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Singular, plural, modal

Puzzle. The Spanish indefinite *algún* (henceforth: ALG-SG), the German indefinite *irgendein* (henceforth: IRGEND-SG), and the English indefinite *some* (henceforth: SOME-SG) are all what is called *modal* indefinites: They all give rise to a speaker ignorance (or indifference, but we will put this aside) effect in seemingly episodic contexts. However, they vary with respect to the strength of this effect: While they are all compatible with a context where there is actually specific negative nonvariation (henceforth: 1-LOSER scenario; cf. *but not* x below), only SOME-SG is also compatible with a context where there is actually specific *positive* nonvariation (henceforth: 1-WINNER scenario). The same seems to be true of their plural variants (henceforth: __-PL): While their modal status is not often discussed, they seem to have the same kind of variation. Finally, we sometimes find differences between the SG and the PL variants of the same item: ALG-SG is not compatible with 1-WINNER, but ALG-PL is.

(1) Jo vive con **algún** estudiante,
Jo lives with ALG-SG student-SG
a. # en concreto, con Ada.
namely with Ada
b. ✓ pero no con Ada.
but not with Ada

(1') Jo vive con **algunos** estudiantes,
Jo lives with ALG-PL student-PL
a. ✓ en concreto, con Ada y Bea.
namely with Ada and Bea
b. ✓ pero no con Ada y Bea.
but not with Ada and Bea

(2) Jo wohnt mit **irgendeiner** Studentin,
Jo lives with IRGEND-SG student-SG
a. # und zwar mit Ada.
namely with Ada
b. ✓ aber nicht Ada.
but not Ada

(2') Jo wohnt mit **irgendwelchen** Studenten,
Jo lives with IRGEND-PL student-PL
a. # und zwar mit Ada und Bea.
namely with Ada and Bea
b. ✓ aber nicht Ada und Bea.
but not Ada and Bea

(3) Jo lives with **some** student,
a. ✓ namely Ada.
b. ✓ but not Ada.

(3') Jo lives with **some** students,
a. ✓ namely Ada and Bea.
b. ✓ but not Ada and Bea.

Existing literature and this talk. All of these patterns are known, and there have also been many accounts to explain them. For example, Alonso-Ovalle and Menéndez-Benito (2010, 2011) discuss and account for ALG-SG/PL in full. However, the patterns have never been considered in full, which has resulted in inconsistent diagnosis and analysis. For example, it has never been noticed that SOME-SG (modal character known since Strawson 1974, endorsed in Alonso-Ovalle and Menéndez-Benito 2015; compatibility with 1-WINNER noted in Becker (1999), Marty, Picat, and Mascarenhas, p.c., ongoing experimental work) shows that weak modal indefinite patterns may also include compatibility with specific *positive* certainty, which may in turn suggest that __-PL, which for IRGEND-PL is clearly modal, might be generally modal too. As a result, there is no account that would capture them in full. In this talk I argue, based on *some-SG*, that all these items, both SG and plural, are modal. And that they raise 3 questions: How do we derive the between-item (non)variation in the SG? How do we derive the between-item (non)variation in the PL? And how do we derive the within-item (non)variation between the SG and the PL? The goal of this talk is to answer all these questions.

Proposal: The between-item variation in the SG. Building on Alonso-Ovalle and Menéndez-Benito (2010), Chierchia (2013), etc., and refs. therein, I propose the following:
$\star$ A singular NP ranges over atoms: E.g., $[\![\text{student}]\!] = \{a, b\}$. The indefinite quantifies existentially over the domain of atoms resulting from this: $\exists x \in \{a, b\}[\dots]$.

⋆ Replacing the domain in the truth conditions with its subsets yields subdomain alternatives, DA : E.g., DA =$\{\exists x \in \{a\}[C(j,x)], \exists x \in \{b\}[C(j,x)]\}$. Abbreviating: DA =$\{a, b\}$. Replacing the scalar element, $\exists$, with its scalemate, $\forall$, similarly yields scalar alternatives, SA.
⋆ All these alternatives are factored into meaning via a silent exhaustivity operator O. Oasserts the prejacent and negates the non-entailed alternatives. The DA of all our indefinites must be factored in in a pre-exhaustified form, ExhDA (obtained by applying O to individual DA; I assume pre-exhaustification of a DA is done relative to other DA of the same size).
⋆ $O_{ExhDA+SA}$ without an intervening operator leads to a crash, but with an intervening modal leads to a Free Choice (FC) effect. Our seemingly episodic utterances are actually prefixed with a null epistemic necessity modal $\Box_S$ (cf. Gricean Bel_S 'the speaker believes ...'), so O_{ExhDA} proceeds across this modal and yields an epistemic FC effect aka ignorance. ⋆ The FC effect thus obtained is total. How do we then get specific negative and positive nonvariation? I propose that this comes from DA -pruning (and only for domains larger than 2, as for smaller domains DA -pruning would destroy the domain). In particular, note that using just the singleton DA yields 1-LOSER (replicating other results from the literature) and using just the non-singletons yields 1-WINNER (a new result). The latter is illustrated below, showing only the crucial ExhDA -implicatures. If ALGUN/IRGEND-SG only allow pruning of non-singleton DA whereas SOME-SG allows pruning of either SgDA or NonSgDA, this captures the variation.

