unas/algunas*) botellas
with
‘Noelia came to the party with (*unas/algunas*) bottles’
b. Teresa insistió/quiso besar a (*unos/algunos*) estudiantes
insisted/wanted
‘Teresa insisted in kissing/wanted to kiss (*unos/algunos*) students’

Decir ni pío is licensed under *sin* ‘without’ and under *negarse* ‘to deny’, but not in the first argument of *todos* ‘all/every’ (or in the context of verbs such as *insistir* ‘to insist’):

- (9) a. *Todos los estudiantes que dijeron ni pío suspendieron el examen
‘All the students who said anything failed the exam’
b. Noelia vino a la fiesta sin decir ni pío/*diciendo ni pío
‘Noelia came to the party without saying anything/saying anything’
c. Teresa se negó a decir ni pío/*insistió en decir ni pío
‘Teresa refused to say anything/insisted on saying anything’

The fact that not all anti-additive contexts license the negative polarity item *decir ni pío* is important because *unos* and *algunos* also display this mixed behavior. They are fine when in certain monotone-decreasing contexts but anomalous when in others: they are not licensed under *pocos* ‘few’, but they are licensed under *como mucho n N* ‘at most n N’ and in (yes/no) questions. The contexts in (10) are monotone-decreasing without being anti-additive or anti-morphic:⁹

⁹ A function is monotone-decreasing if it reverses entailments, that is, if whenever $a \rightarrow b$, $f(b) \rightarrow f(a)$. *Few* is monotone decreasing. ‘John bought apples’ entails ‘John bought fruit’, but with *few* the entailment goes the other way around: ‘John bought few pieces of fruit’ entails ‘John bought few apples’. Notice that the contexts we have identified so far are in a subset-superset relation:

- (10) a. Pocos estudiantes compraron (*unos/*algunos) libros
 few students bought books
 ‘Few students bought (unos/algunos) books’
 b. Como mucho tres estudiantes fumaron (unos/algunos) porros
 like much three students smoked joints
 ‘At most three students smoked (unos/algunos) joints’
 c. ¿Has visto (a unos/a algunos) estudiantes paseando por
 have seen to students taking-a-walk through
 la avenida?
 the avenue
 ‘Have you seen (unos/algunos) students taking a walk in the street?’

That is, the fact that *unos* and *algunos* do not behave uniformly with respect to monotone-decreasing contexts (that are neither anti-additive nor anti-morphic) is not grounds for rejecting the idea that they are positive polarity items, because there are negative polarity items such as *decir ni pío* that also do not behave uniformly with respect to particular kinds of polarity contexts. We want to understand, of course, why this is so, but the point that is of relevance here is that non-uniform behavior with respect to a particular kind of context is not grounds for rejecting the polarity status of the item in question.¹⁰

For completeness, let us note that *decir ni pío* is licensed under *pocos* ‘few’, but not under *como mucho n N* ‘at most n N’ or in (yes/no) questions; again, a polarity item displays a mixed licensing pattern:

- (11) a. Pocos estudiantes dijeron ni pío cuando se cambió la fecha
 del examen
 of-the exam
 ‘Few students said anything when the date of the exam was changed’
 b. *Como mucho tres estudiantes dijeron ni pío cuando se cambió la fecha del examen
 ‘At most three students said anything when the date of the exam was changed’
 c. *¿Piensas que Lola dijo ni pío al cambiarse la fecha del examen?
 think that
 ‘Do you think that Lola said anything when the date of the exam was changed?’

BPortuguese and EPortuguese behave similarly to ESpanish. The BPortuguese data are in (12)-(14):

- (12) Àquela reunião, não vieram (*uns/alguns) professores
 that meeting not came teachers
 ‘To that meeting there didn’t come (uns/alguns) teachers’

(i) Anti-morphic contexts \subseteq Anti-additive contexts \subseteq Monotone-decreasing

¹⁰ Notice that *algunos* seems to be anomalous with *pocos* ‘few’, as shown in (10a). I suspect that speakers might have had this reaction to (10a) because special intonation accompanies the wide scope of *algunos*, and they may have failed to realize this.

- (13) a. Todos os estudantes que perderam (**umas/algumas*) *classes*
all the students that missed classes
foram mal no exame
did badly in-the exam
‘All the students that missed (*umas/algumas*) classes did badly in the exam’
b. João veio para a festa sem trazer (**umas/algumas*) *bebidas*
came to the party without bring drinks
‘John came to the party without bringing (*umas/algumas*) drinks’
c. Joana recusou-se a beijar (**uns/alguns*) *estudantes*
refused-clitic to kiss students
‘Joanna refused to kiss (*uns/alguns*) students’
- (14) a. Poucos alunos trouxeram (**uns/alguns*) *livros*
few students bought books
‘Few students bought (*uns/alguns*) books’
b. No máximo três alunos fumaram (**uns/alguns*) *cigarros*
in-the maximum three students smoked cigarettes
‘At most three students smoked (*uns/alguns*) cigarettes’
c. Você viu (*uns/alguns*) *estudantes* andando na rua?
you saw students walking in-the street
‘Have you seen (*uns/alguns*) students walking in the street?’

Notice that there are some differences between ESpanish and BPortuguese, such as between (10b) and (14b). I have no explanation for such contrasts and thus take the generalization displayed in Table 4 to be good enough for our purposes:

	BARE PLURALS	<i>UNOS/UNS</i>	<i>ALGUNOS/ALGUNS</i>
<i>ESpanish</i>	✗	✓	✓
<i>BPortuguese</i>	✗	✓	✓

Table 4 Positive polarity

2.3 Event distribution

This is the property that is the most problematic from the perspective of the logic that underlies the analysis in this paper. *Algunos*, *alguns*, *uns* and ESpanish bare plurals event distribute, *unos* and BPortuguese bare plurals do not. EPortuguese behaves like ESpanish and not like BPortuguese in this respect. Given our logic, the following questions will arise for the analysis. First, if as items become bigger in their form they also become more loaded semantically, why can ESpanish bare plurals event distribute, but *unos* cannot? *Unos* certainly counts as bigger in its form than the bare plural. And second, if *unos* and *uns* are alike in form, why can the latter, but not the former, event distribute? We will come back to these questions in section 3.1.

Consider first the ESpanish sentences in (15):

- (15) (*Algunos/unos*) *estudiantes* *míos de historia* vinieron ayer
 students mine of history came yesterday
 al despacho
 to-the office
 ‘(*Algunos/unos*) history students of mine came to the office yesterday

And consider two kinds of scenario. In the event distribution scenario, the students who came to the office yesterday did so one by one. In the non-event-distribution scenario, the students who came to the office yesterday arrived together. The sentence with *algunos* is possible in both scenarios, the sentence with *unos* is impossible in the event distribution scenario, and the sentence with the bare plural is possible in both scenarios. Gutiérrez-Rexach (2001, 2004) uses the *entre todos* ‘together’/*cada uno* ‘each’ test to confirm these intuitions, though, for reasons I don’t understand, the test does not apply to bare plurals:

- (16) a. *Algunos estudiantes míos de historia* se comieron una tarta
 clitic ate a pie
 entre todos/ cada uno
 among all each one
 b. *Unos estudiantes míos de historia* se comieron una tarta entre todos/*cada uno
 c. **Estudiantes míos de historia* se comieron una tarta entre todos/cada uno
 ‘(*Algunos/unos*) students from my history class ate a pie together/each’
 (based on Gutiérrez-Rexach 2001: 133; 2004: 430)

(16c) is ungrammatical with either *entre todos* or *cada uno*, so the test doesn’t tell us anything about bare plurals. (16a) and (16b) do contrast in the expected direction: *entre todos* is possible with both *unos* and *algunos* because they both allow non-event-distribution readings, but *cada uno* is possible only with *algunos* because only *algunos* allows event distribution readings. The *todos juntos* ‘all together’/*uno a uno* ‘one by one’ test does work with bare plurals:

- (17) a. *Algunos estudiantes míos de historia* vinieron todos juntos/uno a uno ayer al despacho
 b. *Unos estudiantes míos de historia* vinieron todos juntos/*uno a uno ayer al despacho
 c. *Estudiantes míos de historia* vinieron todos juntos/uno a uno ayer al despacho

Before going on to the BPortuguese data, I would like to briefly discuss distributivity in the context of Gutiérrez-Rexach’s (2001, 2004) and Villalta’s (1994)¹¹ claim that *unos* can never combine with distributive predicates such as *ponerse los pantalones* ‘put one’s pants on’ (cf. Martí 2006). This claim is based on examples such as (18):

- (18) **Unos chicos* se pusieron los pantalones
 boys clitic put the pants
 ‘*Unos* boys put their pants on’

¹¹ Which I haven’t seen.

