Q-movement in French nominal comparatives*

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1 Introduction

- In (1), the degree quantifier *plus* 'more' can appear in different positions without any concomitant change in the truth-conditions

(1) a. Thomas a acheté **plus de pantalons** que de chemises.
Thomas has bought more DE pants than DE shirts.
Thomas bought more pants than shirts.

b. Thomas a **plus** acheté **de pantalons** que de chemises.
Thomas has more bought DE pants than DE shirts.
Thomas bought more pants than shirts.
*(lit. *Thomas has more bought pants than shirts.)*

- more N = plus de N
- This might look familiar to you: Quantification At a Distance (QAD) (2) (Kayne, 1975; Obenauer, 1983)

(2) a. Anatole a mangé **beaucoup de viande**.
Anatole has eaten much DE meat
Anatole has eaten a lot of meat.

b. Anatole a **beaucoup** mangé **de viande**.
Anatole has much eaten DE meat

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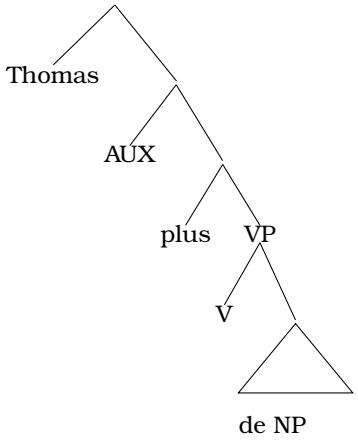
- I talk about QAD in comparatives; Comparison At a Distance (CAD) which has not been studied
- QAD and CAD look similar syntactically: the quantifier *plus* 'more' or *beaucoup* 'much' can be separated from its restrictor
- The four comparative words that can be in CAD are: *plus* 'more', *moins* 'less', *autant* 'as much', and *davantage* 'more'
- 2 hypotheses (in a derivational theory)

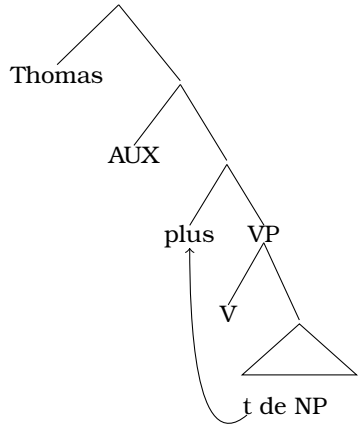
- H1: **base-generation**

The quantifier is base-generated in the position where it appears.



- H2: **movement**

The adverb moves from de-NP.



- Much of the literature on QAD has argued that base-generation is the correct analysis

- I will argue that, at least for CAD, in a derivational theory, H2/movement is the correct analysis
- If H2 is on the right track, we expect to see 2 things:
  - locality restrictions (section 2)
  - scope reconstruction effects (section 3)
- Contributions:
  - bears upon the analysis of QAD
  - is an extension of the work on QAD, which is a phenomenon of significant theoretical interest because it is part of the family of split-constructions
  - properties of DegP movement (Heim, 2001)

2 Argument 1: Locality Restrictions

- How far from de-NP can *plus* be?

2.1 Environments that the *plus* - de NP dependency cannot hold across

- The *plus* - de NP dependency cannot span a finite clause boundary

(3) a. J' ai pensé [$_{CP}$ que tu avais vendu **plus d' ordinateurs**
I have thought that you had sold more DE computers
que d' imprimantes aujourd'hui].
than DE printers today

Today I thought you had sold more computers than printers.

b. J' ai pensé [$_{CP}$ que tu avais **plus** vendu **d' ordinateurs**
I have thought that you had more sold DE computers
que d' imprimantes aujourd'hui].
than DE printers today

c. *J' ai **plus** pensé [$_{CP}$ que tu avais vendu **d' ordinateurs**
I have more thought that you had more sold DE
que d' imprimantes aujourd'hui].
computers than DE printers

- Extraction islands

1. Adjuncts

(4) a. Il a pédalé [avec **plus de force**].
he has pedalled with more DE strength

He pedalled with more strength.

b. *Il a **plus** pédalé [avec **de force**].
he has more pedalled with DE strength

