

Romero/Fox: Reconstruction and connectivity

LING 252 · Ethan Poole · 6 April 2020

1 Distinguishing SynR and SemR

- *Two approaches to reconstruction*

(1) **SynR (higher-copy neglect)**

LF: [~~someone from Duluth~~] is likely [[someone from Duluth] to win the lottery]

(2) **SemR (higher-type traces)**

LF: [someone from Duluth] [$\lambda Q_{(et,t)}$ [is likely [$Q_{(et,t)}$ to win the lottery]]]

- * *The problem*

SynR and SemR can both handle (the standard cases of) reconstruction effects, and they ultimately do so by generating the same truth conditions. All else equal, they are mostly indistinguishable on these metrics alone.

⇒ Therefore, it is necessary to look elsewhere to investigate whether SynR and SemR can be distinguished empirically.

- *Enter binding-theoretic connectivity*

- A central difference between SynR and SemR is where the moved element is located at LF.

- * SynR: the moved element is evaluated in its *launching* site at LF

- * SemR: the moved element is evaluated in its *landing* site at LF

- The insight in the literature is that *other LF principles* may be used to independently detect the location of a moved element at LF.

- One such principle is Condition C, which is standardly taken to be evaluated at the level of LF.¹

- As such, the ensuing discussion has come to center around the interaction between reconstruction effects and binding-theoretic connectivity for Condition C.²

¹ Lebeaux (1988, 1990, 2000, 2009); Chomsky (1995)

² Romero (1997a, 1998); Sharvit (1998); Fox (1999); Sternefeld (2001); Lechner (2013, 2019); Ruys (2015); Keine and Poole (2018)

- *SynR prediction*

Reconstruction effects should cooccur with Condition C connectivity at the launching site of movement, as this is the position of the moved element at LF:

(3) * [<sub>DP ... R-exp₁ ...]₂ ... **pron**₁ ... [DP ... **R-exp**₁ ...]₂ ...
 ~> *Condition C violation*</sub>

- *SemR prediction*

Reconstruction effects should *not* cooccur with Condition C connectivity (unless further assumptions are made), as the moved element occupies its landing site at LF:

(4) ✓ [<sub>DP ... **R-exp**₁ ...]₂ [$\lambda Q_{(et,t)}$ [... **pron**₁ ... Q ...]]

 ~> *No Condition C violation*</sub>

2 Scope–Condition C correlation

* Romero (1997a, 1998) and Fox (1999) argue for the following generalization:

(5) SCOPE–CONDITION C CORRELATION

The scope of a moved element determines its Condition C connectivity.

2.1 Creation verbs

- Heycock (1995) observes the contrasts below involving creation verbs, e.g. *invent* and *come up with*, in intensional contexts:

- (6) a. * [How many stories about **Diana**₂] is **she**₂ likely to invent ___ ?
b. [How many stories about **Diana**₂] is **she**₂ really upset by ___ ?
[Heycock 1995:558]
- (7) a. * [How many lies aimed at exonerating **Clifford**₂] is **he**₂ planning to come up with ___ ?
b. [How many lies aimed at exonerating **Clifford**₂] did **he**₂ claim **he**₂ had no knowledge of ___ ?
[Heycock 1995:558]

⇒ **Condition C is what is at stake**

- Swapping the R-expression and the pronoun in (6a) and (7a) renders the sentence grammatical:

- (8) a. [How many stories about **herself**₂] is **she**₂ likely to invent ___ ?
b. [How many lies aimed at exonerating **himself**₂] is **he**₂ planning to come up with ___ ?

- Thus, the reason that (6a) and (7a) are ungrammatical must be because they violate Condition C.

- **Creation verbs** ~> **Reconstructed scope**

- The semantics of creation verbs idiosyncratically permits only the reconstructed-scope reading.
- The wide-scope, nonreconstructed reading is ruled out by its pragmatic oddity:

(9) **Hypothetical wide-scope reading of (6a)**

#For what number *n*: There are *n*-many particular stories *x* about Diana such that Diane is likely to invent *x*.
[Romero 1998:91]

- How can someone be likely to invent a story that is presupposed to already exist? They cannot, and hence this anomalousness rules out the wide-scope reading.
- Therefore, the only plausible scope of *how many* in (6a) and (7a) is below the creation verb.

* **Putting it all together**

- In (6b) and (7b), without creation verbs, the *wh*-phrase can take wide scope, thereby placing the R-expression outside the c-command domain of the offending antecedent at LF. No violation of Condition C ensues.
- This strategy is unavailable in (6a) and (7a) because of the idiosyncratic semantics of creation verbs that force narrow scope of the *wh*-phrase. Condition C is hence necessarily violated.