(4) $O_{ExhNonSgDA+SA}\ \Box_S\ (a \vee b \vee c)$ **just NonSgDA ⇒ specific *positive* certainty = 1-WINNER ✓**

$$= \Box_S\ (a \vee b \vee c) \wedge \neg \underbrace{\underbrace{O\Box_S\ (a \vee b)}_{\Box_S\ (a \vee b) \wedge \neg \Box_S\ (a \vee c) \wedge \neg \Box_S\ (b \vee c)} \wedge \neg \underbrace{O\Box_S\ (a \vee c)}_{\Box_S\ (a \vee c) \wedge \neg \Box_S\ (a \vee b) \wedge \neg \Box_S\ (b \vee c)} \wedge \neg \underbrace{O\Box_S\ (b \vee c)}_{\Box_S\ (b \vee c) \wedge \neg \Box_S\ (a \vee b) \wedge \neg \Box_S\ (a \vee c)}}_{\Box_S\ (a \vee b) \rightarrow \Box_S\ (a \vee c) \vee \Box_S\ (b \vee c) \quad \Box_S\ (a \vee c) \rightarrow \Box_S\ (a \vee b) \vee \Box_S\ (b \vee c) \quad \Box_S\ (b \vee c) \rightarrow \Box_S\ (a \vee b) \vee \Box_S\ (a \vee c)}$$

verified, e.g., by $\Box_S\ a \wedge \neg \Box_S\ / \Box_S\ \neg b \wedge \neg \Box_S\ / \Box_S\ \neg c$

Proposal: The between-item variation in the PL. A plural NP ranges over atoms and pluralities. E.g., $[\![\text{students}]\!] = \{a, b, ab\}$. Everything else follows as for the SG (though to see this the domain needs to be even larger).
Proposal: The within-item variation between the SG and the PL. Note that $O_{ExhNonSgDA}$ actually verifies two 1-WINNER scenarios: Specific positive certainty about one element of the domain with *ignorance* about the rest (e.g., $\Box_S\ a \wedge \neg \Box_S\ b \wedge \neg \Box_S\ c$) or specific positive certainty about one element of the domain with *negative certainty* about the rest (e.g., $\Box_S\ a \wedge \Box_S\ \neg b \wedge \Box_S\ \neg c$). This should be the case for both SG and PL. However, I propose that the SG part of __-SG imposes a presupposition that there is a unique witness of the existential claim: $\exists! x \in D[P(x)]$. This essentially means that, for a SG epistemic indefinite. compatibility with a 1-WINNER scenario can only be of the latter kind. Thus, in SG but not PL modal indefinites, compatibility with 1-WINNER destroys the FC nature of the item. This explains why an item, such as ALG-, which disallows 1-WINNER in the SG might nevertheless allow it in the PL (and possibly also why when this effect is attested in the SG it tends to be accompanied by another mysterious modal effect—speaker *indifference*).
Conclusion and outlook. I have argued that weak modal indefinites vary with respect to the strength of the modal effect, and there is between-item variation in the singular, between-item variation in the plural, and within-item variation between the singular and the plural. I propose a fully unified account where all these patterns come from obligatory exhaustification relative to pre-exhaustified subdomain alternatives coupled with variation with respect to subdomain alternative pruning, and a uniqueness presupposition in singular indefinites.

References. Alonso-Ovalle, L. & Menéndez-Benito, P. (2010). Modal indefinites. NLS.Alonso-Ovalle, L. and Menéndez-Benito, P. (2011). Domain restrictions, modal implicatures and plurality: Spanish *algunos*. JoS.Chierchia, G. (2013). Logic in grammar.