Syntactic or Non-Syntactic Reconstruction?
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1. INTRODUCTION. This paper is concerned with reconstruction effects: Scope Reconstruction Effects and Connectivity (or Connectedness) Effects. The aim of it is to explore two kinds of drawbacks that a non-syntactic approach to reconstruction presents and that do not arise in a syntactic account.

SCOPE RECONSTRUCTION (ScopeRE) is the effect of having the SCOPE of overtly moved material interpreted not in its S-Structure site, but in a previous site it visited on its way to S-Structure position. In (1), for instance, the existential quantifier *n-many students* --about whose exact amount *n* we are asking-- can be understood as having scope over *should* (wide reading (1a)) or with reconstructed scope under the modal (reconstructed reading (1b)):

(1) How many students should I talk to?
   a. For what number n: there are n-many particular students x such that I should talk to x.
   b. For what number n: it is necessary for there to be n-many students x such that I talk to x. (E.g., how many students/which amount of students should I talk to in order to have a representative survey?)

Another example of ScopeRE is shown under (2), where the variable bound pronoun *his* takes scope under its binder *every boy*:[1]

(2) Which relative of his_1 do you think every boy_1 likes the most?

CONNECTIVITY (ConnE), on the other hand, is the effect for evaluating BINDING THEORY (BT, henceforth) for an overtly moved constituent not with respect to its S-Structure site, but with respect to (one of) its prior site(s). For example, the clefted constituents under (3) are evaluated for BT Principles C and A as if they were in D-Structure position, locally c-commanded by the coindexed subject *she*. Similarly, in (4), the anaphor *himself* is able to find a local c-commanding antecedent not just in its S-Str position (*John*), but also in its D-Str and intermediate site (*Tom* and *Peter*, respectively).

(3) a. * It's about $Mary_1$ that I think she_1 likes writing the most.
   b. It's about $herself_1$ that I think she_1 likes writing the most.

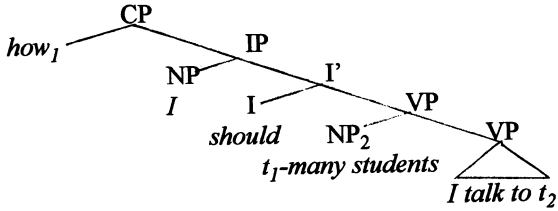
(4) $John_1$ knows which picture of $himself_{1,2,3}$ $Peter_2$ said Tom_3 likes the best.

To account for all these reconstruction effects, two kinds of strategies have been pursued in the literature: the Syntactic Reconstruction approach and the Non-Syntactic Reconstruction approach.

In the SYNTACTIC RECONSTRUCTION (SynR) approach, the overtly moved constituent is placed back in its reconstruction site at LF, either by LF-lowering of the overtly moved phrase (Longobardi 1987, Cinque 1990) or by Copy Theory (Chomsky 1995). The LF-representation under (5) illustrates this type of

reconstruction operation for (1). Once the moved constituent is placed back at the reconstruction site, ScopeRE derive from the usual assumption that scope is read off LF (the scope of a QuNP is its sister node at LF) and ConnE follow from the quite extended view that BT applies at LF too.

(5)

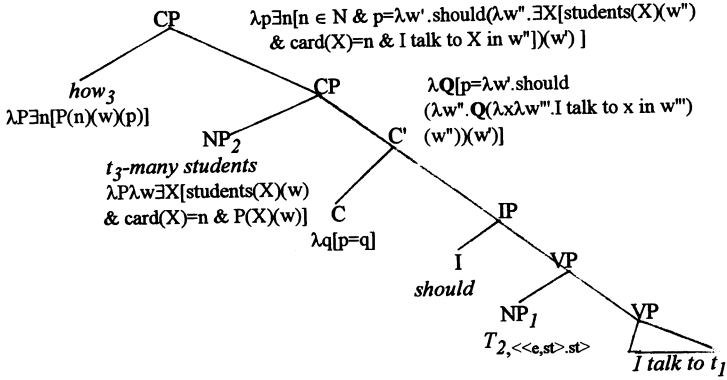


However, a second approach has been developed in the literature that does not involve any syntactic LF-reconstruction and that keeps the two reconstruction phenomena as derived from very different mechanisms: the NON-SYNTACTIC RECONSTRUCTION (Non-SynR) approach.[2]

How are the reconstruction facts derived without any syntactic LF-reconstruction?

