

The importance of being small: an implicature-based approach to epistemic indefinites

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This paper explores the semantics/pragmatics interface by showing how a unified implicature-based approach to polarity sensitivity (along the lines of Chierchia (2008)) derives the meaning of semantically dependent existentials. On the empirical side, I focus on the distribution of the Romanian determiner *vreun* and provide support for the existence of a class of *epistemic* items (which also includes French *quelque* (Jayez & Tovenà 2007) and Spanish *algún* (Alonso-Ovalle & Menéndez-Benito 2009)). Next, I contrast the properties of epistemic items with those of existential FCIs (*irgendein*, *un N qualsiasi* (Chierchia 2008), *un N quelconque* (Jayez & Tovenà 2006)) and show that their meaning differences can be reduced to a difference in the size of the alternatives that are relevant for their computation.

1. THE ROMANIAN CHALLENGE TO POLARITY SENSITIVITY TYPOLOGY: Taking as a starting point the definition of polarity items as elements “excluded from positive assertions with simple past” (Giannakidou 2009), I show that the kind of semantic dependency exhibited by the Romanian indefinite determiner *vreun* (1) differs from all well-known patterns of polarity sensitivity (e.g. negative polarity, free-choiceness, nonveridicality):

(1) * Paul a văzut **vreun** prieten.

Paul has seen V-A friend

Farkas (2002) shows that *vreun* can occur in both negative polarity contexts (e.g. questions, if-antecedents) and ‘positive’ environments (e.g. hypothetical sentences). Refining these observations, I present new empirical evidence and show that *vreun* occurs in epistemic modal contexts (2), disjunctions and the scope of attitude verbs like the non-factive epistemic verbs *think*, *suppose*, *assume*, but also the preference verb *hope*.

(2) *Trebuie* că are Magda **vreo** soluție, ea mereu ne ajută.

must that have.3SG Magda V-A solution, she always CL help.3SG

‘Magda must have a solution, she always helps us out.’

In order to capture this distribution, I contend that *vreun* is an **epistemic** determiner, i.e. an item sensitive to what an epistemic agent holds to be true. More precisely, I argue that the key licensing factor is the semantic properties of the operator embedding *vreun*, which must satisfy the constraint in (3):

(3) LICENSING CONSTRAINT: OPERATOR [...*vreun*...] - Op *p* entails that the epistemic agent’s doxastic alternatives include *non p*-worlds

This constraint imposes that *vreun* occur below operators which cannot be used in situations where that their complement proposition is established to be true. To illustrate, consider the contrast between *want* and *hope*:

(4)* *Vreau* să cumpăr **vreo** carte despre India.

want.1SG SUBJ buy.1SG V-A book about India

‘I want to buy a book about India’

(5) *Sper* să găsesc **vreo** carte despre India.

hope.1SG SUBJ find.1SG V-A book about India

‘I hope to find a book about India’

The preference verbs *want* and *hope* differ with respect to their epistemic properties, a contrast that is relevant for the licensing of *vreun*. In particular, Scheffler (2008) shows that the meaning of *hope* includes an epistemic component, which only makes it compatible with situations where the truth of the embedded proposition *p* is not established, a restriction which *want* lacks. Accordingly, when *p* is established to be true, e.g. when I can see that it is raining, I cannot say ‘*It is raining and that is what I hope*’, but I can felicitously say ‘*It is raining and that is what I want*’. In other words, whenever we use *hope*, we allow for the existence of *non p*-worlds among our beliefs, as captured by the constraint in (3). The same line of thinking

can be extended to epistemic modals (upon seeing that it rains, I cannot felicitously say '*It must be raining*') and the other contexts that license *vreun*, by resorting to their strengthened meaning. Whereas the *basic* meaning of epistemic *must/might* amounts to quantification over epistemically accessible worlds, its *strengthened* meaning involves an evidentiality component: the speaker only has indirect evidence for her claim, and hence is not in a position to rule out the possibility that *not p* might hold (von Fintel & Gillies 2009, Kratzer 2009). This distributional pattern cannot be captured by other licensing constraints, like Giannakidou's nonveridicality-based approach: *vreun* is licensed in contexts which are claimed to be veridical (e.g. *believe*, *suppose*) and ruled out in some nonveridical contexts (deontic modals, verbs like *want*, *insist*).

2. EPISTEMIC ITEMS AS A NATURAL CLASS: Putting together similar facts discussed for French *quelque* and Spanish *algún*, I show that epistemic items form a natural class, sensitive to the what an epistemic agents holds to be true. Epistemic determiners are similar to existential FCIs (Chierchia 2008), which are also dependent items interpreted as an existentials. The two classes differ, however, in at least two important respects: (i) epistemic indefinites are only licensed by epistemic operators, whereas existential FCIs are licensed by any kind of modality, (ii) a property dubbed by Jayez & Tovenia (2007) the NO LOSER constraint: epistemic items allow for the explicit exclusion of a member of the restriction set (7) ('there can be a loser'), whereas existential FCIs preclude it (6) ('there can be no loser'):

(6) ??Marie a rencontré *un* diplomate *quelconque*, qui ne peut pas être mon frère.

'Mary met some diplomat or other, who cannot be my brother.

(7) Yolande a probablement rencontré *quelque* amie, qui n'était pas Marie.

'Yolande has probably met some friend or other, who wasn't Mary'

3. AN IMPLICATURE-BASED APPROACH TO EPISTEMIC ITEMS: In order to account for these data, I endorse the unifying theory of polarity in Chierchia (2008), which relies on the hypothesis that all polarity items come with *active alternatives* – they require the insertion of an exhaustification operator (akin to *only*), and give rise to implicatures, used for enriching the basic meaning of assertions. Crucially, in this framework, implicatures can affect semantic composition, and hence their computation can sometimes lead to ungrammaticality (rather than pragmatic infelicitousness). Building on Chierchia's analysis of existential FCIs like *un N qualsiasi*, I argue that (i) like all indefinites, *vreun* triggers scalar alternatives and (ii) like all polarity-sensitive items, it activates domain alternatives, which I argue to be restricted to singletons. The switch to singleton alternatives is shown to derive the meaning difference in (6)-(7): if the domain alternatives are *non-minimal*, the resulting meaning is a free-choice interpretation: there is a single individual satisfying the existential claim, and any member of the domain is a possible value (existential FCI); if the domain alternatives to which we apply the exhaustification operator are *minimal* (singletons), we allow for situations where one of the members of the domain is excluded (epistemic items). We therefore derive the different behavior with respect to the NO LOSER constraint, and hence the semantic properties of these subclasses of dependent elements by making use of a small set of primitive switches. The difference in the size of domain alternatives leads to different implicatures, which once added to the basic meaning determine the observed patterns.

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