2. Wh-islands

(5) a. Christian s'est demandé [à qui donner **plus de chevaux**].
Christian has wondered to whom give more DE horses

Christian wondered who to give more horses to.

b. Christian s'est demandé [à qui **plus** donner **de chevaux**].
Christian has wondered to whom more give DE horses

c. *Christian s'est **plus** demandé [à qui donner **de chevaux**].
Christian has more wondered to whom give DE horses

- we cannot move *plus* 'more' into a tensed clause however movement into a higher clause is in principle possible

2.2 Environments that the *plus* - de NP dependency can hold across

- Modals

(6) a. Je vais devoir manger **plus de légumes** que de desserts.
I go must eat more DE vegetables than DE desserts

I'm going to have to eat more vegetables than desserts.

b. Je vais devoir **plus** manger **de légumes** que de desserts.
I go must more eat DE vegetables than DE desserts

c. Je vais **plus** devoir manger **de légumes** que de desserts.
I go must more eat DE vegetables than DE desserts

- Some control constructions

(7) Essayer 'try'

a. Il a essayé de lire **plus de livres** que de magazines.
He has tried de read more DE books than DE magazines

He tried reading more books than magazines.

b. Il a essayé de **plus** lire **de livres** que de magazines.
He has tried de more read DE books than DE magazines

c. Il a **plus** essayé de lire **de livres** que de magazines.
He has more tried de read DE books than DE magazines

(8) Sembler essayer 'seem to try'

a. Elle m' a semblé essayer de lire **plus de livres russes**
She 1SG.DAT has seemed try to read more DE books russian
que de livres turcs.
than DE novels turkish

It seemed to me that she tried to read more Russian books than Turkish books.

b. Elle m' a semblé essayer de **plus** lire **de livres plus**
She 1SG.DAT has seemed try to more read DE books russian
que de livres turcs.
than DE novels turkish

c. Elle m' a semblé **plus** essayer de lire **de livres russes**
She 1SG.DAT has seemed more try to read DE books russian
que de livres turcs.
than DE novels turkish

d. Elle m' a **plus** semblé essayer de lire **de livres russes**
She 1SG.DAT has more seemed try to read DE books russian
que de livres turcs.
than DE novels turkish

- this is typical of movement dependencies that care about what is in between

– Simplified summary of locality restrictions

plus .... de NP	**plus* .... de NP
Modals	Extraction islands
Some control verbs	Tensed clauses
Causatives	

2.3 Intervention in the *plus* - de NP dependency

- A time adverbial or a PP can intervene between *plus* and *de NP*

(9) Intervener= time adverbial *hier* 'yesterday'

a. Il m' a semblé hier avoir corrigé **plus de copies** que
It to.me has seemed yesterday have graded more DE copies than
toi.
you

Yesterday, it seemed to me that I had graded more copies than you had.

b. *Il m' a **plus** semblé hier avoir corrigé **de copies** que
It to.me has more seemed yesterday have graded DE copies than
toi.
you

c. [Hier], il m' a **plus** semblé avoir corrigé **de copies**
yesterday it to.me has more seemed yesterday have graded more
que toi.
DE copies

(10) Intervener = PP *à Paul* 'to Paul'

a. Marie a conseillé [à Paul] d' acheter **plus de magazines**
Marie has advised to Paul to buy more de magazines
que de journaux.
than de newspapers
Marie advised Paul to buy more magazines than newspapers.

b. *Marie a **plus** conseillé [à Paul] d'acheter **de magazines** que de journaux.

c. Marie [lui] a **plus** conseillé d' acheter **de magazines**
Marie him.DAT has more advised to buy de magazines
que de journaux.
than de newspapers
Marie advised Paul to buy more magazines than newspapers.

d. [A qui] est- ce que Marie a **plus** conseillé d' acheter
To whom is it that Marie has more advised to buy
de **magazines** que de journaux ?
magazines than newspaper
To whom did Marie advise to buy more magazines than newspaper ?