ScopeRE, on the one hand, follow from the use of two semantic types of traces (Cresti 1995, Rullmann 1995): individual type *e* (lower case *t*) and generalized quantifier type $\langle\langle e,\langle st\rangle\rangle, \langle s,t\rangle\rangle$ (upper case *T*). When a constituent moves leaving a trace *t*, it is interpreted as having scope in its landing site (wide reading); when it leaves a trace *T*, instead, the compositional interpretation assigns it scope in the site of *T* (reconstructed reading). This interpretative device involving higher type traces *T* is known as SEMANTIC RECONSTRUTION (SemR). The LF corresponding to (1b) under this account is given in (6), with the semantic computation annotated for the relevant nodes.[3]

(6)



ConnE, on the other hand, can be derived from a non-local account of Binding Theory, as in Barss 1986. Barss defines the notion of chain accessibility sequence to account for Principle A ConnE (but it can be easily extended to cover Principle

C and B, too). Intuitively, a chain accessibility sequence is a path starting from the anaphor up the tree that leaps from nodes that have moved to their traces and continues from there. The technical definition is provided under (7) and illustrated under (8). The BT-condition on anaphors --given in (9)-- dictates that a local antecedent for the anaphor has to be found as the sister to a node in that path, requirement that is fulfilled for (8), since the coindexed DP *John* is the sister of I', which is a link in the chain (8b).

(7) Chain Accessibility Sequence (Barss 1986):
S = (a_1, ..., a_n) is a well-formed chain accessibility sequence for an NP A only if :
i. A is a_1,
ii. some a_i is a projection of the governor of A,
iii. for every pair (a_i, a_{i+1}), either (1) or (2):
1) a_{i+1} immediately dominates a_i
2) (a_i, a_{i+1}) is a link of a well-formed A' or A (movement) chain,
iv. and a_n is the root node of a Complete Functional Complex.

(8) a. $[_{\mathbf{WhP}}$Which $[_{\mathbf{NP}}$pictures $[_{\mathbf{PP}}$of **himself**$_1]]]_2$ did you think $[_{\mathbf{IP}}$John$_1$ $[_{\mathbf{I'}}$would $[_{\mathbf{VP}}$ like $\mathbf{t_2}$]]]

b. Chain accessibility sequence:
(*himself*, P', PP, N', NP, Wh', WhP, t_2, V', VP, I', IP)

(9) Chain Accessibility Condition on Anaphors:
An anaphor A is licensed only if there is a coindexed NP that is minimally chain accessible to A.

The aim of this paper is to surview two difficulties that the Non-Syntactic approach to reconstruction encounters and that do not arise in the SynR account. The first one, topic of section 2, concerns the relation between ScopeRE and ConnE, and, hence, between the mechanisms deriving the two phenomena. Unexpectedly under the NonSynR account, ScopeRE and ConnE will be shown to correlate and, thus, ConnE will have to be made dependent on scope (by stipulating sensitivity of chains to higher type traces or by reformulating LF c-command conditions in terms of the notion of Semantic Scope). The second problem, discussed in section 3, is a problem for the SemR interpretive device itself: some sloppy readings will be presented that cannot be derived by SemR without violating independently motivated assumptions about VP-Ellipsis. Again, this problem does not arise in the SynR approach.