• **Common misunderstanding**

- Nothing in the grammar needs to encode that creation verbs require scope reconstruction.
- As far as the grammar is concerned, both surface and reconstructed scope are in principle possible.
- It is our world knowledge about what it means to create something that makes the surface-scope reading pragmatically anomalous, thereby forcing the reconstructed-scope reading.

2.2 Embedding the offending antecedent

- Huang (1993) and Takano (1995) observe that the distance between the R-expression in the moved element and the offending antecedent (i.e. coreferential pronoun) appears to matter for Condition C connectivity:

(10) a. **Offending antecedent in the matrix clause**

* [How many pictures of **John**₂] does **he**₂ think [that I like ____]?

b. **Offending antecedent in the embedded clause**

? [How many pictures of **John**₂] do you think [that **he**₂ will like ____]?

[Romero 1998:92]

- Romero argues that this amelioration is contingent on the scope of the moved *wh*-phrase, namely (10b) is grammatical only on a wide-scope reading.

• **Baselines**

- **Wh-islands (forces wide scope)**

(11) * [How many pictures of **John**₂] does **he**₂ wonder [whether I like ____]?

(Intended: For what number *n*: There are *n*-many pictures *x* of John such that John thinks that I like *x*.)

[Romero 1998:92]

- **Rate readings (forces narrow scope)**

(12) * [How many pictures of **Neil Young**₂] does **he**₂ think [that the newspaper should publish ____ per month]?

(Intended: For what number *n*: Neil Young thinks that it should be the case that, every month, there are *n*-many pictures *x* of Neil Young such that the newspaper publishes *x*.)

[Romero 1998:92]

⇒ When the offending antecedent is clausemates with the R-expression in the matrix clause, both test configurations are ungrammatical.

⇒ **Target sentences**

– **Wh-islands (forces wide scope)**

No Condition C violation once the offending antecedent has been embedded:

- (13) [How many pictures of **John**₂] do you wonder [whether **he**₂ will like ___]?

(Paraphrase: For what number *n*: There are *n*-many pictures *x* of John such that you wonder whether John will like *x*.) [Romero 1998:93]

– **Rate readings (forces narrow scope)**

There is a Condition C violation even when the offending antecedent has been embedded:

- (14) *[How many pictures of **Neil Young**₂] do you think [that **he**₂ should publish ___ per month]?

(Intended: For what number *n*: You think that it should be the case that, every month, there are *n*-many pictures *x* of Neil Young such that Neil Young publishes *x*.) [Romero 1998:93]

– Again, we can swap the R-expression and the pronoun to see that what is at stake is indeed Condition C:

- (15) [How many pictures of **himself**₂] do you think [**Neil Young**₂ should publish ___ per month]? [Romero 1998:93]

* **Putting it all together**

- Movement to a position above the offending antecedent avoids a Condition C violation if the moved element takes scope in the landing site and does not reconstruct.
- This strategy is possible in (10b) and (13), but impossible in (14) because the rate reading forces the *wh*-phrase to take narrow scope.
- Crucially, this amelioration strategy is possible only when the offending antecedent is in an embedded clause.

2.3 Lebeaux effects

- It is well-known that \bar{A} -movement may obviate Condition C violations incurred in the absence of movement if the offending R-expression is embedded inside a relative clause (possibly other “adjuncts”):³

- (16) a. ***She**₁ liked the picture that **Alex**₁ took.
 b. [Which picture [_{RC} that **Alex**₁ took]] did **she**₁ like ___ ?
-

- This contrast is called a **LEBEAUX EFFECT (OR LATE MERGE EFFECT)**.

* Romero (1998) and Fox (1999) claim that the obviation of Condition C provided by Lebeaux effects blocks scope reconstruction:

³ van Riemsdijk and Williams (1981); Lebeaux (1988, 1990, 2000, 2009)

(17) [How many pictures [_{RC} that **John**₂ took in Sarajevo]] does **he**₂ want the editor to publish ___ in the Sunday Special?

a. **Wide-scope reading**

✓ For what number *n*: There are *n*-many particular pictures *x* that John took in Sarajevo such that John wants the editor to publish *x*.

b. **Narrow-scope reading**

* For what number *n*: John wants the editors to publish in the Sunday Special (any) *n*-many pictures that John took in Sarajevo. [Romero 1998:96]

