Ellipsis Resolution in Comparatives and the Right Periphery of DP

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1. Introduction

Since Bresnan (1973), a consensus has emerged in the generative literature that the rules of grammar contributing to comparative formation minimally have to include the process of Comparative Deletion ('CD'). CD is defined as an obligatory operation which removes the gradable property expression from within the comparative clause:

(1)   Mary knows younger authors than Peter knows △
        (△$_{CD}$ = d-young authors)
(2)   *Mary knows younger authors than Peter knows young authors

The present paper investigates the syntactic and semantic properties of CD, and tries to answer three questions: First, at which level of representation is CD identified? Should the CD-site be assumed to be present already in the syntactic representation (for instance at LF), or should the ellipsis be restored in semantics? Second, what is the fine-grained structure and interpretation of attributively modified NP-comparatives such as the object *younger than Peter knows* in (1)? Third, which exact mechanism is responsible for the recovery of the empty gradable property in comparatives? These questions will be addressed in turn in sections 2 to 4. Section 5 finally discusses empirical extensions of the theory to be presented.

2. Semantic Approaches towards CD-Resolution

In two recent studies, Kennedy (1997) and Lerner & Pinkal (1995) propose to treat CD as a manifestation of semantic ellipsis, which is identified in the

semantic component. According to L & P, the content of CD in NP-comparatives is recovered by means of a discourse anaphoric mechanism, which resembles the one that governs the distribution of *one*-anaphora. The silent categories in (3a) and (3b) would consequently be identified by the same - or similar - principles:

(3) a. Mary knows a younger author than Peter knows △
     b. Mary knows a young author and Peter knows one, too △
         (△ = d-young author)

In essence, their account rests on the assumption that a context variable P_o built into the denotation of the empty comparative operator takes up the reference of a gradable property, and is λ-converted into the appropriate position in the course of the semantic computation. For the comparative complement of (3)a, this yields the informal representation (4)a, which results in (4)b after the context variable has been instantiated by *young author*:

(4) a. (than) $\exists y[\mathbf{P_o}(d)(y)$ & know (y)(Peter)]
     b. (than) $\exists y[\mathbf{young\ author}\ (d)(y)$ & know (y)(Peter)]

An idea similar in spirit is defended in Kennedy (1997), who also adopts a semantic approach towards CD, but does not employ the help of context variables. To begin with, he points to the fact that the content of the CD-site is always determined locally, unlike other kinds of semantic ellipsis, notably VP-deletion (Williams (1977): 102). The empty node inside the comparative clause in (5) is e.g. unequivocally interpreted as *d-long*, a gradable property that is provided by the matrix predicate of the second conjunct, and cannot be recovered at a distance by the property *d-wide* in the first conjunct:

(5) The table is wider than this rug is, but this rug is longer
     than the desk is △
     (△ = d-long/*△ = d-wide)   (Kennedy (1997): 154)

CD contrasts in this respect with VP-deletion, which is more permissive w.r.t. the locality conditions on ellipsis, as shown by the ambiguity of (6) below:

(6) Marcus read every book I did and I bought every book Charles did △
     (△ = bought/△ = read)   (Kennedy (1997): 154)

In developing an account for this asymmetry between CD and VP-ellipsis, Kennedy adopts L & P's suggestion to let the recovery of the content of CD be mediated by the empty comparative operator. However, instead of opting for a solution in terms of discourse identification, he capitalizes on the fact that OP and the antecedent of the CD-site are in a local relation at LF ((7b)):

(7) a. Syntax: Mary is younger than Peter is $\triangle_{CD}$
     b. LF: Mary is **younger** [than [$_{CP}$ **OP$_i$** Peter is $\mathbf{t_{i, <e,t>}}$]]

According to Kennedy, the comparative operator binds the trace of a Degree Phrase (Abney (1987), Corver (1993)), which corresponds to an expression of the type of an individual property. This higher-type variable (t_i in (7b)) serves as a place holder into which the AP-denotation of the local antecedent is λ-converted in semantics, once the comparative complement has been combined with the denotation of the comparative AP *younger* (t_i is translated as variable 'G' in (8); 'AB' stands for 'absolute'; see Kennedy (1997) for further details):