2. LF-CONDITIONS BASED ON C-COMMAND

2.1. CORRELATION BETWEEN SCOPE AND CONNECTIVITY. It has been noted (Heycock 1995; Fox 1997, Romero 1997) that there is a correlation between the reconstructed scope a phrase takes and its Principle C ConnE. The example under (10), for instance, is grammatical, but it only has the wide scope reading spelled out in (10a) and not the reconstructed "amount" reading (10b):

(10) How many pictures of $Anna_1$ does the committee think that she_1 should publish?

a. √ Wide reading of *how many*:
"For what n: there are n-many particular pictures of Anna that the committee thinks that Anna should publish."

b. * Reconstructed reading of *how many*:
"For what n: the committee thinks that it should be the case that Anna publishes n-many pictures of Anna (e.g., n-many per month)."

This correlation is totally expected under the SynR account: only the reconstructed reading involves syntactic (LF) presence of *n-many pictures of Anna* under the modal *should* and, hence, under the coindexed subject *she*. Thus, only the reconstructed reading yields a Principle C LF-violation.

The Non-SynR account, instead, generates the LF-representations (11a-b). This time, what determines the ConnE of the moved phrase is not its LF-site, but the site of its lowest higher type trace *T*. In (11b), $[t_3$*-many pictures of Anna*$_1]_2$ is evaluated with respect to Principle C as if it were in the lowest *T*-site under *should*, hence c-commanded by the coindexed subject *she* and yielding a violation. In (11a), since there is no higher type *T*, the moved phrase is evaluated for Principle C in its S-Str position, which produces no violation.

(11) a. LF for the wide reading of *how many*:
$[_{CP}$ how$_3$ $[_{CP}$ $[t_3$-many pictures of $Anna_1]_2$ does the committee think $[_{CP}$ $\mathbf{t_2}$ $[_{CP}$ that she_1 should $\mathbf{t_2}$ publish t_2]]]]

b. * LF for the reconstructed reading of *how many*:
$[_{CP}$ how$_3$ $[_{CP}$ $[t_3$-many pictures of $Anna_1]_2$ does the committee think $[_{CP}$ $\mathbf{T_2}$ $[_{CP}$ that she_1 should $\mathbf{T_2}$ publish t_2]]]]

More generally, if we allow for higher type traces *T* in our grammar, LF c-command conditions can be vacuously fulfilled, since the offending constituent need not be in the conflictive site at LF for it to be semantically interpreted there.[4] In order to rule out LF representations like (11b), hence, we need to ensure that Principle C and, in general, c-commnad conditions are checked at LF AS IF the moved constituent were in the site of its lowest *T*-site.

2.2. MODIFICATION OF BARSS' ACCOUNT. A possible solution is to extend Barss' chain accessibility strategy --that he used for anaphors-- to cover Principle C and, crucially, to allow chain accessibility sequences to contain only higher type traces. That is, Principle C should be restated in terms of chain accessibility, as in (12), and the condition (7.iii.2) on chains should be replaced by (13), where α is the same semantic type for both the moved phrase and its trace:

(12) Chain Accessibility Condition on R-expressions:
An R-expression R is licensed only if there is no coindexed NP chain accessible to R.

(13) Chain accessibility Sequence:

iii.2. $(XP_{\alpha,i}, T_{\alpha,i+1})$ is a link of a well-formed A' or A (movement) chain.

In this way, the Principle C facts would follow: the name *Anna* in (10b) would fatally find the coindexed NP *she* accessible through the *T*-chain; in (10a), instead, no *T*-chain would connect it to any coindexed NP, since no higher type trace is left under *she*.[5]

2.3. LF C-COMMAND AS SEMANTIC SCOPE. A second possibility is to use the notion of Semantic Scope from Heim 1995, reproduced under (14). Then, Principle C could be defined as follows:[6]

(14) The **semantic scope** of a phrase α is the sister constituent of the lowest trace of α's own type that α binds at LF. (If α does not bind any trace of its own type, then α's semantic scope is its sister constituent at LF.)[7]

(15) Principle C:

a. An R-expression cannot be c-commanded at S-Str by an NP coindexed with that R-expression.

b. A phrase containing an R-expression cannot have its semantic scope contained within the semantic scope of an NP coindexed with that R-expression.