- According to Romero and Fox, the narrow-scope reading is unavailable because scope reconstruction induces Condition C connectivity. Evaluating the moved *wh*-phrase for Condition C in the launching site of movement would result in ungrammaticality.
- This is supported by the fact that when the R-expression and the pronoun are swapped, the narrow-scope reading reappears:

(18) [How many pictures [_{RC} that **he**₂ took in Sarajevo]] does **John**₂ want the editor to publish ___ in the Sunday special? [Romero 1998:96]

2.4 Binding pronominal variables

- Fox (1999) argues that pronominal-binding reconstruction also induces Condition C connectivity:

(19) a. **Pronoun c-commands launching site**

* [Which of the books that *he*₂ asked **Ms. Brown**₃ for] did **she**₃ give *every student*₂ ___ ?

b. **Pronoun does not c-command launching site**

[Which of the books that *he*₂ asked **Ms. Brown**₃ for] did *every student*₂ get ___ from **her**₂? [Fox 1999:174]

- **Swapping the R-expression and pronoun**

(19a) can be made grammatical by swapping the R-expression and the pronoun so that reconstruction is possible without inducing a Condition C violation (20).

(20) [Which of the books that *he*₂ asked **her**₃ for] did **Ms. Brown**₃ give *every student*₂ ___ ? [Fox 1999:174]

3 SynR over SemR

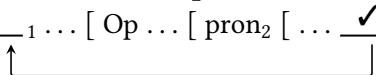
- The core insight of the Scope–Condition C Correlation (SCC) is that scope and Condition C are read off the same structure.

(21) **SCOPE–CONDITION C CORRELATION**


The scope of a moved element determines its Condition C connectivity.

- If a moved DP takes scope in the launching site of movement, then it is also evaluated for Condition C in the launching site:

(22) a. **Structure that scope sees**

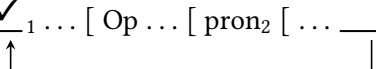
$$[\text{---}_1 \dots [\text{Op} \dots [\text{pron}_2 [\dots \checkmark_1 \dots]]]]]]$$


b. **Structure that Condition C sees**

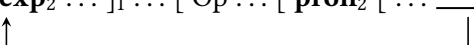
$$* [\text{---}_1 \dots [\text{Op} \dots [\text{pron}_2 [\dots [\text{DP} \dots \text{R-exp}_2 \dots]_1 \dots]]]]]]$$


- If a moved DP takes scope in the landing site of movement, then it is also evaluated for Condition C in the landing site:

(23) a. **Structure that scope sees**

$$[\checkmark_1 \dots [\text{Op} \dots [\text{pron}_2 [\dots \text{---}_1 \dots]]]]]]$$


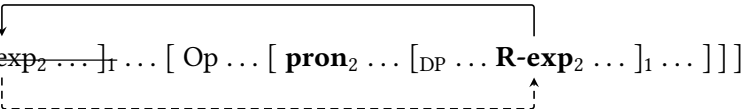
b. **Structure that Condition C sees**

$$\checkmark [[\text{DP} \dots \text{R-exp}_2 \dots]_1 \dots [\text{Op} \dots [\text{pron}_2 [\dots \text{---}_1 \dots]]]]]]]$$


• **SynR**

The SCC follows *for free* on SynR. When the moved DP contains an R-expression, any coindexed DP that c-commands the launching site will then trigger a Condition C violation because the syntactic material of the moved DP is present in the reconstructed position:

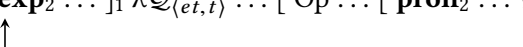
(24) **Correct prediction of SynR (should be ungrammatical)**

$$* [[\text{DP} \dots \text{R-exp}_2 \dots]_1 \dots [\text{Op} \dots [\text{pron}_2 \dots [\text{DP} \dots \text{R-exp}_2 \dots]_1 \dots]]]]]]$$


• **SemR**

On SemR, there is no way to derive the SCC other than stipulating it. Because the moved element is in its landing site at LF, the R-expression is not in the c-command domain of the coindexed pronoun, and thus there is no Condition C violation:

(25) **Incorrect prediction of SemR (should be ungrammatical)**

$$\checkmark [[\text{DP} \dots \text{R-exp}_2 \dots]_1 \lambda Q_{(et,t)} \dots [\text{Op} \dots [\text{pron}_2 \dots Q_{(et,t)} \dots]]]]]]]$$


- All else equal, there is no expectation that Condition C should be able to influence the availability of a reconstructed-scope reading on SemR, contrary to the SCC.

⇒ Accordingly, Romero (1997b, 1998) and Fox (1999) conclude that the SCC supports a purely SynR approach to reconstruction effects. This is more or less the standard view in the literature.

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