- intervention makes a syntactic solution more plausible
  - defective intervention (Rizzi, 1986) has been invoked for French raising constructions to explain the contrast between (11a) and (11b)

(11) Subject raising in seem construction: $*^{PP}$ / $\checkmark^{cl}$

a. *Jean$_i$ semble [à Marie] t_i avoir du talent.
Jean seems to Mary have some talent
Intended: Jean seems to Mary to have talent.

b. Jean$_i$ [lui] semble t_i avoir du talent.
Jean to.her seems have some talent
Jean seems to her to have talent.

  - in (11a), the PP *à Marie* blocks movement of the subject to [Spec, TP]
  - in (11b), the PP has been cliticized and the subject can now raise
  - this has been analyzed as the PP *à Marie* preventing T from agreeing with the subject *Jean* because it is lower in the structure than the PP

- the *plus* - de NP dependency allows some material to intervene but not other
- there's another element which has been argued to move and which has the same locality restrictions: *tout* 'all'

2.4 *plus*-movement looks like *tout*-movement

- *tout* 'all' as a direct object can be in different positions unlike the usual direct object

(12) Object *tout* movement

a. Elle a voulu lire **tout**.
she has wanted read all
She wanted to read everything.

b. Elle a voulu **tout** lire.
she has wanted all read

c. Elle a **tout** voulu lire.
she has all wanted read

- *tout* 'all' movement is subject to intervention too

(13) Intervener = DP *son frère* 'her brother'

a. Elle a laissé [son frère] gérer **tout** tout seul.
she has let her brother handle all on his own
She let her brother in charge of everything on his own.

b. Elle a laissé [son frère] **tout** gérer tout seul.
she has let her brother all handle on his own

c. *Elle a **tout** laissé [son frère] gérer tout seul.
she has all let her brother handle on his own

d. Elle [l'] a **tout** laissé gérer tout seul.
she him has all let handle on his own

e. [Qui] est- ce qu' elle a **tout** laissé gérer tout seul ?
who is it that she has all let handle on his own
Who did she leave in charge of everything?

- The *plus* - de NP dependency is subject to:
  - locality restrictions that are typical of movement
  - intervention effects
  - the same locality restrictions as *tout* movement

3 Argument 2: Scope Reconstruction

- Can the degree Q be interpreted below the position where it appears?

- H2 predicts that Deg can be interpreted lower than where it is pronounced

(14) Hypotheses

H1. Deg [. . . . . [de NP] . . .]
H2. Deg [. . . . . t [de NP] . . .]

- How can we test this?
- We add another scope-bearing element, e.g. a modal.
- H2 predicts MODAL >> Deg is possible in CAD

(15) Interaction of Deg and MODAL

H1. Deg [. . . MODAL . . . [de NP] . . .]
H2. Deg [. . . MODAL . . . t [de NP] . . .]

- Let's look at example (16), it contains:
  - the modal *devoir* 'must'
  - the non-upward monotonic degree quantifier *moins* 'less' (otherwise the readings would be equivalent (Heim, 2001))

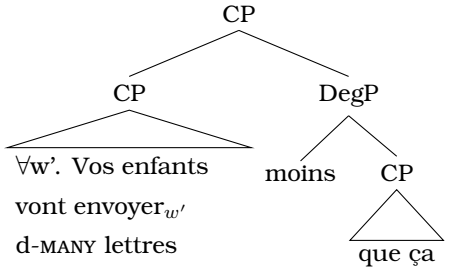
(16) Vos enfants vont moins devoir envoyer de lettres que ça.
Your children go less must send DE lettres than this
Your children are required to send fewer letters than that (=50).

- It has the surface scope reading (Deg >> modal): 'the minimality reading'
- That such a reading is available is shown by the felicitous use of (16) in the following context (17).

