

Restriction with *ne... que* in French: presupposition and compositionality

Introduction

We are interested in this talk in the question of a compositional account of presupposition triggers, like *only*, or rather, one of its French translations, *ne... que*. We rapidly go through some of its properties, before proposing a (static) representation within the framework of DRT. We only allude at the end of this abstract to various compositionality problems which will be dealt with in the talk.

Properties of *ne... que*

- *ne... que* shares with the adjective *seul* and the adverb *seulement* the ability to express restriction in French: in (1), the use of *ne... que* restricts Paul's love to Léa alone, as the gloss shows.

- (1) Paul n'aime que Léa
Paul loves only Léa

If we assume that restriction means something like “what is true of some x is false of all other elements in a given quantification domain”, then it is fair to divide the contribution of *ne... que* into two parts : the asserted part, the restriction itself, and the presupposed part, which is a sort of necessary condition: the property has to be true for one x for the restriction to be defined. Thus, we can represent the semantics of (1) as in (2).

- (2) $\langle \text{Paul aime Léa} \mid \text{Tout ce qu'aime Paul est Léa} \rangle$
 $\langle \text{Paul loves Léa} \mid \text{All that Paul loves is Léa} \rangle$

- the presupposition triggered by *ne... que* have something peculiar: there is what can be called an anaphoric link between the presupposed part and the asserted one. To take again the example (1), even though the semantics can be expressed either as (3a) or as (3b), the two components have to share one constant, namely l . This kind of property raises problems for the compositional account, as will be shown in the full paper.

- (3) a. $\langle a(p, l) \mid \forall x \ a(p, x) \rightarrow x = l \rangle$
b. $\langle a(p, l) \mid \forall x \ x \neq l \rightarrow \neg a(p, x) \rangle$

- the presupposition, and more precisely, what has to be shared between the asserted part and the presupposed part, is sensitive to the referential properties of the NP:

- (4) a. Les baleines ne mangent que du plancton
Whales only eat plancton
b. les baleines n'ont mangé qu'un poisson
The whales have only eaten one fish

In (4a), what is shared is the property denoted by the head noun (plancton) ; in (4b), it is necessary to share the existentially quantified variable introduced in the presupposition. Even though this is partially predictable, it will have consequences on the compositional account.

- *ne... que*, contrarily to its synonyms in French, does not show various unpleasant properties which make the study of the other triggers so delicate:

- A sentence with *ne... que* is never ambiguous as to what's under the scope of the restriction. The adverb *que* appears always to the left of the constituent it has scope over.
- As a consequence, there is nothing like focus-sensitivity with *ne... que*. Neither is it sensitive to various information packaging/pragmatic factors¹.
- Even though *ne... que* has various syntactic peculiarities, its behavior is rather regular and general. It can bear on almost any constituent [Riegel *et al.*, 1994, Arrivé *et al.*, 1986, Muller, 1991].

¹Even though it is highly disputable, at least for French, that any of the restriction triggers is indeed focus sensitive, the other two are sensitive to intonative factors [Vallduví & Zacharski, 1993, Gendrot & Raynal 2004].

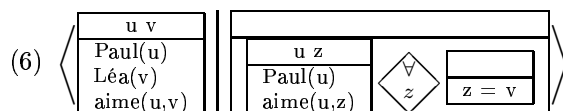
We don't have space to elaborate on that here, but we consider these properties as a very good reason to work on this item, in an attempt to separate the various problems one faces with restriction (and other) presupposition triggers.

- there is still an ambiguity remaining, which is also found with the other triggers: a sentence like (5) can be interpreted as referring only to the set of linguists (only 3 of them being known by Jean, who can know as many philosophers as he wants) or as referring to the set of individuals known by Jean, in which case Jean know only 3 persons, which happen to be linguists.

- (5) Jean ne connaît que trois linguistes
Jean knows only three linguists

Formalization

We give only an example here of the kind of static representation we use for sentences involving *ne... que*. We work in the DRT framework ([Kamp, 1981, Kamp and Reyle, 1993]), assuming a bi-partite representation along the lines of that proposed by [Kamp, 2001, Asher and Lascarides, 1998, Kamp, 2002]. It should be noted that we are only interested here in what Kamp calls “presupposition computation”, leaving aside the problem of the “justification” of the presupposition against the context.



Compositionality

We'll show in the full version of the paper how the various problems summarized here influence the process of DRS-construction, in the framework of λ -DRT [Asher, 1993].

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