(19) **Unos chicos se reunieron*
clitic met
'*Unos boys met*'

(20) Se pusieron *unos* chicos los pantalones
'*Unos* boys put their pants on'

(21) a. *Unos* chicos se pusieron los pantalones al llegar al gimnasio
at arrive to-the gym
'*Unos* boys put their pants on as soon as they arrived to the gym'
b. *Unos* chicos se reunieron en la oficina
in the office
'*Unos* boys met in the office'

(22) and (23) exemplify with BPortuguese:

(23) Durante todo o dia de ontem *alunos meus de História*
 during all the day of yesterday
 vieram me ver no meu gabinete
 ‘All of yesterday history students of mine came to see me to the office’

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- (24) *Alguns/uns meninos da minha aula de História comeram uma torta juntos/cada um*
‘Alguns/uns students from my history class ate a pie together/each’

The summary of these results is displayed in Table 5:

	BARE PLURALS	<i>UNOS/UNS</i>	<i>ALGUNOS/ALGUNS</i>
<i>ESpanish</i>	✓	✗	✓
<i>BPortuguese</i>	✗	✓	✓

Table 5 Event distribution

2.4 Partitivity

Algunos and *alguns* induce a partitivity effect, *unos*, *uns* and bare plurals in the two languages do not. The same generalization holds for EPortuguese. As in the previous section, I first discuss ESpanish and then go on to the data from BPortuguese.

Consider (25) (recall (15)):

- (25) a. *Algunos* alumnos míos de historia vinieron ayer a verme al despacho
b. *Unos* alumnos míos de historia vinieron ayer a verme al despacho
c. *Alumnos míos de historia* vinieron ayer a verme al despacho
'(*Algunos/unos*) history students of mine came to the office to see me yesterday'

Consider a partitive scenario in which I have a big history class, with thirty-five students. Five of them came to my office yesterday. And consider a non-partitive scenario in which I have a very small history class, with only five students. It is those five students who came to my office yesterday. (25a), with *algunos*, is only appropriate in the partitive scenario: there must be history students who didn't come, in addition to those who came. (25b), with *unos*, and (25c), with a bare plural, do not discriminate between the two scenarios. Given (25b) and (25c), either scenario could be the case.¹²

To confirm these intuitions, consider the continuation *Es una pena que no vinieran todos* ‘It’s a shame that not all came’:

- (26) a. *Algunos* alumnos míos de historia vinieron ayer a verme al despacho. ✓ Es una pena que no vinieran todos
is a shame that not came all
- b. *Unos* alumnos míos de historia vinieron ayer a verme al despacho. #Es una pena que no vinieran todos
- c. *Alumnos míos de historia* vinieron ayer a verme al despacho. #Es una pena que no vinieran todos
- ‘(*Algunos/unos*) history students of mine came to the office yesterday. It’s a shame that not all came’

¹² Speakers often report this by saying that, in sentences (25b) and (25c), whether there are other history students of mine who didn't come "is not important".

This continuation is possible for the sentence with *algunos*, but not for the sentence with *unos* or for the sentence with the bare plural. This is expected if *algunos* induces a partitive effect, which the continuation in (26) makes explicit reference to. As for *unos* and the bare plural, one important speaker reaction was as follows: “it is strange not to say whether other students came or not and then all of a sudden to say that not all came”.

Two notes before moving on to BPortuguese. First, I think that the partitive effect is an implicature, but the *de hecho* ‘in fact’ test, which is widely used in English to test for implicatures, does not distinguish *algunos* from *unos* and bare plurals:

- (27) a. *Algunos* alumnos míos de historia vinieron ayer a verme al despacho. ✓De hecho, of fact
vinieron todos.
came all
b. *Unos* alumnos míos de historia vinieron ayer a verme al despacho. ✓De hecho, vinieron todos.
c. *Alumnos míos de historia* vinieron ayer a verme al despacho. ✓De hecho, vinieron todos.
(*Algunos/unos*) history students of mine came to the office yesterday. In fact, they all came’

With the *in fact* test, what we do is deny an implicature, which, according to the description above, should be possible with *algunos* but not with *unos* or the bare plural, since they lack the relevant implicature. However, I don’t think that the conclusion to be drawn from (27) is that the three indefinites have a partitive implicature. Recall that the way I have described *unos* and bare plurals is that they lack the partitive implicature: sentences with *unos* and bare plurals do not tell us whether there are additional students who didn’t come to my office. It is compatible with that state of affairs to add with *de hecho* that all came. In the particular case of *unos* and bare plurals, this is *added* to a previous information state; in the case of *algunos*, we use the *de hecho* continuation to deny an implicature. I take it that the contrast between (26) and (27) is due to the presence of *de hecho*, which allows the hearer to make sense of the strange state the speaker of sentences such as (26a) seems to be in: initially, this speaker does not commit himself to any claims about other students not coming, and then he immediately says that not all came. With *de hecho* in (27b), the hearer is allowed to understand the shift from not caring/knowing, etc. whether there are other students who didn’t come to stating that they all came. That *de hecho* is crucial here can be seen from the fact that (26b) and (26c) improve if *de hecho* is used. (26a) becomes degraded because the continuation suggests that the information that not all the students came was not communicated before, but it was. That (28b) and (28c) are felicitous then indicates that the information that not all students came was not in fact communicated before:

- (28) a. *Algunos* alumnos míos de historia vinieron ayer a verme al despacho. #De hecho, no vinieron todos
b. *Unos* alumnos míos de historia vinieron ayer a verme al despacho. ✓De hecho, no vinieron todos
c. *Alumnos míos de historia* vinieron ayer a verme al despacho. ✓De hecho, no vinieron todos
(*Algunos/unos*) history students of mine came to the office yesterday. It’s a shame that not all came’

In short, *de hecho* is not always a mark of implicature denial, it can also be used to add information that was not implied (or presupposed, or entailed) before. This is why we obtain no contrast in (27), and we have to appeal to (26) and (28) as the contexts in which the difference between *algunos* on the one hand and *unos* and bare plurals on the other can be observed.

The second note is that Laca (1996: 248-251) claims that bare plurals in ESpanish induce a partitive effect. I think that the generalization provided here is the correct one, and that it is subtly different from what Laca claims: it is not that bare plurals are partitive, it is that they are appropriate both in partitive and in non-partitive scenarios. Perhaps the subtlety of the difference is what caused Laca to claim that bare plurals are partitive.

