Epistemic Indefinites: A Crosslinguistic Comparison of Spanish *Algún* and Brazilian Portuguese *Algum*

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INTRODUCTION

Epistemic expressions in natural language allow us to express our uncertainty or ignorance about particular information in conversation. For instance, existential determiners such as English *some*, Spanish *algún* or Germain *irgendein* are a few items that convey speaker ignorance, as shown in (1):

(1) María se casó con algún médico.
María SE married with ALGÚN doctor
'Maria married some doctor or other.'

By using *algún* the speaker conveys that they cannot identify which doctor Maria married.

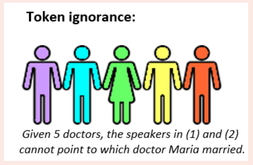
Portuguese *algum* is an unexplored epistemic indefinite that initially appears to behave identically to Spanish *algún*. In (2) we see once again that the speaker is ignorant to the identity of the doctor, in fact it would be odd to follow with 'namely' and explicitly identify the individual in question:

(2) Maria se casou com algum doutor, (# com certereza com o Dr. Smith)
Maria SE married with ALGUM doctor, for sure with the Dr. Smith
'Maria married some doctor or other, namely Dr. Smith.'

Variations of Ignorance

Type vs. Token ignorance

Token
All epistemic indefinites covey ignorance, but the type of ignorance expressed varies. As seen in (1) and (2), the speaker cannot point out which precise individual or *token* which would satisfy the existential claim.



Given 5 doctors, the speakers in (1) and (2) cannot point to which doctor Maria married.

Type
Weir (2012) discusses that even when the individual is known (no token ignorance) a speaker can express ignorance to the type/kind of object they are discussing. This ignorance arises from combining sub-kind denoting nouns — i.e.: plants, bugs, etc. can be broken down into subspecies— with epistemic indefinites. Thus from (3a), a speaker may naturally follow up with (3b), but not (3c):

(3) a. Look! There's <u>some plant</u> growing though the wall of my room.
b. ✔ I don't know what kind of plant it is, so I should be careful.
c. ?? I know that is it poison ivy, so I should be careful.

Uniqueness

Ignorance with respect to 'number'

In cases (1) - (3) above, we are likely to make a uniqueness assumption, ie: in each accessible world, Maria married *only one* student. When uniqueness cannot be taken for granted, Spanish *algún* can convey ignorance with respect to the total number of individuals that satisfy the existential claim. (4) strongly suggests that the speaker does not know how many flies there are in the soup:

(4) Hay algúna mosca en la sopa.
There.is ALGÚN.FEM fly in the soup
'There is one or a very small number of flies in my soup.'

Number ignorance as an implicature

Following AO&MB (2010) this 'ignorance with respect to number' component is a conversational implicature, as briefly illustrated below:

- Disappears in downward entailing environments:
  (5) No es verdad que haya algúna mosca en la the sopa.
  Not is true that there is ALGÚN.FEM fly in the soup

➢ This just means that the soup is 'fly-less' and does not convey that the speaker knows how many flies are in the soup.

They further derive that when *algún* is used: **the speaker believes there is at least one fly in the soup, but does not know how many flies there are.**

References

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CLAIMS

Recent literature has uncovered great variation to properties of speaker ignorance expressed by epistemic indefinites. This study contributes to a semantic typology of these epistemic modals by contrasting the ignorance component of two closely related indefinites: Spanish *algún* and Brazilian Portuguese *algum*.

Investigation: To what extent do we find variation between these closely related modals? How can we account for said variations?

We identified two differences between SP and BP: (i) *Uniqueness requirements*, (ii) *Types of ignorance expressed*. These variations can be explained within an implicature approach to epistemic indefinites: (i) derives from the assumption that the two indefinites have different pragmatic competitors, and (ii) from the assumption that the two indefinites contrast with respect to the types of semantic objects that they can range over: *algún* can only range over individuals, *algum* can also range over subtypes.

DATA ANALYSIS

1.1 Uniqueness: *Testing for ignorance wrt number*

Context : Julia sees two or three flies fall into her soup, but she is unsure of how many**…**

SPANISH

(6a) Julia: "Hay algúna mosca en la sopa."
There is ALGÚN.FEM fly in the soup
'There is one or a few flies in my soup.'

✔

As illustrated in (4) –(6a) SP *algún* is compatible with the speaker believing there are *one or more* flies in the soup

PORTUGUESE

(6b) Julia: "Tem alguma mosca na sopa."
There is ALGÚN.FEM fly in the soup
'There is a fly in the soup.'