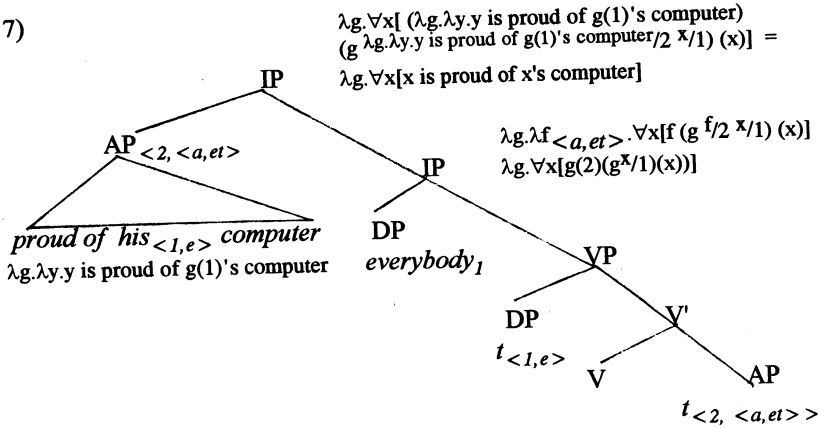
In summary, in this section 2 we have seen that ScopeRE and ConnE correlate: the quantificational scope a phrase takes determines the position from where Binding Theory LF requirements are evaluated. This parallelism, which is predicted under the SynR account and totally unexpected under the NonSynR approach, already makes NonSynR look rather dubious. However, and for the sake of exploring all possibilities, we showed how LF-conditions based on c-command can be reformulated through chain accessibility or in terms of semantic scope, so that the sensitivity of ConnE to scope can be derived.

In the next section, NonSynR encounters another problem, this time left without solution: reconstructed scope sloppy readings in VP-ellipsis.

3. SLOPPY READINGS IN VP-ELLIPSIS. This section is concerned with the binding of variables located in the moved phrase. To achieve this binding, our current denotations need to be shifted into dynamic denotations, that is, each constituent will denote a function from variable assignments into its usual denotation.[8] The computation under (17) illustrates how this binding is done in a dynamic SemR framework:[9]

(16) Proud of his$_1$ computer everybody$_1$ is.

(17)

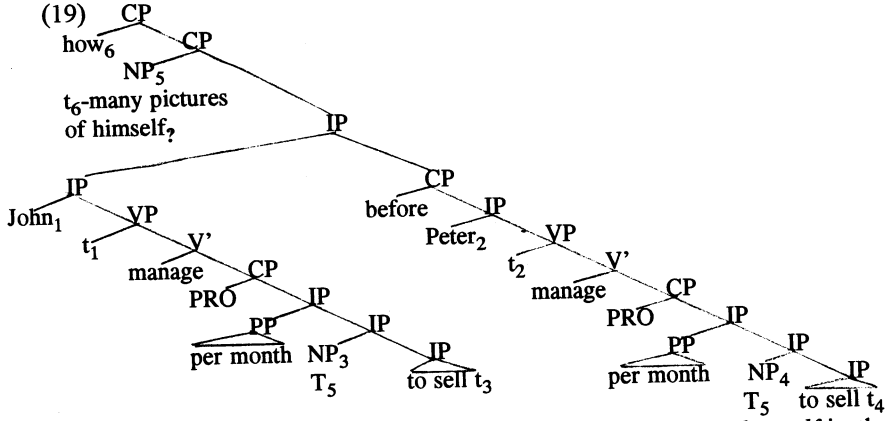


As announced, the second problem that (dynamic) SemR has to face is reconstructed scope sloppy readings in VP-ellipsis. The reading at issue is illustrated under (18), with the corresponding LF-representation under (19):

(18) How many pictures of himself did John manage to sell per month before Peter did?

a. √ "For which n: John manage to sell n-many pictures of John per month before Peter managed to sell n-many pictures of Peter per month."

