

Non-Restrictive Relative Clauses Within a Unidimensional Semantics

There are two major schools of thought about the syntax and semantics of non-restrictive relative clauses (henceforth NRRs). The ‘low attachment’ school (from Jackendoff 1977 to Potts 2005) claims that a NRR is attached and interpreted near its surface position; in order to explain why its content ‘scopes out’ to the matrix level, Potts 2005 introduces a major innovation: he takes NRRs to be ‘conventional implicatures’, which are interpreted in an autonomous semantic dimension, one that does not interact with the assertive component of the sentence. The ‘high attachment’ school (from Emonds 1979 through McCawley 1988 to Del Gobbo 2003) takes a NRR to be attached as a sister to the matrix node, and to be interpreted as a separate conjunct, with the *wh*-element analyzed as an E-type pronoun. For this school, it is in the syntax that NRRs ‘scope out’. But unlike Potts 2005, this school fails to explain the special semantic status of NRRs, whose content is neither presupposed nor really asserted. Focusing on *que*-NRRs in French¹, we argue for a different theory:

I. Syntax: A NRR (A) is preferably attached with highest scope, but (B) it can also be attached as a sister to any node that dominates its surface position and is of propositional type (for simplicity, we adopt McCawley’s view that a NRR may be directly attached as a sister to a node it is not adjacent to).

II. Semantics: As is claimed by the ‘high attachment school’, the *wh*-element of a NRR is interpreted as an E-type pronoun, and the entire NRR is interpreted as a conjunct. When a NRR is not attached high, it may interact semantically with any operator it is in the scope of, *contra* Potts 2005.

III. Pragmatics: We suggest that NRRs have a special pragmatic status: they are presented by the speaker as expressions whose content is trivial once one adds to the Context Set assumptions that are not controversial. This explains why NRRs have a non-trivial contribution (unlike presuppositions, they are not trivial in the original Context Set, but only after some assumptions are added to it), why they have a special pragmatic status, and why they display a ‘projection pattern’ which is reminiscent of presuppositions.

With respect to IA and II, we agree with the ‘high attachment’ school; but we disagree with both schools with respect to IB and III.

1. Syntax: High Attachment. We provide three new arguments in favor of the possibility of high attachment of NRRs (other arguments are listed in McCawley 1988).

1.1. Condition C Effects: R-expressions in a *restrictive* relative clause yield Condition C effects if the surface position is c-commanded by a coindexed pronoun, but the effect is obviated in NRR, as is illustrated in (1). This fact can be explained if NRRs can be attached at the matrix level, despite their surface appearance.

(1) Et le Président?_i [*How about the President_i?*]

a. #Il_i a donné au ministre qui n’aime pas Sarkozy_i une tâche impossible.

He_i gave to the minister who doesn’t like Sarkozy_i an impossible task.

b. Il_i a donné au ministre de la Justice, qui n’aime pas Sarkozy_i, une tâche impossible.

He_i gave to the minister of Justice, who doesn’t like Sarkozy_i, an impossible task.

a’. #Il_i n’a envoyé qu’à un seul journaliste qui adore Sarkozy_i son_i dernier livre.

He_i sent to only one journalist who loves Sarkozy_i his latest book.

b’. Il_i n’a envoyé qu’à un seul journaliste, qui adore Sarkozy_i, son_i dernier livre.

He_i sent to only one journalist, who loves Sarkozy_i, his latest book.

1.2. Mood: Verbs that are embedded in the antecedent of a counterfactual conditional in French must take a morphological imperfect and cannot appear in the conditional mood (unlike elements that appear in the consequent). But in the same position NRRs *can* take the conditional mood, just like independent clauses:

(2) a. Si je rencontrais / #rencontrerais demain un soldat, je l’interviewerais. Il **serait** content.

If I met / #would-meet tomorrow a soldier, I him would-interview. He would-be happy.

b. Si je rencontrais demain un soldat qui était / #serait content de me parler, je l’interviewerais.

If I met / #would-meet tomorrow a soldier who was / #would-be happy to talk to me, I him would-interview.

c. Si je rencontrais / #rencontrerais demain un soldat, qui **serait** content de me parler, je l’interviewerais.

If I met / #would-meet tomorrow a soldier, who would-be happy to talk to me, I him would-interview.

1.3. Weak Crossover Effects: *Wh*-interrogatives that directly bind a pronoun contained within a restrictive relative clause give rise to Weak Crossover effects, as is standardly expected ((3)a); but the effect is obviated with NRRs ((3)b). This can be explained if the NRR is attached high and the *wh*-relativizer is interpreted as an E-type pronoun, which makes (3)b similar to (3)c.

¹ Cinque 2008 holds a mixed position: he takes *che*-NRRs in Italian to display the behavior predicted by the ‘low attachment’ school; and he takes *il quale*-NRRs in Italian (as well as all English NRRs) to behave in accordance with the ‘high attachment’ theory. The NRRs we consider in French pattern with *che*-NRRs with respect to Cinque’s tests, but *contra* Cinque we claim that they can be attached very high.