Now consider BPortuguese, as in (29) and (30) (recall (22) and (23)):

- (29) a. *Alguns* alunos meus de História vieram me ver ontem no meu gabinete
b. *Uns* alunos meus de História vieram me ver ontem no meu gabinete
'*Alguns/uns* history students of mine came to see me yesterday to the office'
- (30) Durante todo o dia de ontem *alunos meus de História* vieram me ver no meu gabinete
'All of yesterday history students of mine came to see me to the office'

We obtain the contrast in (31) and (32):

- (31) a. *Alguns* alunos meus de História vieram me ver ontem no meu gabinete. #Estou tão
feliz por todos os meus alunos de história terem
happy because all the my students of history had
vindo me ver!
come clitic see
b. *Uns* alunos meus de História vieram me ver ontem no meu gabinete. ✓Estou tão
feliz por todos os meus alunos de história terem vindo me ver!
‘*Alguns/uns* history students of mine came to see me yesterday to the office. I am so
happy that all of my history students came to see me!’
- (32) Durante todo o dia de ontem *alunos meus de História* vieram me ver no meu gabinete.
✓Estou tão feliz por todos os meus alunos de história terem vindo me ver!
‘All of yesterday history students of mine came to see me to the office. I am so happy
that all of my history students came to see me!’

Alguns, just like *algunos*, induces a partitive effect and a sentence with *alguns* cannot be followed by *Estou tão feliz por todos os meus alunos de história terem vindo me ver* ‘I am so happy that all of my history students came to see me’. *Uns* and bare plurals do not induce such an effect, since such a continuation is possible in sentences that contain them.¹³

The results of this subsection are summarized in Table 6:

¹³ The *in fact* test also does not seem to work very well in BPortuguese.

	BARE PLURALS	UNOS/UNS	ALGUNOS/ALGUNS
<i>ESpanish</i>	✗	✗	✓
<i>BPortuguese</i>	✗	✗	✓

Table 6 Partitivity

2.5 Context sensitivity

On top of inducing partitivity, *algunos* is context sensitive (cf. Martí 2006), though none of the other indefinites, in *ESpanish* or *BPortuguese*, are. Consider (33):

- (33) {Teachers A and B are on an excursion with a group of children, of whom they are in charge. Teacher A comes to teacher B running:}
- a. Teacher A: ¿Te has enterado? *Algunos niños* se han perdido en el bosque
clitic have found-out children clitic have
lost in the forest
- b. Teacher A: ¿Te has enterado? *Unos niños* se han perdido en el bosque
‘Have you heard? *Algunos/unos* children have gotten lost in the forest’
- c. Teacher A: ¿Te has enterado? Hay *niños* perdidos en el bosque
‘Have you heard? There are lost children in the forest’

In (33a), teacher A says that some of the children him and teacher B are in charge of have gotten lost in the forest, and that there are other children in their care that have not gotten lost. Consider the continuations in (34) and (35):

- (34) {After a few hours, teachers A and B discover that none of the children from their group had actually gotten lost; it was children from a neighboring village:}
- Teacher A: Estamos de suerte: lo que dije antes estaba mal.
are of luck the what said earlier was wrong
¡No tenemos que darle malas noticias a ningún padre!
not have that give-clitic bad news to any parent
‘We are so fortunate that what I said turned out to be false – we don’t have to give bad news to any parent!’
- (35) Teacher A: Pero por lo menos todos nuestros niños
but through the least all our children
están de vuelta
are of return
‘But at least all of our kids are back’

(34) is a felicitous continuation for (33a), but (35) is not. (33a) can be followed by (34) because it ends up being false that some of the children from their group had gotten lost and this is still compatible with some other children getting lost, such as those from the neighboring village; it cannot be followed by (35) because (35) contradicts it: if some of their children have gotten lost, it cannot be that all of them are back. However, matters are

different when we consider the BPortuguese version of (33a), in (36a). The sentences with *uns* and the bare plural are also provided:

- (36) {Teachers A and B are on an excursion with a group of children, of whom they are in charge. Teacher A comes to teacher B running:}
- a. Teacher A: Você ouviu? *Algumas crianças* se perderam na floresta
 you heard children clitic lost in-the forest
 b. Teacher A: Você ouviu? *Umas crianças* se perderam na floresta
 ‘Have you heard? *Algumas/umas* children got lost in the forest’
- (37) {Teachers A and B are on a week-long excursion with a group of children, of whom they are in charge. Yesterday they sent their children on a two-day mini-excursion with one of the local guides. Teacher A comes to teacher B running:}
- Teacher A: Você ouviu? Durante todo o dia de ontem *crianças* se perderam na floresta
 ‘Have you heard? All of yesterday children got lost in the forest’

(36a) cannot be followed by (the BPortuguese equivalent of) (34). The new developments in (34) do not make the statement in (36a) false: that statement says that some children (contextually salient or not) got lost in the forest and some other children didn’t. On the other hand, (36a) can be followed by (The BPortuguese equivalent of) (35): the statement that all of the teachers’ children are back is compatible with some other group of children having gotten lost in the forest.¹⁴

Consider what happens if *uns* and *unos* or bare plurals are used instead. The equivalents of (33b), (33c), (36b) and (37) cannot be followed by (the BPortuguese equivalent of) (34): it is not false that there is a group of lost children. They can be followed by (the BPortuguese equivalent of) (35), because (35) simply adds information to the more general previous sentence: the lost children are not (from) the teachers’ group. As was the case with partitivity, *unos/uns* and bare plurals in both languages just don’t seem to care whether the Ns mentioned are contextually salient or not.

Gutiérrez-Rexach (2001) and Martí (2006) point out that *algunos* NPs can also give rise to meanings that don’t look context dependent. Consider the following example, from Martí (2006):

¹⁴ Some speakers might need stress on *nossas* ‘our’ in the BPortuguese version of (35):

- (i) Mas pelo menos todas as NOSSAS crianças estão de volta
 ‘But at least all of our children are back’

Stress doesn’t improve things for (35) when used as a continuation for (33).

- (38) {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 *algunas* monedas en el bolsillo. Déjame pagar
have coins in the pocket let-me pay
- b. Pirate B: Tengo *unas* monedas en el bolsillo. Déjame pagar
- c. Pirate B: Tengo *monedas* en el bolsillo. Déjame pagar
‘I have (*unas/algunas*) coins in my pocket. Let me pay’

(38b) and (38c) behave as expected, and the coins that Pirate B offers are not coins from the treasure they have just found. In (38a), surprisingly, the coins offered by Pirate B may or may not come from the treasure that the two pirates have just discovered. That *algunos* has these interpretation possibilities in this example can be confirmed as follows. First, it is possible to follow (38a) with (39) (this is not possible, expectedly, for (38b) or for (38c)): Pirate A, upon hearing (38a), can legitimately raise the suspicion that the coins offered by Pirate B belong to the treasure:

- (39) {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 A: ¿ Me estás diciendo que cogiste monedas del
clitic are saying that took coins from-the
tesoro, a pesar de lo que decidimos?
treasure to grief of the what decided
‘Are you telling me that you took coins with you when we discovered the treasure, despite our agreement?’

But it is also possible to follow (38a) (and (38b) and (38c)) with (40):

- (40) Pirate B: Mi hermano me dio este dinero el otro día
my brother clitic gave this money the other day
‘I got this money from my brother the other day’

Martí (2006) points out that it would not be correct to conclude that in this use of *algunos*, *algunos* behaves in the same way as *unos* or bare plurals, i.e., that *algunos* has a context insensitive use. The reason is that sentences with *algunos* NPs are not appropriate in contexts, such as those in (41) and (42), which altogether lack a salient entity available for future reference; *unos* NPs are, as expected, felicitous in such contexts:¹⁵

¹⁵ With bare plurals the sentences in (41) and (42) are ungrammatical (not merely inappropriate). See Laca (1996), among others.