(8) [younger]([[than [$_{CP}$ OP$_i$ Peter is $\mathbf{t_{i, <e,t>}}$]]]) =
     = λQλx[MORE(young(x))(Q(young))](λG[max(λd[AB(**G**(Peter))(d)])])
     = λx[MORE(young(x))(λG[max(λd[AB(**G**(Peter))(d)])(**young**)])]
     = λx[MORE(young(x))(max(λd[AB(**young**(Peter))(d)]))]

Recapitulating briefly, in both L & P's and Kennedy's theory of CD, the ellipsis site is recovered at a late stage in the derivation, that is, in the semantic component. We are therefore led to expect that principles that operate on purely syntactic representations (overt syntax and LF) are blind to the content of CD. In the next section, I will demonstrate that this prognosis is incorrect, and that one should therefore seek an alternative analysis of CD.

3. Identification of CD in Syntax

3.1. Evidence from Binding Theory
The first argument supporting the view that the CD-site is restored prior to semantics comes from disjoint reference effects. In order to establish this point, it will be necessary to turn to a brief discussion of two competing analyses of the variable size of the CD-site in predicative constructions first.

If the comparative adjective is transitive, CD may affect either the adjectival head alone, or erase the adjective along with its complement:

(9) a. Mary is prouder of John than Bill is of Sally
        ($\triangle$ = d-proud)
     b. Mary is prouder of John than Bill is $\triangle$
        ($\triangle$ = d-proud of John)

The question that arises in this context is whether the PP in (9b) has been suppressed by a deletion process separate from CD, or whether it has been elided along with the adjective. For if the second option can be shown to obtain, the properties of an elided PP represent a heuristic tool for the detection of more general properties of CD.

Paradigm (9) is reminiscent of one that shows up in contexts of sentential conjunction. In coordinate structures, deletion can be either restricted to the adjective, exemplified by Pseudogapping in (10a), or may affect the adjectival predicate and its argument, as in the 'VP'-ellipsis (10b):

(10) a. Mary is proud of John and Bill is of Sally
      b. Mary is proud of John and Bill is, too

Following Lasnik's (1995) treatment of Pseudogapping, I assume that the difference between (10a) and (10b) does not lie so much in the size of ellipsis, but rather in the presence of an additional movement step in the derivation of (10a) (Johnson (1997), Jayaseelan (1990)). While (10b) constitutes a simple case of VP-deletion, the object PP in (10a) moves out of the containing VP (and AP) prior to elision, yielding the appearance of A°-deletion:

(11) a. Mary is proud of John and Bill is [$_{VP}$ [$_{AP}$ proud of Sally]]
      b. Mary is proud of John and Bill is [$_{PP}$ of Sally]$_i$ [$_{VP}$ [$_{AP}$ proud t$_i$]]
      c. Mary is proud of John and Bill is [$_{PP}$ of Sally]$_i$ △
          (△ = [$_{VP}$ [$_{AP}$ proud t$_i$]])

We can now employ the same strategy in the derivation of the comparative (9a): In an initial step, the object PP is evacuated out of the AP, followed by application of CD, which targets the whole AP-node:

(12) a. Mary is prouder of John than Bill is [$_{AP}$ proud of Sally]
      b. Mary is prouder of John than Bill is [$_{PP}$ of Sally]$_i$ [$_{AP}$ proud t$_i$]
      c. Mary is prouder of John than Bill is [$_{PP}$ of Sally]$_i$ △$_{CD}$
          (△$_{CD}$ = [$_{AP}$ proud t$_i$])

That is, the categories affected by CD in (9a) and (9b) are of the same size; in both cases it is an AP that has been removed from the respective surface strings. It follows that the PP object that is elided along with the adjectival head in (9b) is also contained in the CD-site, and not erased by some additional operation.

Consider in this light example (13):

(13)   Mary is prouder of John$_i$ than he$_{*i/j}$ is △^{1}
          (△ = d-proud of John)

(13) does not possess a reading in which *John* and the pronominal subject of the comparative clause corefer, indicating that the PP *of John* resides inside the

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^{1}(13) improves if the pronoun is focused, a behavior typical of Principle C (Reinhart (1983)).

c-command domain of the pronoun already at LF, triggering a Principle C violation.[2] Since the object PP is part of the CD site, we are moreover led to the conclusion that the CD-site *d-proud of John* has been restored already as early as during the syntactic computation.

