

DONALD DUCK IS BACK, AND HE SPEAKS SPANISH

LUISA MARTÍ

CASTL
Universitetet i Tromsø
luisa.marti@hum.uit.no

This paper argues that the solution to the “Donald Duck” problem put forth in Schwarzschild 2002 is, despite its simplicity and attractiveness, not viable. Schwarzschild’s solution to the problem involves the idea that the domain restriction of indefinites can be a singleton set. This assumption not only solves the “Donald Duck” problem, it also explains why indefinites can take scope outside of syntactic islands in many languages. I show with data from Spanish, however, that there are indefinites whose wide scope is sensitive to islands. If wide scope readings are analyzed using the singleton-set idea, however, their sensitivity to the syntactic environment in Spanish cannot be explained. This suggests that we should reject this assumption. But if so, we no longer have a general solution to the “Donald Duck” problem. I then suggest that solutions to the problem that exploit the semantics of conditionals are to be preferred.

1. The “Donald Duck” problem and two of its solutions

The “Donald Duck” problem is the problem that arises when the restriction of a wide scope indefinite is stranded inside of an *if*-clause. Consider the English example in (1a) and its two possible semantic representations in (1b) and (1c), which use material implication. Notice that in (1b) the restriction of the indefinite noun phrase, *relative of mine*, is interpreted inside the antecedent of the conditional, and that in (1c) that restriction is outside the antecedent of the conditional:

- (1) a. If *some relative of mine* died this year, I will inherit a house
b. $\Box x$ [*x is a relative of mine* & x died this year] \Box I will inherit a house]
c. $\Box x$ [x is a relative of mine] & [x died this year] \Box I will inherit a house]

Donald Duck is not related to me and, intuitively, if he died this year, it wouldn’t follow from (1a) that I inherit a house. However, the mere existence of Donald Duck

makes (1b) true: it is true as long as there exists somebody who is not a relative of mine. These very weak truth-conditions prompted Heim 1982 to move the restriction of the indefinite out of the *if*-clause, and Reinhart 1997 (see also Winter 1997) to use choice functions to interpret indefinites. These approaches propose (1c)¹: now the individual in question has to be a relative of mine, and Donald Duck no longer counts.

Schwarzschild 2002 insightfully points out, however, that (1c) does not solve the problem. This is because (1c) is true as long as I have a relative who did not die this year, but his/her existence doesn't make (1a) true intuitively. In order to really solve the problem, Schwarzschild argues, we need to assume that the contextual restriction of the indefinite noun phrase is a singleton set. In his solution, indefinites are (unambiguously) existential quantifiers whose contextual domain restriction can be a singleton. Indefinites don't move, and, when their domain is not a singleton, they give rise to narrow-scope readings. When their domain is a singleton, we get the appearance of wide scope (cf. Breheny 2003), with the following truth-conditions for (1a):

- (2) $[\exists x x \in C \ \& \ x \text{ is a relative of mine} \ \& \ x \text{ died this year}] \rightarrow \text{I will inherit a house}$; C is a singleton set containing a contextually-salient individual

This is what we want: Donald Duck is not this one contextually-salient relative of mine, and neither is just any relative of mine. Only a unique, contextually-salient relative of mine counts. And s/he has to have died for me to inherit the house.

2. Spanish *algunos*

This is an elegant solution to the “Donald Duck” problem. The argument in this paper, however, is that it is not viable. The reason has to do with the fact that Schwarzschild's proposal ties the solution to the problem to island-**ins**ensitive wide scope. The crucial point is that the mechanism that achieves wide scope and the one that achieves the required, stronger truth-conditions in (2) are the same: the assumption that the domain restriction of the indefinite can be a singleton set. Schwarzschild predicts that indefinites should be able to take scope outside of syntactic islands, since whether the domain restriction of an indefinite is a singleton or not is not something that is expected

¹ The truth-conditions Reinhart 1997 and Winter 1997 propose are as in (i), which is equivalent to (1c). ‘CH’ stands for ‘choice function’. Choice functions are functions of type $\langle e, e \rangle$:

- (i) $[\text{if } CH(f) \ \& \ [f(\text{relative of mine}) \text{ died this year}]] \rightarrow \text{I will inherit a house}$

to depend on the syntactic environment of the indefinite. This might be a good prediction for English (and perhaps other languages), since English indefinites seem to be able to freely take scope outside of syntactic islands. Importantly, however, the Spanish plural indefinite *algunos* can only outscope certain islands². Wide scope (collective) readings for *algunos* are available outside *if*-clauses ((3a)), *wh*-islands ((3b)) and *when*-clauses ((3c))³:

- (3) a. [Si *algunos hermanos pequeños míos* se rascan la cabeza], mi madre se preocupa,
 ✓ aunque si se rascan la cabeza mis hermanos Pedro y Antonia, mi madre no se preocupa
 ‘If some younger siblings of mine scratch their heads, my mother worries; though if my siblings Pedro and Antonia scratch their heads, my mother doesn’t worry’
- b. Si se me olvida [quién se pelea con *algunos niños*], el director de la guardería lo apunta en mi historial
 ‘If I forget who gets into a fight with some children, the kindergarten director writes it down on my sheet’
- c. Si [cuando *algunos niños* lloran los profesores no reaccionan], el director de la guardería lo apunta en sus historiales
 ‘If when some children cry the teachers do not react, the kindergarten director writes it down on their sheets’