- (41) {A and B are mathematicians at the university in Saarbrücken. A comes to B running. Children are something that hasn't been on their minds or conversations for a long time:}
- a. A: ¿Sabes qué? #*Algunos* niños han conseguido resolver
 know what children have managed solve
 la conjetura de Poincaré!
 the conjecture of
- b. A: ¿Sabes qué? ✓*Unos* niños han conseguido resolver la conjetura de Poincaré!
 ‘You know what? Some children have managed to solve Poincaré’s conjecture!’
- (42) {A and B work at an agency for the prevention of car accidents. A is already at work, and B is just now arriving, and he is quite agitated. Children are something that hasn't been on their minds or conversations for a long time:}
- a. B: ¡Dios mío! #*Algunos* niños están jugando demasiado
 God mine children are playing too
 cerca de la carretera!
 close of the road
- b. B: ¡Dios mío! ✓*Unos* niños están jugando demasiado cerca de la carretera!
 ‘Oh my God! Some children are playing too close to the road!’

I conclude that the right empirical generalization about *algunos* is that it is context sensitive, even in cases such as (38a). We do not yet understand the differences between such cases and examples such as (36) that are responsible for the differing behavior, but in view of examples such as (41) and (42), I propose that *algunos* is always interpreted in connection with a contextually salient entity, sometimes directly, as in (33a), and sometimes only “indirectly”, as in (41) and (42).

Notice that BPortuguese behaves differently in these contexts, since *alguns* is possible (and induces a partitive effect that is lacking with *uns*, of course):

- (43) {A and B are mathematicians at the university in Saarbrücken. A comes to B running. Children are something that hasn't been on their minds or conversations for a long time:}
- a. A: ✓Você sabia que *alguns* meninos conseguiram resolver
 you know that children managed solve
 o desafio de Poincaré?
 the conjecture of
- b. A: ✓Você sabia que *uns* meninos conseguiram resolver o desafio de Poincaré?
 ‘Did you know that some children have managed to solve Poincaré’s conjecture!’
- (44) {A and B work at an agency for the prevention of car accidents. A is already at work, and B is just now arriving, and he is quite agitated. Children are something that hasn't been on their minds or conversations for a long time:}
- a. B: Santo Deus! ✓*Alguns* meninos estão brincando perto
 holy God children are jumping close
 demais da estrada!
 too of-the road

- b. B: Santo Deus! ✓ *Uns* meninos estão brincando perto demais da estrada!
‘Oh my God! Some children are jumping too close to the road!’

This further confirms that *alguns* is not context sensitive.

The summary of the facts discussed in this subsection is in Table 7:

	BARE PLURALS	UNOS/UNS	ALGUNOS/ALGUNS
<i>ESpanish</i>	✗	✗	✓
<i>BPortuguese</i>	✗	✗	✗

Table 7 Context sensitivity

3 A decompositional analysis for plural indefinites

In this section I present a decompositional analysis of the six indefinites described in section 2.

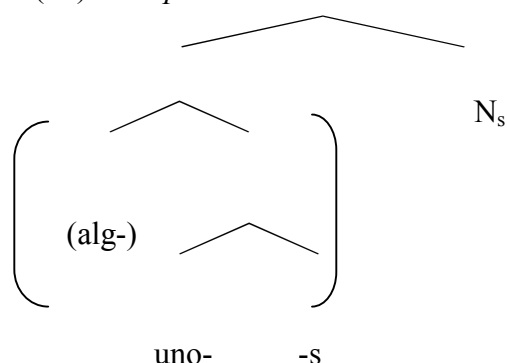
There is good reason to suppose that indefinites should be analyzed in a compositional fashion: in language after language, it is possible to see, more or less transparently, that indefinites are internally built up of pieces, which are sometimes other, simpler indefinites, and sometimes interrogative words. The data in (45), from Haspelmath (1997), is a representative sample:

- (45) a. German:
ein ‘some’, *irgend-ein*, *kein* ‘no’ (determiner)
jemand ‘somebody’, *irgend-jemand*, *niemand* ‘nobody’ (person)
etwas ‘something’, *irgend-etwas* (thing)
b. Hindi/Urdu:
koi ‘somebody’, *koi bhii* (person)
kuch ‘something’, *kuch bhii* (thing)
kabhii ‘some time’, *kabhii bhii* (time)
c. Turkish:
bir ‘some’, *hiçbir* ‘no’ (determiner)
biri ‘somebody’, *hiçbiri* ‘nobody’ (person)
bir sey ‘something’, *hiç bir sey* ‘nothing’ (thing)

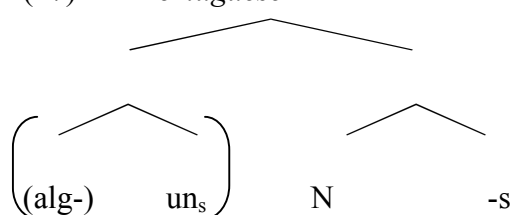
For example, in German ((45a)), there is an indefinite, *ein* (loosely translated as ‘some’) that is used as a building block for other indefinites, such as *irgend-ein* and *kein*. This pattern is similar for *jemand* ‘somebody’ and *etwas* ‘something’. In Hindi/Urdu ((45b)), *bhii* is added to simpler indefinites to form more complex indefinites. And in Turkish ((45c)), *hiç* can be added to simpler indefinites to add a negative meaning. I do not discuss here the other pervasive pattern, which builds indefinites with the help of interrogative building blocks, but the fact that it exists is further support for a decompositional analysis of indefinites. In other words, the argument is that a non-decompositional theory of indefinites would have it that the pervasive patterns we observe cross-linguistically, exemplified in (45), are merely accidental.

I assume the decompositions in (46), for ESpanish (and EPortuguese), and in (47), for BPortuguese:

(46) *ESpanish*



(47) *BPortuguese*



I use the subscript 'S' to indicate a plural morpheme that is just a plural agreement marker, without any semantic content. To treat the plural marker on nouns differently in the two languages is motivated primarily by the fact that ESpanish bare nouns are semantically singular, whereas their BPortuguese counterparts are semantically plural, as we saw in section 2.1. (48) is the denotation I assume for plural nouns in ESpanish (and EPortuguese):

(48) $[[niños]] = [[niño]] = \lambda x. x \text{ is an atomic child individual}$

I assume the classification of individuals in Link (1983), where individuals can be atomic/singular or molecular/plural. The distinction between these two kinds of individuals is illustrated in (49):

- (49) a. atomic/singular individuals: John, Peter, Sue, Steven...
b. molecular/plural individuals: John+Peter, Sue+John, Steven+Sue+John...

In other words, the individual John is an atomic or singular individual, and is not molecular or plural. On the other hand, the individual John+Peter is a molecular or plural individual, not an atomic or singular one. Molecular/plural individuals have atomic/singular subparts.

The denotation of *niños* is the same as the denotation of *niño* and is a set of atomic child individuals. The plural marker *-s* on the plural noun is a marker of plural agreement; it cannot add semantic plurality in this language because ESpanish bare nouns are semantically singular.