Binding Theory and the behavior of reciprocals also provide a second argument in support of a syntactic account of CD resolution. As demonstrated by the examples under (14), the subject of the comparative can sloppily bind an anaphor or a reciprocal contained within the CD-site:

(14) a. Mary is prouder of herself than Sally is △
          (△ = d-proud of herself)
      b. The girls are prouder of each other than the boys are △
          (△ = d-proud of each other)

Again, this observation serves as a diagnostic that the anaphors in (14) - and therefore also the AP's containing them - are already reconstructed at LF.[3]

3.2. Coordinate Structure Constraint

The third and final piece of evidence in favor of a syntactic approach towards CD-resolution stems from overt extraction. Observe first that extraction out of the object position of a transitive positive adjective, as in (15a), as well as simultaneous movement of the AP-complement out of the matrix and the comparative clause, as in (15b), leads to well-formed structures:

(15) a. a person **that$_i$** Mary is proud of **t$_i$**
      b. a person **that$_i$** Mary is [more proud of **t$_i$**] than Peter is △
          (△ = d-proud of **t$_i$**)

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[2]The same conclusion is reached if Principle C is assumed to constitute an innate interface strategy (Reinhart (1983, 1995); Reinhart & Grodinzky (1993)). According to Reinhart's (1995: 51) 'Interface Rule I', the LF-representation of (i)a, which employs a bound variable, is more economical than - and therefore preferred over - the LF of (i)b, which includes an overt name:

(i) a. He$_i$ touched himself$_i$
     b. *He$_i$ touched Max$_i$

If it is not possible to establish the structural context for variable binding, as in (ii), Rule I licenses coreference between names and pronouns:

(ii) The bear near Max$_i$ touched him$_i$

Crucially, Rule I evaluates competing LF-representations, and not semantic formulas. Thus, the comparison set for (13) will have to include a representation in which the name (and consequently the containing AP) have been reconstructed into the CD-site already at LF.

[3]The point can be strengthened, if an LF-cliticization analysis of reflexives and reciprocals is adopted, according to which the anaphor covertly raises to its antecedent (Chomsky (1995), Heim, Lasnik & May (1991), Lebeaux (1985)). Since movement presupposes the existence of a syntactic target, these accounts require that the anaphor be syntactically present already at LF.

However, if movement targets the adjectival complement in the matrix clause alone, the result surface string is deviant:

(16)   *a person **that$_i$** Mary is [more proud of **t$_i$**] than Peter is △ of John
            (△ = d-proud of **t$_i$**)

Compare now the contrast between (15b) and (16) to the one which sets apart the coordinate structure (17a) from (17b).

(17)   a.   a person **OP$_i$** that Mary is [proud of **t$_i$**] and Peter is △, too
          b.   *a person **OP$_i$** that Mary is [proud of **t$_i$**] and Peter is △ of John
                (△ = proud of **t**)

Let me assume that comparatives are subject to the Coordinate Structure Constraint ('CSC') much in the same way that coordination is.[4] Then, the unacceptability of (16)[5] and (17b) receive a uniform explanation and can be reduced to a reflex of the more general ban on asymmetric extraction. Notice furthermore that examples that militate against the CSC are fully interpretable. The common noun of (16) denotes *the set of individuals x, such that there is a degree d such that Mary is d-proud of x and d is greater than the maximal degree d' to which Peter is proud of John* (assuming von Stechow's (1984) comparative semantics in terms of maximality). Thus, the CSC arguably represents a condition that poses restrictions on syntactic derivations, and not on semantic representations. It follows that violations of the CSC have to be computed in syntax, and the conclusion that the CD-site in the ill-formed structure (16) has been reconstructed prior to semantics becomes inescapable. The sensitivity of comparatives to the CSC therefore constitutes a further piece of evidence in favor of the view that the CD-site is restored as early as in the syntactic component.

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[4]See also Napoli (1983: 687f), who observes that the CSC holds for NP-comparatives:
(i)   a.   *Who did you see [more pictures of t] than (you read) books about Ronald Reagan
      b.   *Who did you see more pictures of Nancy Reagan than (you read) [books about t]
      c.   Nancy Reagan, I've seen [more pictures of t] than I've read [books about t]
On coordinate-like properties of comparatives vd. Corver (1994), Lechner (1998a), Pinkham (1982).