(19)



The problem is that there is only one occurrence of the anaphor *himself* in the whole LF-representation (19) and yet the sloppy reading is possible. In other words, under the assumption that *John* and *Peter* have different movement indices, there is no index that the single occurrence of *himself* could bear that would yield it bound by *John* in the first clause and by *Peter* in the second.

Note that, under the SynR approach, this problem does not arise. The moved phrase syntactically reconstructs into the embedded CP in the first conjunct. Hence, since the antecedent VP is *[t_1 manage PRO per month [t_6-many pictures of himself$_1$]$_3$ to sell t_3]*, the elided VP --which needs to be LF-identical to the antecedent VP, except maybe for the indices-- will contain an occurrence of the anaphor too. Once we have two anaphor occurrences, we can coindex one of them with *John* and the other one with *Peter* and so derive the sloppy reading (18a).

Two possible solutions will be pursued in the NonSynR account, and both of them will fail. First, we will try dropping the assumption that *John* and *Peter* should be contraindexed; i.e., we will allow for accidental coindexing in VP-Ellipsis. Second, we will allow for vehicle change between a higher type trace *T* and a full QuNP.

3.1. ACCIDENTAL COINDEXING. Dynamic SemR cannot derive the sloppy reading from the LF in (19), where the two subjects *John* and *Peter* bear different movement indices, but it certainly can if the same index is assigned to the anaphor and to BOTH moved subjects.

The problem with this approach, however, is that there are independent reasons to disallow accidental coindexing between the binders of sloppy pronouns in VP-Ellipsis. More concretely, if accidental coindexing is allowed, parallelism between the binders is no longer enforced, contrary to what the examples in (20)-(21) show:

(20) Norma told Beth$_1$'s boyfriend to give her$_1$ a dime, and Judy told Lois's boyfriend to. (from Ross and Sag 1976)
   a. √ Strict reading: {to give Beth a dime}.
   b. √ Sloppy reading with respect to to Lois: {to give Lois a dime}.
   c. * Sloppy reading with respect to Judy: {to give Judy a dime}.

(21) John$_1$ wants Susan to water his$_1$ plants, but/and my father said Peter wants Mary to. (inspired by Jacobson 1992)
   a. √ Strict reading: {water John's plants}
   b. √ Sloppy reading with respect to Peter: {water Peter's plants}.
   c. * Sloppy reading with respect to my father: {water my father's plants}.

Let us assume we were to allow two nodes in separate clauses to accidentally have the same index of movement *i* or the same referential index *j* (even if those two occurrences of *j* get bound by different binders). Then, for instance, we could index the second conjunct of (20) as in (22), make the elided VP exactly identical to the overt VP and derive the grammatical sloppy reading (20b):

(22) ... and Judy told Lois$_1$'s boyfriend to {[$_{VP}$give her$_1$ a dime]}.

Unfortunately, nothing would then prevent us from using the indexing in (23) too, which again makes the two VPs identical but this time yields the missing sloppy reading (20c). Note that assuming VP-internal subjects would not help,

since the indexation in (24) would still be possible and again result in the unavailable sloppy reading (20c). The same argumentation holds also for (21).[10]

(23) ... and $Judy_1$ told Lois's boyfriend to {[$_{VP}$give her_1 a dime]}.

(24) Norma told [$Beth_1$'s boyfriend]$_2$ [$_{CP}$ PRO_2 to [$_{VP}$ t_2 give her_1 a dime]], and $Judy_1$ told [Lois's boyfriend]$_2$ [$_{CP}$ PRO_2 to {[$_{VP}$ t_2 give her_1 a dime]}].

In conclusion, since accidental coindexing makes the wrong predictions about possible binders of sloppy pronouns, we abandon it as a possible avenue to derive sloppy readings in a dynamic SemR framework.