BPortuguese bare nouns, on the other hand, are semantically plural. Here I follow Müller (2002) in her treatment of bare singular and plural nouns in this language:

$$(50) \quad [[[\text{menino}]\text{-s}]] = \lambda x.x \text{ is a molecular child individual}$$

The plural marker on BPortuguese nouns is meaningful and has the denotation in (51b). It takes as its argument a noun like *menino* in (51a), which simply denotes a set of child individuals, atomic or molecular. The plural morpheme returns a set of molecular child individuals as the denotation of *meninos*; i.e., a subset of (51a):

$$(51) \quad \begin{array}{ll} \text{a. } [[\text{menino}]] = \lambda x.x \text{ is a child individual} \\ \text{b. } [[\text{-s}]] = \lambda P_{\langle \text{et} \rangle}. \lambda x.[P(x) \ \& \ \text{Mol}(x)] \end{array}$$

This treatment builds semantic plurality and singularity into the lexical semantics of nouns. Because nothing is else is built into their lexical semantics, ESpanish and BPortuguese bare plurals do not induce a partitive effect, are not context sensitive and are not positive polarity items. The fact that the former, but not the latter, give rise to event distribution readings is dealt with in section 3.2, but it is important to say now that this difference will be linked to the different lexical semantics proposed here.

I assume, like many others, that there is a default process of existential binding that takes care of the unsaturated variable provided by bare plurals. In generic sentences, we get binding by a generic operator instead of existential binding.¹⁶ Additionally, I assume that there is a rule of semantic composition that allows verbal predicates to combine with bare plurals in argument position:

$$(52) \quad \begin{array}{c} \diagup \quad \diagdown \\ \exists/\text{GEN } x \quad \diagup \quad \diagdown \\ \text{boys} \quad \text{came} \end{array}$$

I follow Chung and Ladusaw (2004) in that that operation is a generalized version of Predicate Modification, Restriction. For more on the advantages of treating these nouns as I do here, see Müller (2002) for BPortuguese and McNally (2004) for ESpanish.

Bare nouns are the first and most basic building block for our indefinites. We can now add *unos* and *uns* to obtain a new indefinite. Here the underlying logic of the analysis tells us that *uns* and *unos* should be very similar semantically, because they are very similar in form. The denotation of *unos* is built up of the denotation of *uno* and the denotation of the plural maker, which is meaningful on determiners in ESpanish:

$$(53) \quad [[[\text{uno}]\text{-s}]] = \lambda P_{\langle \text{et} \rangle}. \lambda Q_{\langle \text{et} \rangle}. \exists x[\text{Mol}(x) \ \& \ \forall z[z < x \rightarrow P(z)] \ \& \ Q(x)]$$

$$(54) \quad \begin{array}{ll} \text{a. } [[\text{uno}]] = [[\text{uns}]] = \lambda P_{\langle \text{et} \rangle}. \lambda Q_{\langle \text{et} \rangle}. \exists x[P(x) \ \& \ Q(x)] \\ \text{b. } [[\text{-s}]] = \lambda R_{\langle \text{et}, \langle \text{et}, t \rangle \rangle}. \lambda P_{\langle \text{et} \rangle}. \lambda Q_{\langle \text{et} \rangle}. R(\lambda y. \text{Mol}(y) \ \& \ \forall z[z < y \rightarrow P(z)])(Q) \end{array}$$

The plural morpheme in (54b) takes *uno* in (54a) as its argument. *Uno* is an existential generalized quantifier and the result of combining with the plural marker, in (53), is also an existential generalized quantifier, but one that quantifies over molecules instead of atoms.

¹⁶ See section 3.2 for a slight addition to this picture.

This is achieved via the plural marker, because it provides a set of molecular individuals as the first argument of *R*, i.e., *uno*. When *unos* combines with the noun in (48), the plural marker on *unos* allows *unos* to take atomic individuals and put them together to form molecular individuals and existentially quantify over them. Thus, *unos* phrases in ESpanish are semantically plural. *Uns* in BPortuguese has the same denotation as *uno*, in (54a), thus capturing the fact that they look alike morphologically. The plural marker on *uns* is just an agreement marker and has no semantic content. *Uns* does not need the help of its *-s* to give rise to plural noun phrases, because BPortuguese bare nouns ((50)) already provide the molecules.

Thus, both *unos* phrases and *uns* phrases are semantically plural, have existential import, are not generic (because the variable provided by the noun already gets bound existentially by *unos/uns*), lack a partitive effect (because no partitive effect is built in) and are not context sensitive (nothing that is context sensitive has been built into their semantics). As for event distributivity and polarity sensitivity, I provide an analysis of these effects in section 3.2.

Notice how the lack of a partitive effect and the lack of contextual sensitivity with bare plurals, *unos* and *uns* is achieved in this analysis. I exemplify with *unos/uns*. The (simplified) truth-conditions that this analysis gives rise to for the (ESpanish and BPortuguese versions of the) sentence in (55) are as in (56):

(55) There arrived *unos/uns* children to the party

(56) $[[(55)]]$ = 1 iff there is a molecular child individual *x* and *x* arrived to the party

All that (56) requires is that there exist a molecular/plural individual who come to the party. It is left completely open whether there are other individuals who came to the party; (56) is true independently of whether that is the case. Hence, there is no partitive effect. There is also no reference to anything contextually salient in (56): the sentence is true in scenarios in which a contextually salient plural child individual came to the party and in scenarios in which the child individual is not contextually salient. In this respect, the semantics of *unos* and *uns* is rather weak, but that seems to be exactly what we need.

We have the option in both languages to continue building indefinites with the help of *alg-*, which I propose has the denotation in (57):

(57) $[[alg-]] = \lambda R_{\langle et, \langle et, t \rangle \rangle} . \lambda P_{\langle et \rangle} . \lambda Q_{\langle et \rangle} . R(P)(Q)$
 Implicature: $R(P)(\{x: Q(x)=0\})$

That is, *alg-* has, in fact, no truth-conditional content. It simply provides two arguments to *R*, i.e., to *unos/uns*, which it takes as its argument. However, *alg-* induces the implicature that $R(P)(\{x: Q(x)=0\})$. This is how we build in the partitive effect: there is an implicature that there are *P* individuals who are not in *Q*. In the case of a BPortuguese sentence like (58) (= (29a)), we obtain the (simplified) (59):

(58) *Alguns* alunos meus de História vieram me ver ontem no meu gabinete.
 ‘*Alguns* history students of mine came to see me yesterday to the office’

- (59) $[[[(58)]]] = 1$ iff there is a molecular individual x such that x is a history student of mine and x came to see me yesterday to the office
 Implicature: there is a molecular individual x such that x is a history student of mine and x didn't come to see me yesterday to the office

The truth-conditions we obtain are like those we obtain for *uns*, but there is the added partitive implicature.

Recall that an additional property of ESpanish *algunos* that differentiates it from BPortuguese *alguns* is that *algunos* is context sensitive, but *alguns* is not. I assume that (57) is actually the denotation of BPortuguese *alg-*, and that the denotation of ESpanish *alg-* is slightly different: it incorporates a contextual, free variable C (see von Stechow 1994, Martí 2003, 2006, among many others), as in (60):

- (60) $[[alg-]] = \lambda R_{\langle et, \langle et, t \rangle \rangle} . \lambda P_{\langle et \rangle} . \lambda Q_{\langle et \rangle} . R(P \cap C)(Q)$
 Implicature: $R(P \cap C)(\{x: Q(x)=0\})$

We make sense of the fact that *algunos* and *alguns* look alike morphologically by giving them a very similar semantics. It is, nevertheless, different in that the first argument of the R relation is more restricted in ESpanish than in BPortuguese: in ESpanish, the first argument of the quantifier (P) is intersected with the free variable C , which gets a value from the context. This is a slight departure from the transparent form-meaning hypothesis, because *alg-* is *alg-* in both languages. At the moment, however, I know of no better way of accounting for context sensitivity. It must be located somehow on ESpanish *alg-*, because e.g. *unos* doesn't have it. In any case, I am reasonably satisfied that (57) and (60) are very similar.¹⁷

Thus, both *algunos* and *alguns* have existential import, they are both semantically plural (*alguns* because of N ; *algunos* because of *-unos*) and are positive polarity items (because *unos* and *uns* are; see section 3.2). They both induce a partitive effect, though only *algunos* is context sensitive. See section 3.2 for an analysis of the event distribution effect.