(17) Context min: Parents are gathered together in their children's classroom for a meeting with their teachers. The children are all going to apply for an internship over the summer. One teacher tells the parents that one year, a child sent out 50 application letters. Since there is no upper limit, this is possible but he reassures the parents that their children of course can send fewer. He says:

- The (simplified) LF for this reading can be represented as in (18)

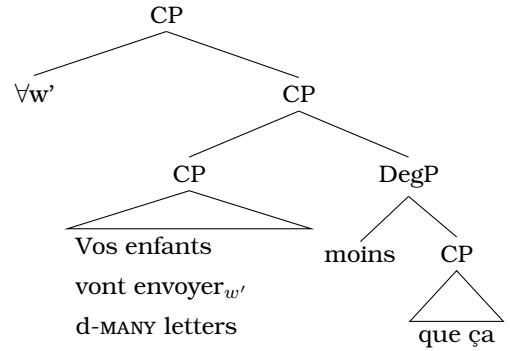
(18) The minimal requirement reading (moins >> devoir):
Max{d | ∀w'∈ Acc(w) Your children are going to send d-MANY letters in w'} < 50



≃ the minimum number of letters that the children are required to send is less than 50. It says nothing about an upper end, leaving open that they are allowed to send more letters.

- What's interesting is that it has the lower scope reading (modal >> Deg)

(19) The maximal requirement reading (devoir >> moins):
∀w' ∈ Acc(w). Max{d | Your children are going to send d-MANY letters in w'} < 50



≃ The maximal number of letters that the children are allowed to send is less than 50.

- That such a reading is available is shown by (20)
- A falsity judgment task needs to be used to show that the maximal requirement reading is there.
- This is because the maximal requirement reading entails the minimal requirement reading.

(20) Context: Parents are gathered together in their children's classroom for a meeting with their teachers. The children are all going to apply for an internship over the summer. One teacher tells the parents that one year, a child sent out 50 application letters. Of course, children are free to send as many or even more letters but it's also definitely not necessary for them to send as many. Two parents are talking[1]:

A. Les enfants vont moins devoir envoyer de lettres que
The children go less must send DE lettres than
ça(= 50 letters).
this

B. Mais c' est faux voyons ! Au contraire ... s' ils
But this is false see ! On.the contrary if they
veulent, ils peuvent en envoyer à toutes les entreprises
want they can them send to every the company
du pays.
in.the country
But that's not true, come on! If they want, they can send letters to every single company in the country!

- The scenario in (20) sets up the minimality reading while making the maximality reading false.
- The scenario tells us that two parents are talking about a parent / teacher meeting that happened earlier.
- Speaker A utters the test sentence in (20).
- Speaker B reacts to A's utterance by denying the stronger maximality reading.

[1] L'année dernière, certains enfants du collège ont envoyé jusqu'à 50 lettres de candidature pour trouver un stage. Évidemment, les enfants peuvent en envoyer autant voire plus mais il n'est pas non plus nécessaire d'en envoyer autant. Deux parents d'élèves se parlent.

- Informants were asked to judge whether the dialogue between A and B was coherent.
- The dialogue in (20) is coherent, we can conclude that the sentence in A has the maximality reading (devoir >> moins)

- when *moins* 'less' is pronounced to the left of *devoir* 'must', inverse scope (i.e. must >> less) is available
- DegP reconstructs below *devoir* 'must'
- this is predicted by the movement analysis

4 Conclusion

- locality restrictions are naturally explained by movement
- lower scope is possible which is predicted by movement
- CAD is derived via movement of the comparative quantifier

- at the beginning of the talk, I said that CAD could be treated as an instance of overt realization of the independently assumed DegP covert movement
- the parallel is not ideal though: you can do covert movement out of PP's but not overt movement

(21) a. Cette année, je vais devoir faire la cuisine pour moins de
This year, I go must do the cuisine for fewer DE
gens que l' année dernière.
people than the year last

b. *Cette année, je vais devoir moins faire la cuisine pour de gens que l'année dernière.

c. *Cette année, je vais moins devoir faire la cuisine pour de gens que l'année dernière.