[5]Some speakers judge (16) to be marginally acceptable, acknowledging though a clear contrast between (16) and (15b). This might be attributed to the fact that comparatives meet the (poorly understood) conditions which rescue CSC-violations in English examples such as *What did you go to the store and buy* (Culicover (1972), Culicover & Jackendoff (1997), Goldsmith (1985), Williams (1994)). Note incidentally that e.g. the German equivalent of (16) is strictly ungrammatical, correlating with the observation that German does not license exemptions from the CSC.

This concluded the argumentation in favor of syntactic CD-resolution. Next, I will turn to a discussion of the syntax of NP-comparatives, proceeding from there to the presentation of an alternative account of CD.

4. Towards a New Theory of CD

4.1. The Representation of NP-Comparatives

The current section focuses on the fine-grained structural relations between the DP, the AP-modifier and comparative marking in NP-comparatives such as the object in (1), repeated below as (18):

(18)   Mary knows younger authors than Peter knows

In developing an account of NP-comparatives, I will diverge from standard assumptions about the degree and DP-internal modifier system that can be found in the literature in two respects. First, I will advocate a new account of the relation between the comparative clause and the AP it is associated with. Second, it will be argued that the standard analysis of attributive modification should be reevaluated in the light of internally complex NP's such as (1).

To begin with, I will adopt the functional AP-hypothesis, which holds that each AP is embedded under a functional Deg(ree)P(hrase) (Abney (1987), Bresnan (1973), Corver (1993, 1997)). Prior studies that have considered comparatives from the perspective of the DegP-hypothesis have assigned to simple predicative comparatives such as (19a) the factorization (19b), in which the AP and the *than*-XP are both generated as daughters of a recursive Deg'-node (Corver (1993), Kennedy (1997), Merchant & Kennedy (1997)).

(19)   a.   Mary is younger than Peter
         b.   .... [$_{DegP}$ [$_{Deg'}$ [$_{Deg'}$ Deg° [$_{AP}$ younger]] [than-XP]]

Contrary to the positions taken in the literature, I would however like to suggest that the *than*-XP serves as a complement to Deg° and that the AP originates in SpecDegP as the external argument of the degree head:[6]

(20)   [$_{DegP}$ [$_{AP}$ younger] [$_{Deg'}$ Deg°$_{[+comparative]}$ [$_{than-XP}$ than Peter]]]

One immediate consequence of the parse in (20) is that AP and Deg° are in a Spec-Head configuration. Comparative morphology can therefore be base-generated directly on the adjectival head, and checked on the AP by a suitable

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[6]Thus, the *than*-XP is effectively treated as an internal argument, which can under certain conditions be contextually recovered (cf. *Mary is younger*), much in the same way that the complement of a transitive predicate such as *eat* can (cf. *Mary eats*).

[+comparative] feature in Deg° (Chomsky 1995).[7]

Consider at this point once again NP-comparatives such as (18) and their analysis under the DegP-hypothesis. If one were to follow the standard assumption that prenominal modifiers are adjuncts to NP, the whole DegP - the string *younger than Peter knows* in (18) - would have to be left-adjoined at the NP-level, resulting in the illicit surface serialization given under (21):

(21)   [$_{NP}$ [$_{DegP}$ [$_{AP}$ younger] [$_{Deg'}$Deg°$_{[+comp]}$ [$_{than-XP}$ than Peter ...]]] [$_{NP}$ authors]]

Thus, NP-comparatives reveal the limitations of the traditional NP-adjunction analysis, which fails to capture word-order correctly.

In principle, there are two ways to reconcile the DegP-hypothesis with the actually observed serialization. On the one hand, one could invoke obligatory extraposition, shifting the *than*-XP in (21) to the right-periphery of the DP. As it turns out, however, this option can be shown to empirically untenable. Right-ward shift of the *than*-XP would violate the locality constraints which are generally thought to restrict extraposition (Ross (1976), Lechner (1998a)). On the other side - and this is the line I would eventually like to pursue - it is possible to take the data above as an argument against the traditional NP-adjunction analysis of prenominal modification.