3.2 Positive polarity and event distribution

3.2.1 Positive polarity as presupposition failure

Recent treatments of polarity sensitivity have analyzed the phenomenon as presupposition failure (see Nilsen's (2004) analysis of positive polarity items like *possibly* and Chierchia's (2004) and Kadmon and Landman's (1993) analysis of negative polarity items like *any*). I exemplify here how the account works with *uns*. To the entry we had in (54a), we add the following presupposition:

- (61) $[[un_s]] = \lambda P_{\langle et \rangle} . \lambda Q_{\langle et \rangle} . \exists x[P(x) \ \& \ Q(x)]$
 presupposition: $\forall G[G \subseteq P \rightarrow \exists x[G(x) \ \& \ Q(x)]] \rightarrow_{\text{asymm}} \exists x[P(x) \ \& \ Q(x)]$

¹⁷ Note that the analysis in (60) does not attempt to capture data like (38a) (section 2.5), where the relationship between C , the contextual variable, and its antecedent would not seem to be so straightforward. I leave this issue for future research, as we don't yet really know what is going on in such examples. Notice, however, that this analysis *does* account for the fact that the ESpanish examples (41a) and (42a) are infelicitous, as opposed to the BPortuguese (43a) and (44a): *algunos*, though not *alguns*, contains a contextual variable that needs an antecedent, and such antecedent is unavailable in the contexts of these sentences.

What that presupposition tells us to do is to check certain entailments of the sentence. Suppose we had the (B)Portuguese version of the sentence in (62), which, notice, does not contain negation:

- (62) there came *uns* teachers to the meeting (recall (5), (12))
- a. all subsets of [[teachers]] contain individuals that came to the meeting
 → [[teachers]] contains individuals that came to the meeting
 - and
 - b. all subsets of [[teachers]] contain individuals that came to the meeting
 ↯ [[teachers]] contains individuals that came to the meeting

(61) says that we have to look at all subsets of teachers. In (62a) we check the entailment in one direction: if all subsets of teachers contain individuals that came to the meeting, then it should follow that the big set of teachers also contain individuals that came to the meeting. This entailment indeed follows. (61) says more: in order to fully comply with the presupposition, it must be the case that the reverse entailment does NOT hold. We check the reverse entailment in (62b). If the big set of teachers contains individuals that came to the meeting, it does NOT follow that all subsets of teachers also contain such individuals. You could choose a subset in which all of the members are non-comers. So the presuppositions of a sentence with *uns* and without negation are met.

If we put in negation, the presupposition that the entailment be asymmetric is no longer met. (63) contains *uns* and negation and is ungrammatical:

- (63) *there didn't come *uns* teachers to the meeting (recall (5), (12))
- a. all subsets of [[teachers]] lack individuals that came to the meeting
 → [[teachers]] lacks individuals that came to the meeting
 - b. all subsets of [[teachers]] lack individuals that came to the meeting
 ← [[teachers]] lacks individuals that came to the meeting

(63a) checks the entailment in one direction: if all the subsets of teachers lack individuals that came to the meeting, it follows that the big set of teachers lacks individuals that came to the meeting ("lack" being the negation of "contain"). (63b) checks the reverse entailment, which also holds in this case but shouldn't: if the big set of teachers lacks individuals who came to the meeting, all subsets of teachers will also lack such individuals. The presuppositions of *uns* are not met under negation, and this is how we derive the polarity effect. Similar remarks will hold for *unos*, and because *algunos* and *alguns* contain a positive polarity inside of them, they will also be positive polarity items.

This predicts that *algunos* and *alguns* should be ungrammatical when under the scope of negation. Recall, however, that, even though this was true, it was also true that sentences with negation and *algunos/alguns* were not ungrammatical, they merely forced the wide scope reading of the indefinites. We can make sense of this, and of the difference with *unos* and *uns*, by assuming that *algunos/alguns* can move above negation but *unos/uns* cannot. Since in the negation >> *algunos/alguns* option the presuppositions of the indefinites are not met, we don't

obtain the narrow scope reading in (64b)¹⁸. Because *algunos* and *alguns* can move, (64a) is the only reading of the sentence:

- (64) there didn't come *algunos/alguns* teachers to the meeting (recall (5), (12))
 a. *algunos/alguns* >> negation: "there are some teachers who didn't come to the meeting (and some who did)"
 b. *negation >> *algunos/alguns*: "it is not the case that there are teachers who came to the meeting" (i.e., no teachers came to the meeting)

The (im)possibility of moving above negation seems to be correlated with the fact that, in the case of ESpanish, *algunos* and *unos* differ in whether they can take scope above other operators¹⁹. Consider the contrast in (65) (based on Martí 2005a, b):

- (65) a. Si *algunos* *alumnos* *míos* aprueban el examen de Selectividad me
 if students mine pass the exam of clitic
 alegraré muchísimo
 become.happy very.much
 b. Si *unos* *alumnos* *míos* aprueban el examen de Selectividad me alegraré muchísimo
 'If *algunos/unos* students of mine pass the university entrance exam, I will be very happy'

(65a), with *algunos*, can have either a wide or a narrow scope reading of the indefinite with respect to the *if*-clause; (65b), with *unos*, can only have a narrow scope reading. Imagine that I am a high school teacher, and that I have been preparing my students all year long for the national university entrance exam. Now my students have taken the exam and we are waiting for the results. Consider a narrow scope scenario for both *algunos* and *unos*: I am so desperate and I feel so scared about the results that I will be very happy if just a few students pass the exam. I don't care who they are, all I want is some passing grades. Any group of students passing will make me very happy. The two sentences in (65) are fine in this scenario. For the wide scope reading to be true, this is not enough. There has to be a particular group of students of mine who will make me very happy. Suppose that I am so confident in my students that I know that a good number of them will pass. So if there are a good number of passing grades I don't get particularly happy. However, there are these few students of mine that have had a hard year and it has taken them a lot of effort to follow the class. If those particular students manage to pass the entrance exam, on the other hand, I will be very happy. Only the sentence with *algunos* is felicitous in the latter scenario^{20, 21}.

¹⁸ This would indeed be the narrow scope reading of *algunos/alguns*; that is, the partitive implicature triggered by *algunos/alguns* (see (57), (60)) is not relevant here. See Chierchia (2004), Gazdar (1979) and Horn (1989) for discussion of implicature suspension under negation and other downward-entailing contexts.

¹⁹ One may argue that scope of indefinites such as *algunos* or *unos* is not the right property to look for here, since it is commonly assumed that at least some indefinites do not achieve scope via movement but via other mechanisms such as choice functions (see Kratzer 1998, Reinhart 1997, among others). I equate scope of indefinites with movement in my analysis (cf. the analysis of the wide scope of *algun(o)s* over negation, or (68) below). If this turns out to be wrong, I believe that my analysis can be translated into one that achieves indefinite scope via some other mechanism.