- (3) a. ?? Quel terroriste est-ce qu'un officier qui va lui régler son compte va interroger?
Which terrorist is it that an officer who will settle his score will interrogate?
 b. Quel terroriste est-ce qu'un officier, qui va lui régler son compte, va interroger?
Which terrorist is it that an officer, who will settle his score, will interrogate?
 c. Quel terroriste est-ce qu'un officier va interroger? Il va lui régler son compte.
Which terrorist is it that an officer will interrogate? He will settle his score.

2. Syntax: Lower Attachments. As it turns out, the mood test in 1.2, as well as an inspection of the truth conditions, shows that in other examples NRRs can be attached at intermediate scope sites (Harris and Potts 2009 give experimental evidence in favor of the possibility of low attachment under attitude verbs).

- (4) a. Jean n'aurait pas été renvoyé s'il avait appelé son père, qui **avait** / aurait appelé son avocat.
Jean would not have been expelled if he had called his father, who had / would-have called his lawyer
 b. Aucun élève n'aurait été renvoyé s'il avait appelé son père, qui **avait** / aurait appelé son avocat.
No student would have been expelled if he had called his father, who had / would-have called his lawyer

With the conditional mood *aurait appelé*, (4)a entails that Jean would not have been expelled if he had called his father; the NRR behaves as an independent clause outside the scope of the *if*-clause. By contrast, with the (modally interpreted) pluperfect *avait appelé*, the entailment fails to hold because the antecedent requires that Jean should have called his father *and* that the latter should have called his lawyer. Similar facts hold in (4)b.

Intermediate attachments can also be obtained, as can be seen by considering the truth conditions of (5), where the NRR is in the scope of the *if*-clause, but outside that of *obtenu* [= 'be granted the wish that']:

- (5) Si Marie avait obtenu qu'on appelle son père, qui avait à son tour appelé son avocat, elle n'aurait pas été renvoyée.
If Marie had obtained that one call her father, who had in turn called his lawyer, she wouldn't have been expelled.

3. Semantics: We have argued that NRRs can be attached at the matrix level while appearing in embedded positions. With this syntax, it is unnecessary to posit Potts's bidimensional semantics to explain 'high' readings, which should be accounted for in the syntax. Furthermore, the existence of examples with lower attachment, such as (4) and (5), shows that such a semantics is undesirable: it wrongly predicts that there could be no semantic interaction between the NRRs and the operators it is embedded under, contrary to fact. In agreement with the 'high attachment' school, we posit a simple conjunctive semantics for NRRs; depending on their point of attachment, they do or do not interact with the semantics of other operators. Furthermore, like Del Gobbo 2003 and earlier work, we take the *wh*-relativizer to have an E-type semantics.

4. Pragmatics: As it stands, our conjunctive semantics misses two important facts about NRRs. (i) First, NRRs with high attachment have a different informational status from the rest of the sentence. Thus if I want to break the news that the French President has murdered his wife, (6)a is far more felicitous than (6)b (which is acceptable if the news of the murder is already out). The NRR is somehow incidental to the main assertion:

- (6) a. Sarkozy, qui avait rencontré sa femme au début de sa présidence, vient de l'assassiner.
Sarkozy, who had met his wife towards the beginning of his presidency, has just murdered her.
 b. #Sarkozy, qui vient d'assassiner sa femme, l'avait rencontrée au début de sa présidence.
Sarkozy, who has just murdered his wife, had met towards the beginning of his presidency.

(ii) Second, NRRs with low attachment give rise to non-trivial patterns of projection:

- (7) a. Tu ne vas pas épouser Anne, ou ta mère, qui sera furieuse, te déshériterà.
You will not marry Anne, or your mother, who will be furious, will disown you.
 b. Est-il vrai que tu ne vas pas épouser Anne, ou que ta mère, qui sera furieuse, te déshériterà?
Is it true that you will not marry Ann, or that your mother, who will be furious, will disown you?

(7)a gives rise to an inference that *if you marry Ann, your mother will be furious*, rather than to the unconditional inference that *your mother will be furious*; this suggests that the NRR is attached within the second disjunct. (7)b gives rise to the same inference, despite the fact that the sentence is not asserted. These and related facts are reminiscent of presupposition projection. Thus in disjunctions, the negation of the first disjunct can be used to satisfy the presupposition of the second disjunct: *Sam isn't wrong or he knows that he is* doesn't presuppose anything, because the negation of the 1st disjunct entails the presupposition of the 2nd.

We account for (i) and (ii) by taking NRRs to be expressions whose content is presented by the speaker as making an uncontroversial contribution, in the sense that they can be made trivial by adding to the Context Set uncontroversial (though non-trivial) assumptions. To put it roughly, they have the behavior of presuppositions that can 'easily' be accommodated globally – hence the contrast between (6)a and (6)b. Furthermore, in (7) the speaker presents the contribution of the embedded NRR to be trivial once one makes uncontroversial assumptions – hence the inference that *if you marry Ann, your mother will be furious*.