The alternative account for prenominal attributes that I will advocate here is modeled after Abney (1987), and combines a non-endocentric structure for the DP with the DegP-hypothesis. For Abney, prenominal AP-modifiers are selected by D°, and take the head noun they modify as a complement (vd. Berman (1973)). According to present assumptions, AP is embedded under DegP. Substituting 'DegP' for 'AP', we arrive at a phrase structure for NP-comparatives, in which DegP no longer originates as an adjunct to NP, but is generated as a complement of DP, as in (22):

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[7]In periphrastic comparatives, the degree marker *mehr*/'more' arguably moves from Deg° into a higher functional projection, marked 'QP' in (i)b (see Corver (1997) on the distinction between DegP and QP; a similar phrasal architecture was independently proposed by Izvorski (1995)):
  (i)   a.   Mary is more interesting than Peter
         b.   ....[$_{QP}$ **more$_i$** [$_{DegP}$ [$_{AP}$ interesting][$_{Deg'}$ **t$_i$** [$_{than-XP}$ than Peter]]]]

(22)
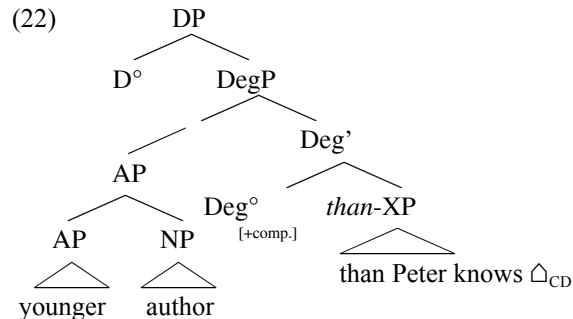
A first consequence of (22) is that the *than*-phrase originates now to the right of the head noun, in compliance with the observed surface word-order. Second, the higher AP node (*younger authors*) c-commands the CD-site, an aspect that will turn out to be crucial in the alternative account of CD to be presented in the next section.[8]

4.2. The AP-Raising Analysis of CD

Notice that adopting the parse (22) entails that both the AP in the comparative complement and the AP modifying the item of comparison reside in the specifier positions of a DegP. Both DegP's are moreover contained in a uniformly right-branching tree, resulting in a configuration in which the CD-site is c-commanded by its antecedent. Thus, the relation between the CD-site and its antecedent satisfies the structural conditions on chain-formation. I would like to propose now that the category removed by CD is indeed a trace, or more precisely a copy of the antecedent left by AP-movement from the lower SpecDegP into the higher SpecDegP. This leads to the AP-Raising analysis of CD, which is stated in (23):

(23)　**AP-RAISING HYPOTHESIS:** Comparative Deletion consists in AP-Raising from the comparative clause into the matrix clause.

Applying (23) to example (18) consequently results in the tree diagram given

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[8]Further evidence for the right-branching DP structure in (22) comes from bounding theory (Lechner (1998b)) and the observation that the precedence relations of the terminals in the tree directly translate into c-command. A DP-internal quantificational modifier may e.g. bind a pronoun contained within the subject of the *than*-XP (Lechner (1998a)):

(i)　weil Maria einen kritischeren Artikel über [jeden der Autoren]$_i$ als sein$_i$ Manager △ schrieb

　　since M.　a　more critical article　about each of the authors than his manager △ wrote

　　(△ = wrote a d-critical article about t)

　　"since Mary wrote a more critical article about each of the authors than his manager"

under (24):[9]

(24) a. Mary knows younger authors than Peter knows
     b.