In BPortuguese, we can observe that *alguns* can take wide scope in the following kind of context:

- (66) Maria quer falar com *alguns* médicos antes de tomar uma
 wants talk with doctors before of take a
 decisão sobre o seu joelho
 decision about the her knee
 ‘Maria wants to talk with *alguns* doctors before making a decision about her knee

The sentence can be true in two kinds of scenario. In the wide scope scenario, imagine that Maria has a broken knee and before she decides whether to have an operation or not, she wants to talk with a number of doctors that have been recommended to her. Everybody knows these are good surgeons, and she has the appointments next week. This description makes it clear that the doctors Maria wants to talk to exist, something that is not required in the narrow scope reading. In the narrow scope scenario, Maria also has a broken knee. It is her policy to always consult with a few doctors before making any medical decisions. Unfortunately, she knows no good knee surgeons, and nobody has recommended any to her. She still wants to be able to have opinions from different doctors before deciding what to do, so she is a bit desperate²². Unfortunately, for reasons I do not understand, *uns* leads to ungrammaticality in (66), so we cannot test whether it gives rise to wide scope readings or not. I leave this issue for further research.

The idea, then, is that *algunos* and *alguns* are indeed positive polarity items, as they must be under the transparent form-meaning hypothesis, since *unos* and *uns* are. But *algunos* and *alguns* have more freedom of movement, and hence they can escape the harmful effects of negation.

3.2.2 Event distribution as scope above a D-operator

I suggest to treat event distribution as scope above a distributivity operator combined with the idea that verbal predicates such as *come* come with an event argument (cf. Landman 2000, Link 1983, Schwarzschild 1996, among others). A verb like *came* is not merely a set of individuals, because it also contains an event variable; its denotation is in (67a):

²⁰ I am not making a distinction here between collective and distributive wide scope readings; see Martí (2005a) for discussion of this in ESpanish.

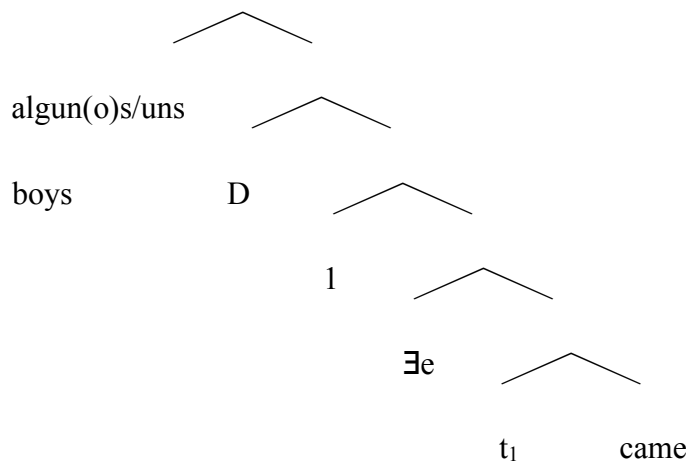
²¹ Martí (2005a, b) discusses other operators and shows that *unos* always takes narrow scope. She also argues that the wide scope reading of *algunos* in cases such as (65a) is really a case of wide scope, since *algunos* can give rise to so-called intermediate readings.

²² Notice that the fact that both *algunos* *N P* and *alguns* *N P* carry the implicature that there are some *N* for which *P* does not hold (i.e., they are partitive; see section 2.4) makes it difficult to test for wide scope readings. The hallmark of these readings is that there is a particular group of *N*s for which a predicate applies, which allows for the possibility that there is another group of *N*s for which the predicate does not hold, which is very similar to partitivity. Perhaps, then, examples such as (65) is not the best one to test for the wide scope of *algunos*, since it is hard to distinguish the two properties (though (66) seems better, since here a property that distinguishes wide scope from partitivity is that the doctors have to exist in order for the reading to be true). The scope of the indefinites under investigation here is a difficult issue that I do not explore in detail in this paper.

- (67) a. $[[\text{came}]] = \lambda x. \lambda e. \text{came}(x)(e)$
 b. $[[D]] = \lambda f_{\langle e, t \rangle}. \lambda x. \forall y [y \text{ is atomic} \ \& \ y < x] \rightarrow f(y)]$

I assume that there is a default mechanism of existential binding, similar to the one I assumed above for bare plurals, that later on takes care of event variables. (67b) has the denotation of the D-operator that is assumed in much work on distributivity. It is an operator that attaches to a syntactic tree wherever it is compatible type-wise. What it does is collect into a set all of those individuals whose atomic parts are such that they apply to a predicate like *came*. Since *came* comes with an event variable, what it will do is collect into a set molecular individuals, and it will express that for each of their atomic parts, there is an event in which each atomic part came. This will give us event distribution. In the case of *algunos*, *alguns* and *uns*, which, remember, did event distribute, we need an LF like that in (68), where the indefinite phrases have moved above D:

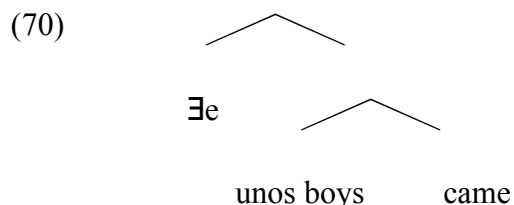
(68)



- (69) $[[\text{uns/algun(o)s boys came}]] = 1$ iff there is a molecular boy individual x and for all of its atomic subparts y , there is an event e such that y came in e

We get the (simplified) truth-conditions in (69). (69) says that the sentence is true iff there is a molecular boy individual x and for all of its atomic subparts there is an event e such that each of the atomic subparts came in e . Suppose we choose different events for each atomic subpart. We then get event distribution. Suppose we choose the same event: then we get non-event-distribution. This is as it should be, since these three indefinites allowed also non-event-distribution readings.

Why doesn't *unos* event distribute? I assume that *unos* cannot move. Before, it couldn't move above negation, now it can't move above *D*. It just can't move at all. Hence, the only possible LF for a *unos* sentence is (70), where *unos* hasn't moved. This LF results in the denotation in (71): the requirement is that there be one single event for a whole collection of boy individuals:

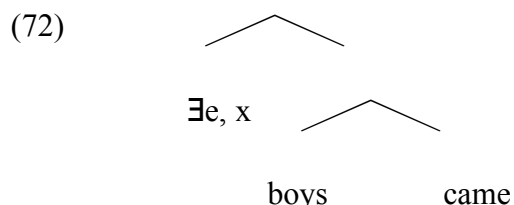


- (71) $[[\text{unos boys came}]] = 1$ iff there is a molecular boy individual x and an event e and all atomic subparts of x came in e

As before, (im)possibility of movement above a particular operator should be correlated with some other property. Given the discussion at the end of section 3.1. and that in Martí (2005a, b), I conclude that the reason why *unos* cannot scope above *D* is that *unos* always takes obligatory narrow scope. The situation should be slightly different for *uns*: it must be able to scope above some operators (like *D*) but not others (like negation). As pointed out in section 3.1, it is not so easy to test for the scope possibilities of *uns*, so I leave this issue for further research.

We are now ready to come back to another one of the problems for the transparent form-meaning hypothesis: the behavior of bare plurals. Recall that ESpanish bare plurals event distributed, but BPortuguese bare plurals did not. Why do they differ in this respect? I propose to derive the behavior of bare plurals with respect to event distribution from their independently justified lexical semantics plus the assumption that they, like *unos*, always take narrow scope obligatorily. That is, that bare plurals in ESpanish event distribute and bare plurals in BPortuguese do not is a by-product of their lexical semantics, it doesn't have to be stipulated separately.

Combining the denotation of bare plurals in ESpanish ((48)) with the LF in (72) (cf. (52)), we get the truth-conditions in (73a):



- (73) a. *ESpanish*
 $[[\text{boys came}]] = 1$ iff there is an event e and an atomic boy individual x and x came in e
 b. *BPortuguese*
 $[[\text{boys came}]] = 1$ iff there is an event e and a molecular boy individual x and x came in e

The ESpanish sentence is true iff there is an event e and an atomic boy individual x and x came in e . This is so weak that it happens to be true in the two kinds of scenarios, the event distribution scenario and the non-event-distribution scenario. The truth-conditions we obtain for BPortuguese, in (73b), are slightly stronger, because bare plurals in this language denote sets of molecular, not atomic individuals. The BPortuguese sentence is true iff there is an event e and a molecular boy individual x and x came in e . This is false in the event distribution scenario, as desired.