✘

⚠ This can only be interpreted as saying: there is *one* fly in the soup. BP *algum* is unacceptable in this context!

The 'ignorance with respect to number ' implicature is not available for BP *algum.*

2.1 Type Ignorance

In (1)-(2) we find that both *algún* and *algum* can express ignorance over individuals, below we will test for type ignorance:

Context : Julia sees a single plant growing on the wall and she does not know what kind of plant it is…

SPANISH

(8a) Julia: "¡Mira! Alguna planta está creciendo en la pared. "
Look! ALGÚN.FEM plant is growing on the wall
'Look! There is some (type of) plant growing on the wall.'

✘

⚠ This can only be interpreted as saying: There is a least one plant growing on the wall!

PORTUGUESE

(8b) Julia: "Olha! Alguma planta está crescendo na parede "
Look! ALGUM.FEM plant is growing on the wall
'Look! There is some (type of) plant growing on the wall.'

✔

This shows BP *algum* is compatible with type ignorance!

SP *algún* Algun does not express ignorance over subtypes, only tokens

TO NOTE - BP *Algum* behaves like Spanish if type ignorance is blocked:

Suppose Julia is walking through the forest, a finds one mushroom in Scenario 1, and a cluster of mushrooms in Scenario 2:
Julia can therefore state (9) only in scenario 1, but NOT for scenario 2

PORTUGUESE

(9) Julia: : "Olha! Eu pegei algum cogomelo."
Look! I picked up some (type of) mushroom

DERIVING DIFFERENCES

1.2 Uniqueness: *Accounting for differences*

Under a downward entailing context, the "exactly one" implicature for *algum* disappears, just as the "ignorance wrt number" implicature disappears in Spanish:

(7) "**Todo estudante que completou algum problema receberá um doce"**
Every student who finished ALGUM problem will recieve.3p a treat
Every student who finished a problem will receive a treat.

Scenario: If Lucas completed two homework problems, and Emma completed three, both students would still have satisfied the teacher's request and will receive a candy.

Thus, we find *algum* is compatible with the students completing *at least one* problem. The "exactly one" inference we find in (6b) may thus be a conversational implicature…

Proposal: Algum and Algún may compete against different scalar alternatives.

While Spanish *algún* may compete with stronger claims: { Algun, Many,…,All }, BP *algum* competes with other numerals, i.e: { n ≥ 2, n ≥ 3, n ≥ 4 …}
Thus in (6b), the speaker believes there is at least n ≥ 1 flies in the soup, but by the Quantity implicature we derive that the speaker is <u>not convinced</u> of:

P.I's: There are at least $\left\{ \begin{array}{l} n \geq 2 \text{ flies} \\ n \geq 3 \text{ flies} \\ n \geq 4 \text{ flies} \\ \vdots \end{array} \right\}$

With these Primary Implicatures and with the original statement in (6b), we may infer: "possible only one fly" - an implicature compatible with there being exactly one fly in the soup.

Accordingly, this causes *algum* to be infelicitous in non-unique contexts such as (6)!

2.2 Type Ignorance: *Accounting for differences*

Unlike in BP, when the individual is known (no token ignorance) Spanish is *algún* cannot convey speaker ignorance wrt type. We have determined that type ignorance in BP behaves as an implicature, and are currently exploring if the subtypes *algum* quantifies over are simply alternatives that Spanish does not compete against, for example: From **(9)** we find:

Scenario 1:

Type ignorance ✔

Scenario 2:

No Type ignorance ✘

- In Scenario 1, speaker does not recognise the single mushroom and must consider all species of mushrooms as alternatives "types" to quantify over.
- In Scenario 2, by being exposed to more than one mushroom the speaker is given enough information to catalogue the type of mushroom before them, blocking 'type ignorance'.

Thus in example (9) Scenario 2, since the speaker knows the individual and the type of mushroom she picked up, there is no ignorance remaining and algum must be infelicitous.

Conclusions

***Algún* vs. *Algum*:**

- The 'ignorance with respect to number ' implicature is not available for BP *algum.*
- *Algum* competes with other numerals, while algún competes with {*many, etc*...}
- *Algún* quantifies over individuals but *Algum* is ambiguous: it can also quantify over types so long as there exist type alternatives to consider.
- We will continue to compose an analysis for these "type" differences.