

## To reconstruct or not to reconstruct: that is the question

### 1. Overview

The aim of this study is to use what is traditionally referred as A'-reconstruction in order to compare two possible formalizations of syntax-semantics interface, one based on Generative Grammar and Logical Form (GG), the other built on Categorical Grammar and Variable-Free Semantics (CG-VFS). We will first give several arguments suggesting that both analyses could be on the right track, before introducing data which could tease them apart.

### 2. Reconstruction data

Examples in (1) and (2) (from French, similar examples in Arabic) illustrate reconstruction data: intuitively, the distributive/functional reading of the *wh*- or dislocated constituent follows from the presence of a 'bound' variable in that peripheral constituent, as if it were (partly) within the scope of the universal quantifier.

### 3. Two possible accounts: Reconstruction (GG) or not (CG-VFS)

If I were Irene Heim (Heim and Jacobson (2005)), I would probably analyse these functional readings in (1) and (2) as cases of literal reconstruction: functional readings (and the bound variable readings of *lui* and *sa*) would follow from presence of a copy of the displaced constituent (in the thematic position), resulting either from movement, or crucially from ellipsis on the resumptive clitic when resumption is at stake. That second option is proposed in Guillot and Malkawi (2006), and corresponds to an analysis of resumption as *e*-type in the sense of Elbourne (2001), i.e. as a definite description with a determiner (the resumptive clitic) and an elided restriction. Interpretation of the copy as a definite with a complex index then provides a presupposition, as the schema in (3) shows.

But if I were Pauline Jacobson (Jacobson (1999) or Heim and Jacobson (2005)), I would rather analyse such functional readings without reconstruction: such readings in (1) and (2) would follow very nicely from two independently motivated assumptions in the (CG-)VFS system:

- implementation of binding *via* a compositional rule, the *z-rule*, and crucially not via a syntactic requirement like c-command (hence, no requirement on reconstructing the displaced constituent carrying the 'bound' variable).

- analysis of pronouns as identity functions over individuals or functions ( $\lambda x.x$  or  $\lambda f_{(e,e)}.f$ ), that individual or function being provided by the context;

As the schema in (4) shows, (2) can now be seen as a kind of coreference over functions (rather than individuals), i.e. between the (resumptive) pronoun (introducing the slot for a skolem function) and the dislocated element (providing that skolem function).

### 4. Arguments for both analyses

We will give several arguments in favor of the two analyses, including the following:

- the link between functional readings with resumption and *e*-type interpretation of a pronoun is theoretically reinforced: via NP-ellipsis for GG account (à la Elbourne (2001)), and via identity function over functions ( $\lambda f.f$ ) under VFS;

- the fact that functional readings with resumption also occur in presence of islands (see (5)) is correctly predicted by both accounts, as no movement is at stake in both cases: the relation is based either on ellipsis (GG), or a kind of coreference over functions (VFS).

### 5. Teasing the two accounts apart

We will finally (re)introduce two generalizations about resumption which seem to favor the GG account based on reconstruction:

- as pointed out in Sharvit (1997), resumption, contrary to a gap, only allows for a functional reading (banning the pair-list reading), as shown by the answers for (5b); such generalization can be accounted for in a GG account if we assume that a pair-list reading requires interpretation of the copy as indefinite, and more precisely as a choice function (see Aguero-Bautista (2001)), whereas it appears quite problematic for the VFS account, as such analysis makes no clear distinction between a gap (and even nothing) and (resumptive) pronoun with respect to the semantic calculus.

• functional readings with resumption in islands only arise with weak resumptives (clitics), but not with strong resumptives (strong pronouns or epithets), as the contrast in (6) from Jordanian Arabic shows; again, such restriction can be explained under the GG account by syntactically constraining ellipsis, whereas it is clearly unexpected under the VFS account.

- (1) *Quelle photo<sub>1</sub> de lui<sub>2</sub> chaque homme<sub>2</sub> a-t-il déchirée<sub>-1</sub>?*  
 ‘Which picture of him(self) did every man tore?’
- (2) *La photo de sa<sub>2</sub> fille, chaque homme<sub>2</sub> l(a)’a déchirée.*  
 ‘The picture of his daughter, every man tore it.’
- (3) *Schema for (1) under GG:*  
 SYN: *quelle photo<sub>1</sub> de lui<sub>2</sub>...chaque homme<sub>2</sub>...<sub>[DP I’<sub>1</sub> [NP<sub>δ</sub> photo de lui<sub>2</sub>]]</sub>*  
 SEM:  $\llbracket CP \rrbracket = \lambda p \exists f. [p = \forall y. [man'(y) \rightarrow tear'(y, f(y))]]$   
 presupposition:  $\forall f. [f \in C \rightarrow \forall y. [man'(y) \rightarrow picture\ of\ y'(f(y))]]$   
 $\Rightarrow$  *What is the function  $f$  such that every man<sub>y</sub> tore the<sub>f(y)</sub> picture of  $y$ ?*
- (4) *Schema for (2) under (CG-)VFS:*  
 $\llbracket la\ photo\ de\ sa\ fille \rrbracket = \lambda x. \iota y. y\ is\ the\ picture\ of\ x's\ daughter$   
 $\llbracket la \rrbracket = \lambda f. f$   
 $\llbracket chaque\ homme\ a\ déchiré\ la \rrbracket = \lambda f. [\forall x. man(x) \rightarrow x\ tore\ f(x)]$   
 with  $f$  given by the displaced constituent:  $f = \lambda x. \iota y. y\ is\ the\ picture\ of\ x's\ daughter$
- (5) a. *Le livre<sub>1</sub> qu’i<sub>l</sub><sub>2</sub> a emprunté, je suis fâché parce qu’aucun étudiant<sub>2</sub> ne l<sub>1</sub>’a rapporté.*  
 ‘The book he had borrowed, I’m furious because no student brought **it** back.’  
 b. *Quelle photo<sub>1</sub> de sa<sub>2</sub> fille est-ce que tu te demandes si chaque homme<sub>2</sub> l<sub>1</sub>’a gardée?*  
 ‘Which picture of his daughter do you wonder whether each man kept **it**?’  
**Answers:**  $\surd$  *celle de son mariage* ‘the one from her wedding’  
 \**pour Jean, c’est celle de sa naissance; Paul, celle de son mariage,...*  
 \*‘for John, the one from her birth; Paul, the one from her wedding,...
- (6) a. *[talib-[ha]<sub>1</sub> l-kassoul]<sub>2</sub> ma ħakjan maŋ [wala mŋallmih]<sub>1</sub> gabl-ma tʃuf-uh<sub>2</sub>*  
 student-her the-bad Neg talked.1pl with no teacher before saw.3sf-Cl  
 / -uh<sub>2</sub> hu<sub>2</sub> l-mudiirah  
 / -Cl he the-principal.3sf  
 ‘Her bad student, we didn’t talk to any teacher before the principal saw him.’  
 b. *\*[talib-[ha]<sub>1</sub> l-kassoul]<sub>2</sub> ma ħakjan maŋ [wala mŋallmih]<sub>1</sub> gabl-ma hu<sub>2</sub> /*  
 student-her the-bad Neg talked.1pl with no teacher before he /  
*ha-l-ğabi<sub>2</sub> yesal*  
 the-idiot.3sm arrive.3sm  
 ‘Her bad student, we didn’t talk to any teacher before he / this idiot arrived.’

## References

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