So, to derive the behavior of bare plurals with respect to event distribution, we don't make use of the D-operator. We get event distribution for free in the case of ESpanish bare plurals because of their very weak lexical semantics. And we get that BPortuguese bare plurals don't event distribute because of their slightly stronger lexical semantics. In the background is the assumption that bare plurals in both languages can never take scope above D (or above any other operator), were we to generate a D in the syntax of sentences with bare plurals. This assumption is justified given the behavior of bare plurals in both languages in the context of other scope-taking operators. In ESpanish, the bare plural version of (65) behaves in the way the sentence with *unos* ((65b)) does, and, in general, bare plurals in ESpanish always take narrow scope (see Gutiérrez-Rexach 2001, 2004 and McNally 2004, among others, for the same claim). In BPortuguese, bare plurals also seem to take obligatory narrow scope, as can be seen from the bare plural version of (66): the existence of doctors is not required. The same is true, in both languages, in the context of negation (cf. (5), (12)): they always take scope under it.

One welcome consequence of deriving the behavior of bare plurals with respect to event distribution in this fashion is that we predict very easily that sentences with any of the indefinites we have studied here can be true in what I call the group event distribution scenario. The sentence in (74) (recall (23)) is true in the non-event-distribution scenario but it is also true in a group event distribution scenario in which several groups of history students of mine came to see me to the office; each group did so at a separate time. Hence, there is distribution over events, but it is not that there is an event per atomic individual (as in the regular event distribution reading), there is an event per molecular individual:

- (74) Durante todo o dia de ontem *alunos meus de História* vieram me ver no meu gabinete
 'All of yesterday history students of mine came to see me to the office'

This we easily get from (73b), since the truth-conditions there require there to be *at least* a molecular boy individual that came. This is compatible with more molecular boy individuals coming each at their own time. (73a) makes the ESpanish sentence true in the group event distribution scenario as well: if there are groups of students who, each at their own time, came to see me, then there is an atomic student who came to see me at a particular time. We obtain the same result with *unos/uns* and *algunos/alguns*, for the same reason BPortuguese bare plurals do so. The situation is most dramatic with BPortuguese bare plurals and with ESpanish *unos* because they allow less readings (i.e., the plain event distribution reading) than *uns*, *algunos* and *alguns*.

4 Conclusion

In this paper I have pursued the hypothesis that there is a transparent match between form and meaning in the realm of BPortuguese and ESpanish plural indefinites. I have provided a careful description of some of their crucial properties and have then proposed an analysis in which these properties are accounted for on the basis of their morphological composition. The transparent form-meaning match that I propose to follow here is, I think, the null hypothesis, so the paper can be considered a study on the advantages (and perhaps disadvantages) of pursuing the null hypothesis. The hypothesis is interesting because it constrains the explanation space and forces us to look for alternative and independently justified analyses of those properties that cannot have come from the building blocks of the indefinites. It also tells us what sort of explanation (lexical-semantic –e.g., having to do with the lexical semantics of the building blocks—or non-lexical-semantic –e.g., having to do with movement possibilities) certain properties must have.

References

- Chierchia, Gennaro (2004) ‘Scalar implicatures, polarity phenomena and the syntax/pragmatics interface’, in Adriana Belletti (ed.), *Structures and beyond*, Oxford: Oxford University Press, 39-103
- Dayal, Veneeta (1998) ‘Any as inherently modal’, *Linguistics and Philosophy* **21**, 433-476
- Gazdar, G. (1979) *Pragmatics: implicature, presupposition and logical form*, New York: Academic Press
- Gutiérrez-Rexach, Javier (2001) ‘The Semantics of Spanish plural existential determiners and the dynamics of judgment types’, *Probus* **13**: 113-154
- ____ (2004) *La semántica de los indefinidos*, Madrid: Visor Libros
- Haspelmath, Martin (1997) *Indefinite pronouns*, Clarendon Press: Oxford
- Heim, Irene (1982) *The semantics of definite and indefinite noun phrases*, Ph.D dissertation, University of Massachusetts, Amherst, MA, USA
- Horn, Larry (1989) *A natural history of negation*, Chicago: University of Chicago Press
- Kadmon, Nirit and Fred Landman (1993) ‘Any’, *Linguistics and Philosophy* **16**: 353-422
- Kratzer, Angelika (1998) ‘Scope or Pseudoscope? Are there Wide Scope Indefinites?’, in Susan Rothstein (ed.) *Events and Grammar*, Kluwer Academic Publishers, pp. 163-196
- Laca, Brenda (1996) ‘Acerca de la semántica de los *plurales escuetos* del español’, in I. Bosque (ed.) *El sustantivo sin determinación. La ausencia de determinante en la lengua española*, Madrid: Visor Libros, 241-268
- Landman, Fred (2000) *Events and plurality*, Dordrecht: Kluwer Academic Publishers
- Link, Godehard (1983) ‘The logical analysis of plurals and mass terms: a lattice-theoretical approach’, in R. Bauerle et al. (eds.) *Meaning, Use and Interpretation of Language*, Berlin: de Gruyter, 303-323
- McNally, Louise (2004) ‘Bare plurals in Spanish are interpreted as properties’, *Catalan Journal of Linguistics* **3**:115-133
- Martí, Luisa (2005a) ‘Spanish *algunos* and the syntactic sensitivity of indefiniteness’, ms., CASTL/Universitetet i Tromsø, downloadable at <http://ling.auf.net/lingBuzz/000184>. Under review.

- _____ (2005b) ‘Donald Duck is back, and he speaks Spanish’, in P. Dekker and M. Franke (eds.) *Proceedings of the 15th Amsterdam Colloquium*, Institute for Logic, Language and Computation, Universiteit van Amsterdam, 143-148
- _____ (2006) ‘Contextual restrictions on indefinites: Spanish *algunos* vs. *unos*’, ms., CASTL/Universitetet i Tromsø, downloadable at <http://ling.auf.net/lingBuzz/000230>. Under review in A. Giannakidou and M. Rathert (eds.) *Proceedings of the Workshop on QP structure, nominalization and the role of DP*, Oxford University Press
- Martins, Ana Maria (1997) ‘*Alguns, muitos, poucos, todos* e a relação sintaxe-semântica’, in A.M. Brito et al. (eds.) *Sentido que a vida faz: estudos para Óscar Lopes*, Porto: Campo das Letras, 679-692
- Müller, Ana (2002) ‘Genericity and the denotation of common nouns in Brazilian Portuguese’, *delta* **18**: 287-308
- Nilsen, Øystein (2004) ‘Domains for adverbs’, *Lingua* **114**: 809-847
- Reinhart, Tanya (1997) “Quantifier Scope: How Labor is Divided between QR and Choice Functions”, *Linguistics and Philosophy* **20**: 335-397
- Schwarzschild, Roger (1996) *Pluralities*, Kluwer Academic Publishers
- Suñer, Margarita (1982) *The syntax and semantics of Spanish presentational sentence-types*, Washington, D.C.: Georgetown University Press
- Villalta, Elizabeth (1994) ‘Plural indefinites in Spanish and distributivity’, ms., CNRS
- van der Wouden, Ton (1997) *Negative contexts. Collocation, polarity and multiple negation*, London: Routledge
- vanden Wyngaerd, Guido (1999) ‘Positively polar’, *Studia Linguistica* **53**: 209-226