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                    DP
            ┌───────┴───────┐
           D°             DegP
                      ┌─────┴─────┐
                    AP_i         Deg'
                  ┌──┴──┐     ┌───┴────┐
                 AP    NP   Deg°     than-XP
                /\    /\  [+comp]   ┌───┴───┐
          young-er authors       than     CP
                                       ┌───┴────┐
                                     OP_j       △
                                          Peter knows  DP
                                                    ┌───┴───┐
                                                         DegP
                                                    ┌─────┴─────┐
                                                  AP_i         Deg'
                                                ┌──┴──┐     ┌───┴───┐
                                               AP    NP   Deg°     t_j
                                              /\    /\
                                           young  authors
```
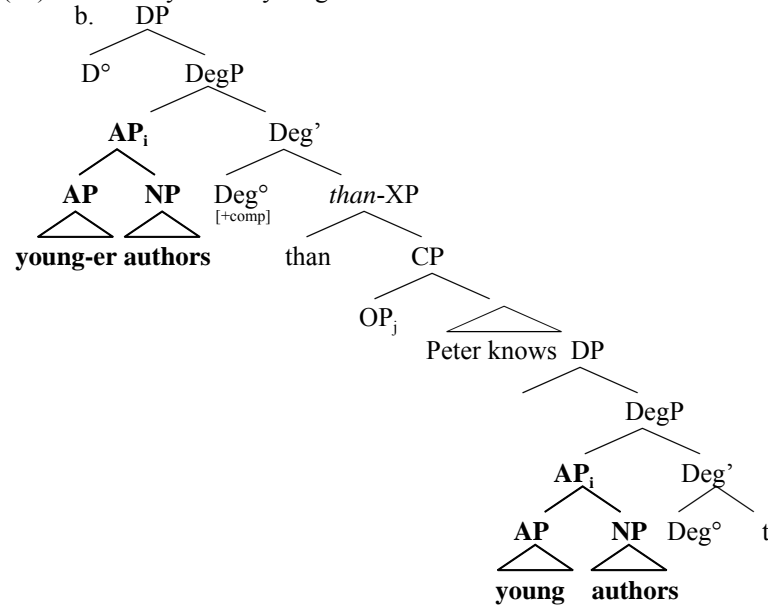
AP-Raising in (24) is triggered by the need to eliminate the [+comparative] feature of Deg° in the higher DegP, and complies in this respect with the well-established generalization in the Minimalist Program that movement processes are motivated by morphological properties of heads (Chomsky (1995)). Given that a [+comparative] on the matrix Deg° counts as an uninterpretable feature, failure of AP-Raising results in a structure in which the matrix Deg°$_{[+comp]}$ winds up with an unchecked feature, causing the derivation to crash.

The tree (24) reveals a second essential aspect of the AP-Raising analysis. Unlike in other instances of movement, we need to ensure that in comparative formation both copies of the dislocated AP are preserved at LF. Whereas it is characteristic of regular chains that all but one chain members are deleted at LF, both the higher and the lower AP-copy in (24) are submitted to semantic interpretation. This difference between ordinary movement and AP-Raising falls out from conditions on interpretability. Failure to delete all but a single chain link in an XP-movement chain that is footed in an argument

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[9]The comparative operator (OP) binds a degree trace which serves as a complement to a semantically vacuous Deg° inside the comparative clause. Since Deg° is semantically empty, the AP is translated in its positive form (*d-young authors*), and not as a comparative. Note on the side that the analysis naturally carries over to predicative comparatives.

position results e.g. in an uninterpretable structure, because the resulting derivation contains an argument which is not linked to a predicate, in violation of Full Interpretation. The situation is significantly different with AP-Raising. In (24), the semantic interface conditions dictate that none of the copies of the AP may be deleted. Otherwise, either the matrix or the comparative clause would end up without an internal argument.[10]

The AP-Raising hypothesis (23) entails three direct consequences. First, it contributes to an understanding why the AP in the matrix clause displays comparative marking (*young-er authors*), while the standard of comparison is restored in its positive form *young authors* (vd. e.g. Moltmann (1992)). In the present system, this follows from the fact that comparative morphology and semantics are exclusively encoded in the higher $Deg°_{[+comp.]}$.

Second, the fact that the elliptical constituent in comparatives is related to its antecedent by movement - taken together with the traditional constraints on extraction - accounts for Kennedy's observation that CD operates locally (vd. example (5)).