A few empirical remarks are in order. In (3a) (and (4) and (5b) below) I illustrate the procedure to find out about wide scope readings. In (3a), the wide scope reading is compatible with other groups of my younger siblings not causing worry in my mother when they scratch their heads, whereas its narrow scope reading is not. A felicitous continuation that explicitly makes reference to this possibility is taken to indicate that the wide scope reading is available. On a different note, notice that (3b) and (3c) embed the islands in question (*wh*-islands and *when*-clauses, respectively) inside of *if*-clauses. The reason for doing this is that a second scope-bearing element is needed in order to evaluate the scope of *algunos* in these sentences, and *if*-clauses easily provide that second scopal element. One might worry that there is some special property of *if*-

² Alonso-Ovalle and Menéndez-Benito 2002 show that the singular indefinite *algún* is also island-sensitive, but they don’t look at as many islands as I do here or draw the conclusions I draw.

³ Compare the behavior of *algunos* in these examples with that of *unos*, another Spanish plural indefinite: *unos* never allows wide scope readings.

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clauses that facilitates wide scope readings, but this cannot be, given facts such as (5b) and (5c) below. Notice finally that intermediate readings with *algunos* outside of e.g., *if*-clauses are possible, as shown in (4). (4) suggests that the readings that worry us here are truly scopal (not referential, specific, etc.):

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

Wide scope (collective) readings are not available outside relative clauses ((5a)), coordinations ((5b)) or complex NPs ((5c)):

- (5) a. Juan aprobó a todos los alumnos [que se leyeron *algunas novelas de Cela*]
'Juan passed every student who read some novels by Cela'
- b. Si [mi hermana mayor y *algunos hermanos pequeños míos*] se rascan la cabeza, mi madre se preocupa, # aunque si se rascan la cabeza mi hermana mayor y mis hermanos Pedro y Antonia, mi madre no se preocupa
'If my older sister and some younger siblings of mine scratch their head, my mother worries; though if my older sister and my siblings Pedro and Antonia scratch their heads, my mother doesn't worry'
- c. Me preocuparé [si los médicos empiezan a considerar la posibilidad de sedar a *algunos pacientes*]
'I will worry if doctors start to consider the possibility of sedating some patients'

Notice in (5b) that a continuation that explicitly refers to a situation that zooms in on the wide scope reading is impossible. From this I draw the conclusion that the example does not give rise to a wide scope reading.

The wide scope readings of *algunos* in the examples in (3)/(4) are of the stronger kind, like that of our initial (1a) (recall (2)). The strong, wide scope readings Schwarzschild would achieve by making the domain restriction of the indefinite in these examples be a singleton set (with a single plural individual). The crucial question here is: why can't the domain of *algunos* in the examples in (5) also be a singleton set? That would give the indefinite scope outside the islands there, which we don't want. We would want to be able to say that the syntactic environment can have an influence

on whether *algunos* can take wide scope or not, as we would be able to say if its wide scope arose via syntactic movement. But why would the singletonness of the domain restriction have anything to do with the syntactic environment of the indefinite?

Trying to save the singleton indefinite hypothesis by saying that *algunos* is not a singleton indefinite is not helpful: if singletonness is the solution to the “Donald Duck” problem, we would want it to apply to *algunos*. Crucially, the wide scope readings of examples such as (3a) are not true as long as some group of non-scratching siblings of mine exists. Another attempt that does not work is to assume that indefinites move *and* that their domain can be a singleton, i.e., that island sensitivity results from restrictions on movement and the “Donald Duck” problem is solved by *algunos* being a singleton indefinite. This allows problematic derivations in which *algunos* scopes out by movement but its domain is not a singleton, which takes us back to the Heim version of the problem (recall (1c) and that Heim obtained it by moving the restriction of the indefinite outside of the *if*-clause).

3. A third solution to the “Donald Duck” problem: Haida 2003

One thing that the two approaches to the “Donald Duck” problem discussed above have in common is that they both assume that conditionals are interpreted as material implication. An alternative approach to the problem, then, is to investigate a different semantics for conditionals. Perhaps the “Donald Duck” problem arises because of the semantics assumed for conditionals and is independent of the semantics of indefinites. This is indeed the approach developed in Haida 2003 to solve his generalized version of the “Donald Duck” problem. Haida assumes a three-valued logic and a semantics for conditionals that makes use of this logic. In this logic, “If S_1 then S_2 ” comes out undefined in the crucial case in which S_1 is false and S_2 is true. This case was at the heart of the matter in our discussion in §1: with material implication in e.g. (1c), the existence of a relative of mine who did not die this year makes the antecedent of the conditional false; this automatically makes the conditional true and is at odds with our intuitions about the sentence. With the new semantics for conditionals, however, we account for the fact that (1a) does not entitle me to a house in case I have a relative who did not die this year.

4. Conclusion

The facts about Spanish *algunos* that I have presented here are problematic for many

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theories of indefinites, since these theories are usually designed to make indefinites island-insensitive (cf. e.g. the choice function approach in Reinhart 1997 and Winter 1997). However, they have dramatic relevance for Schwarzschild's proposal, since they imply that his elegant solution to the "Donald Duck" problem is not viable. This, we saw, was because Schwarzschild proposes that the same mechanism, singletonness, is responsible for indefinite wide scope and for preventing the "Donald Duck" problem. Hence, solutions to the problem that do not tie it to scope are called for. One such solution is Haida 2003.

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