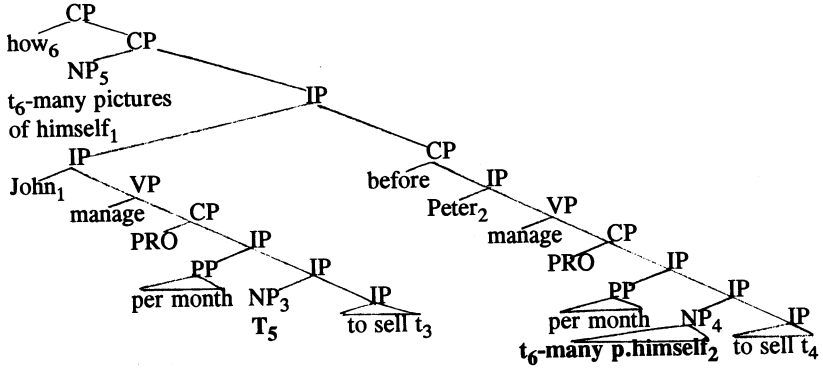
3.2. VEHICLE CHANGE. Other possibility is to allow **vehicle change** between a generalized quantifier trace *T* and the phonologically full quantifier. The notion of vehicle change is introduced in Fiengo&May 1994 in order to derive the fact that, as far as VP-Ellipsis is concerned, a trace and a pronoun count as identical. One of their examples is given under (25), where him_1 and t_1 do not prevent the two VPs from behaving as identical:

(25) a. Mary introduced every boy to someone his mother did.

b. [$_{IP}$ every boy_1 [$_{IP}$ someone$_2$ his_1 mother did **introduce him$_1$ to t$_2$** [$_{IP}$ Mary introduced t_1 to t_2]]]

Let us assume, for the sake of trying, that a *T* and a full QuNP also count as identical, so that, in (26), the elided VP *[manage PRO per month t_6-many pictures of himself$_2$ to sell t_4]* can be recovered from the antecedent VP *[manage PRO per month T_5 to sell t_3]*:

(26)



However, the configuration in (26) would run into problems once we try to check Rooth's 1992 focus condition, given under (27). Intuitively, (27) requires that the denotation of the antecedent clause be the same as the denotation of second clause except for the constituent denotation of the focused material. For instance, in (28), the function denoted by the first conjunct is the same as the

function denoted by the second conjunct, except that in the former we talk about Mary and, in the second, about Lucy:

(27) Focus Condition on VP-Ellipsis:
There must be LF-constituents α and β dominating the antecedent VP and the elided VP respectively such that the ordinary semantic value of α ($[[\alpha]]$) belongs to the focus semantic value of β ($[[[\beta]]^f$).

(28) Mary visited his$_1$ parents and LUCY did, too.
a. Denotation of first conjunct:
$g_1 \rightarrow$ "that Mary visited Joshua's parents"
$g_2 \rightarrow$ "that Mary visited Peter's parents"
$g_3 \rightarrow$ "that Mary visited Marcel's parents"
...
b. Denotation of second conjunct:
$g_1 \rightarrow$ "that Lucy visited Joshua's parents"
$g_2 \rightarrow$ "that Lucy visited Peter's parents"
$g_3 \rightarrow$ "that Lucy visited Marcel's parents"
...

However, this condition is not fulfilled for the two compared clauses in (26), since, besides the difference permitted by the focus, they diverge in the value of their indices for each assignment, as can be seen in (29):

(29) [[*John$_1$ managed PRO to per month T_3 sell t_3*]] $\notin$
[[*PETER$_2$ managed PRO to p. month n-many pictures of himself$_2$ sell t_5*]]^f
a. Denotation of first conjunct:
$g_1 \rightarrow$ "that John managed to sell **a house** per month"
$g_2 \rightarrow$ "that John managed to sell **my pictures of John** per month"
$g_3 \rightarrow$ "that John managed to sell **few picture of Peter** per month"
...
b. Denotation of second conjunct:
$g_1 \rightarrow$ "that Peter managed to sell **2** pictures of Peter per month"
$g_2 \rightarrow$ "that Peter managed to sell **4** pictures of Peter per month"
$g_3 \rightarrow$ "that Peter managed to sell **1** picture of Peter per month"
...