Third, the AP-Raising theory of CD has immediate repercussions on the analysis of the reconstruction and CSC effects introduced in section 3. In comparatives, the AP is base-generated inside the comparative clause, and we therefore expect its content to be visible to the principles of Binding Theory and the CSC in syntax. Consider to this effect e.g. once again the Principle C violation in (13), repeated below under (25), and its underlying source:

(25) a.   Mary is prouder of John$_i$ than he$_{*i/j}$ is △
           (△ = d-proud of John)
      b.   Mary is [$_{DegP}$ [$_{AP}$ prouder of John]] than **he** is [$_{DegP}$ [$_{AP}$ proud of **John**]]

In (25b), the pronoun c-commands the name inside the lower AP-copy already in syntax, deriving the attested disjoint reference effect.

Section 5 provides further empirical support for AP-Raising, and demonstrates that the AP-Raising hypothesis successfully captures two asymmetries between pre- and postnominally modified NP-comparatives, that prove as a litmus test for any theory of CD.

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[10]Technically, this ban on deletion can be achieved by taking AP-Raising to be an instance of movement without chain-formation. For further discussion, empirical evidence in defense of AP-Raising and the semantic rules for comparatives see Lechner (1998a).

5. Pre- vs. Postnominal Asymmetries

The AP-Raising hypothesis as its stands makes a number of empirical predictions about the distribution and properties of NP-comparatives, two of which will be discussed in this ultimate section.

5.1. The CD-Site *can* be Small

Bresnan (1973) and Stanley (1969) observed that the interpretation of NP-comparatives is sensitive to DP-internal word order. While (26a) entails that my mother is a man, (26b) can be uttered felicitously without such an implication:
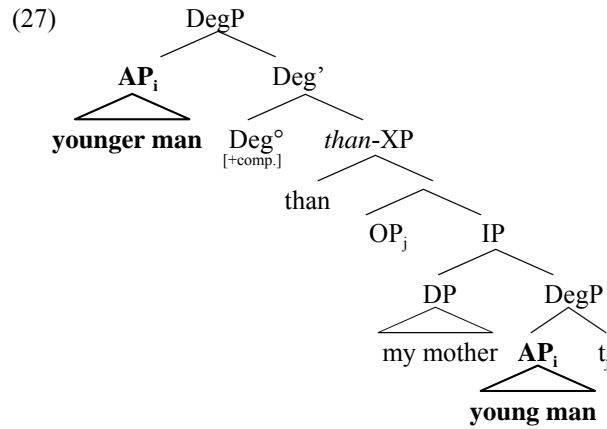
(26) a. #She met a younger man than my mother
            (△ = (is a) d-young man)
      b. She met a man younger than my mother
            (△ = (is) d-young)

This asymmetry is standardly attributed to variation in the size of the respective CD-sites. In the classic analysis of Bresnan (1973), the CD-site is assumed to correspond in size to the sister node of the *than*-XP. In the prenominal construction, the *than*-XP adjoins to the NP, as illustrated by (26)a', and the ellipsis is restored as a modified common noun (bold face). Low attachment - as in (26)b' - leads to the postnominal construction, in which CD targets a constituent no larger than an AP.
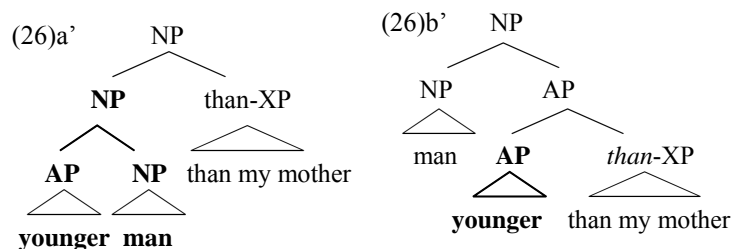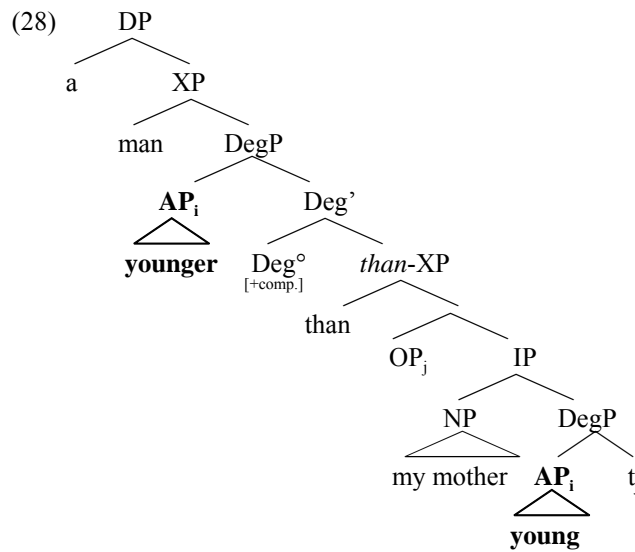

Crucially, Bresnan allows the *than*-XP to adjoin at different nodes, depending upon serialization. But if the deliberations of section 3 are on the right track, there are good reasons to believe that the *than*-XP is invariably attached lowest within the DP, and Bresnan's account for the pre- vs. postnominal asymmetry (26) can consequently not be maintained.

Let us examine at this point how the AP-Raising hypothesis fares w.r.t. (26), restricting the attention to the prenominal structure (26)a first. As shown by the parse for (26)a given under (27), *young man* originates in the comparative complement, from where it moves into the higher SpecDegP. This (trivially) forces the CD-site to be restored as *young man*:

(27)

DegP
- AP$_i$
  - **younger man**
- Deg'
  - Deg°
    [+comp.]
    - than
  - *than*-XP
    - OP$_j$
    - IP
      - DP
        - my mother
      - DegP
        - AP$_i$
          - **young man**
        - t$_j$

The analysis of the postnominal construction (26)b proceeds equally straightforward.

(28)

DP
- a
- XP
  - man
  - DegP
    - AP$_i$
      - **younger**
    - Deg'
      - Deg°
        [+comp.]
        - than
      - *than*-XP
        - OP$_j$
        - IP
          - NP
            - my mother
          - DegP
            - AP$_i$
              - **young**
            - t$_j$

As illustrated by (28) above, the underlying source of the comparative in (26b) is a predicative clause headed by the AP *young*. AP-Raising therefore targets the AP only, and the postnominal DegP is subsequently combined with the head noun.[11]

What is important for present purposes is the observation that the two serializations and their respective interpretations correspond to the two possible base-generated stuctures inside the comparative clause that the current theory allows AP-Raising to operate on. SpecDegP may either host an AP that modifies an NP, or an AP alone, which predicates of the subject of the *than*-XP. These different base-generated structures directly translate into two different word-order patterns for the matrix DP.

5.2. The CD-Site *can* be Small

The second pre- vs. postnominal asymmetry to be considered here stems again from Bresnan (1973). Whereas the contrast (26) demonstrated that the CD-site of a postnominal comparative *can* be small, example (29) attests to the fact that the ellipsis may not remove a constituent larger than an AP.

(29)   She met a man younger than Mary △
      a.   △ = (is) d-young
      b. *△ = met a d-young man

In (29), the CD-site *has* to small, the sentence lacks a 'wide', VP-elliptical reading, which is manifest exclusively in prenominal NP-comparatives:

(30)   She met a younger man than my mother △
      a.   △ = (is) d-young
      b.   △ = met a d-young men

Again, this follows straightforwardly from current assumptions. In the postnominal construction, it is only an AP which is raised into the higher SpecDegP. SpecDegP of the comparative clause in (29) therefore also has to be occupied by an AP. But the selectional restrictions induced by the main predicate inside the comparative clause require that the verb take a DP-object - and not a bare AP - as an internal argument. Thus, the wide reading (29b) is unavailable for the same reason for which its underlying source (31a) is deviant:

(31)   a. *She met a man younger than Mary met young
      b. *... a man [$_{DegP}$ [$_{AP}$ younger] than [$_{CP}$ Mary met [$_{DegP}$ **[$_{AP}$ young]**]]]

The AP-Raising hypothesis correctly leads us to expect that in the postnominal construction, the main predicate of the *than*-XP is realized as an AP, efficiently

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the NP in the postnominal modifier. The present proposal is compatible with a variety of assumptions, such as right-adjunction, as in (28), or low embedding (following Haider (1995), Kayne (1994)).

blocking the wide construal of the ellipsis.[12]

6. Conclusion

I have argued that CD is not the product of ellipsis, but derives from overt movement of an AP from the comparative into the matrix clause. The AP-Raising analysis adequately accounts for the locality restrictions on CD, reconstruction effects into the comparative clause, and the impact of word-order variaton on the size of the CD-site. Furthermore, evidence in favor of a new structure for prenominally modified NP's was supplied which supports the assumption of a right-branching extended projection of the DP.

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[12]Furthermore, as pointed out by B.Partee (pc), postnominal comparatives are - correctly - predicted to be well-formed whenever independent syntactic considerations license a bare AP-predicate inside the comparative clause:

(i)   She met a man more intelligent than I consider him △   (△ = d-intelligent)

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