4. CONCLUSIONS. Two problems have been presented for the Non-Syntactic account of reconstruction phenomena that do not arise within the Syntactic approach.

First, there is a correlation between the reconstructed scope of a phrase and its Connectivity Effects. This parallelism is totally unexpected under the NonSynR approach, which derives the two kinds of reconstruction phenomena from independent mechanisms. We saw two posible ways to fix NonSynR: redefinition

of LF c-command conditions in terms of chain accessibility (where chains contain only higher type traces) and in terms of Semantic Scope.

Second, reconstructed scope sloppy readings cannot be derived through SemR without bending independently motivated assumptions about VP-Ellipsis. At this point, we do not have a possible solution that would account for this reading within the NonSynR framework.

ENDNOTES

[1] This type of reconstruction --variable binding without c-command-- is classified as ScopeRE rather than as ConnE given that, in the non-syntactic approach to reconstruction, its solution relies on the mechanism yielding the quantifier scope facts rather than on the mechanism yielding ConnE.

[2] The split of the two reconstruction phenomena in the literature stems from Cinque's 1990 observation that, whereas ScopeRE are blocked by *whether* islands (as noted in Longobardi's 1987 example in (i)), ConnE are not, as shown in (ii). However, Romero 1997 argues that the noted asymmetry does not reside on the type of reconstruction phenomenon, but on the type of moved constituent, since the cleft in (iii) can also scopally reconstruct through the island. Whether ScopeRE and ConnE pattern together and how their correlation could be derived in the Non-SynR aproach will be the subject of section 2.

(i) How many students do you wonder whether I should talk to?
√ wide reading of how many, * reconstructed reading

(ii) It is to herself$_1$ that I don't know whether she$_1$ wrote.

(iii) It is three BOOKS that I don't know whether you can check out at once (...but, three magazines, I'm sure you can).

[3] See Cresti (1995:100, 102) and Rullmann (1995:184) for details, and also Beck (1996:137). For variable binding without c-command, see section 3 in this paper.

[4] The same point that we made for Principle C can be made for Positive Polarity Item (PPI) licensing as well (Beck, p. c.). The PPI *someone* under (i) only has the wide reading *someone^not*, given under (i.a), but not the narrow reading *not^someone* in (i.b). If we do not have SemR in our grammar, the facts follow from LF c-command: the *not^someone* reading is ruled out because PPIs cannot be c-commanded by clausemate negation at LF. But, if we allow SemR of LF-movement, then the missing reading *not^someone* could be derived from the LF in (ii.b). Hence, if we allow for LF-movement to leave a higher type trace *T*, moved constituents have to be evaluated with respect to PPI-licensing as if they were in their lowest *T*-site.

(i) I didn't see someone.
a. "There is somebody that I didn't see."
b. * "It's not the case that there is somebody that I saw" / "I didn't see anybody."

(ii) a. Wide reading of *someone*:
[$_{IP}$ someone$_1$ [$_{IP}$ I didn't (**t$_1$**) see t$_1$]]
b. * Narrow reading of *someone*:
[$_{IP}$ someone$_1$ [$_{IP}$ I didn't **T$_1$** see t$_1$]]

[5] Another modification of Barss' account involves his condition on anaphors. As it stands in (9), Barss' condition does not explain Lebeaux' "Trapping Effect", which consists in the antecedent of an anaphor being unable to have reconstructed scope under the anaphor. For example, (9) by itself does not rule out the LF-representation under (i.a), since the coindexed NP *some people* is certainly accessible to the anaphor through the chain in (i.b), given that *some people* is the sister of the link *I'*. But then the semantic computation of (i.a) wrongly predicts the reading (i.c) to be possible, where the reference of the anaphor -- like of any constituent bearing an unbound index-- is provided by the context assignment.

(i) Some people$_2$ seem to themselves$_2$ to be deserving of the Nobel Prize.
a. [$_{IP}$ Some people$_2$ [$_{I'}$ seem to themselves$_2$ [$_{IP}$ **T$_2$** [$_{I'}$ to be deserving of the Nobel Prize]]]]
b. (*themselves*, P' PP, V', VP, I', IP)
c. * "It seems to them (reference provided by context assignment) that some people are deserving of the Nobel Prize."

In order to rule out the LF-representation in (i.a), we need to impose a second condition on anaphors, which we state under (ii) (Lebeaux actually makes it follow from a Coherence Principle) and we need to

ensure that syntactic binding has semantic consequences, as Heim&Kratzer (*forth.*) propose by means of (iii)-(iv) (see their chapter 10 for details):

(ii) Second Condition on Anaphors:
An anaphor needs to be syntactically bound by its antecedent at LF.

(iii) Binding Principle:
Let α and β be DPs, were β is not phonetically empty. Then α binds β syntactically iff α binds β semantically .

(iv) A DP α semantically binds a DP β iff β and the trace of α are bound by the same variable-binder.

[6] The notion of semantic scope and the reformulation that will follow from it is of no use in Cresti's second possible implementation of SemR (pp. 101-2), since there the *how many* phrase and its *T*- trace do not have the same semantic type.

[7] With this reformulation of LF c-command, the two-fold condition on anaphors would look as follows:

(i) Conditions on anaphors:
a. Principle A: An anaphor needs to be c-commanded by a coindexed NP in its governing category at some stage of the derivation (Lebeaux).
b. There has to be a node containing the anaphor such that its semantic scope is within the semantic scope of an NP coindexed with the anaphor.

[8] This further refinement is needed in order to overcome a ban on λ-conversion: no free variable should get accidentally bound in λ-converting. If we just apply the standard SemR framework to e.g. (16), the pronoun *his*, which is free within the fronted AP, will have to stay free after λ-conversion –as (i) shows–, and thus there is no way for it to get bound by *everybody*.

(i) $[[\textit{Proud of his}_1 \textit{ computer } 2 [\textit{ everybody}_1 \textit{ is } T_{2,<e,t>}]]]^g = 1$ iff
$[[2 [\textit{ everybody}_1 \textit{ is } T_{2,<e,t>}]]]^g$ ($[[\textit{proud of his}_1 \textit{ computer}]]^g = 1$ iff
λP.∀x[P(x)] (λy.y is proud of g(1)'s computer) = 1 iff
∀x[x is proud of g(1)'s computer]

In a dynamic framework, instead, the AP *proud of his computer* is not an open predicate, but a closed predicate denoting a function from variable assignments to properties. That is, the pronoun *his* is not free in the fronted AP and hence can come out bound by *everybody* after λ-conversion.

[9] For details, see Chierchia 1995.

[10] If we disallow accidental coindexing, instead, the parallelism between binders of sloppy pronouns follows easily from Rooth's 1992 Focus Condition on VP-Ellipsis: the antecedent VP and the elided VP may differ in the indices of the pronouns they contain, but the Focus Condition ensures that the antecedent proposition and the proposition with the ellipsis are completely parallel, varying only in the denotation of the focused material (see Rooth and subsection 3.2 of this paper for the formal definition and illustration of this idea).

Note that, without the ban of accidental coindexing, Rooth's Focus Condition will not derive the desired facts. In (i), the only focus is placed on *Mary* and, hence, the Focus Condition only requires a proposition parallel to "that Susan waters g(1)'s plants". This is fulfilled regardless of who binds the index *1* higher up in the tree in the second sentence. Thus, the sloppy readings with respect to *Mike* and *nobody* are not ruled out, contrary to intuitions:

(i) John_1 will ask Susan to water his_1 plants. Mike_{*1} said nobody_{*1} believed MARY would {water his_1 plants}.

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