- (21a) has two readings:
  - devoir >> moins: this year the maximal number of people that I am allowed to cook for is 25.
  - moins >> devoir: the minimum number of people that I am *required* to cook for this year is less than 25. This reading is compatible with a situation in which I cook for 25 people or more.
- maybe movement is allowed but *P de.
- Consequences for QAD
  - If QAD and CAD are instantiations of the same phenomenon, either QAD involves movement or my account is wrong
  - If QAD is derived via movement too, it is not obvious how the semantics will work out
  - What about the event reading reported for QAD constructions (Obenauer, 1983)?
    - evidence from questionnaire that event reading is not there in CAD (see appendix)
    - one dialect does not have event reading for QAD ('Québec French' (Burnett, 2009))

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5 Appendix

5.1 Controls

- the whole DP can't appear before the verb (22a)
- if we remove the Q, the sentence is unacceptable (22b)

(22) a. *Thomas a plus de pantalons acheté que de chemises.
Thomas has more DE pants bought than DE shirts.

b. *Thomas a acheté de pantalons.
Thomas has bought DE pants

5.2 What kind of movement? A possible analysis: DegP movement (Heim, 2001)

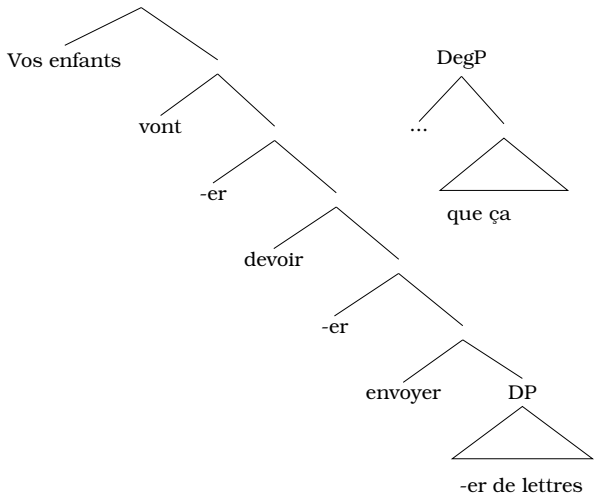
- In this section I give a more fleshed out analysis of the movement of the CAD operators that I have been arguing for.
- Given a modal and a CAD operator, 4 word order/scope combinations are predicted.

Scope | Word order	quant-MODAL	MODAL-quant
DegP » MODAL	A	B
MODAL » DegP	C	D

- CAD is reminiscent of the movement proposed by Heim (2001).
- The two can be put together if movement is conceptualized in the copy theory of movement.
- In figure 2, I show the SPELLOUT of a C structure/reading using example (1) repeated in (23)

(23) Vos enfants vont moins devoir envoyer de lettres que ça.
Your children go less must send DE lettres than this
Your children are required to send fewer letters than that (=50).

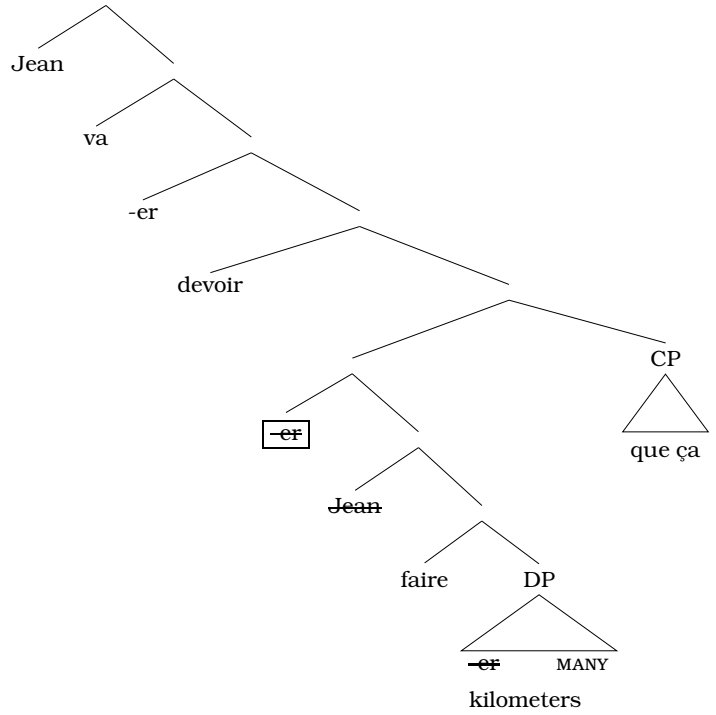
(24) Spell-out of (2)



- The spell-out of (2) is sent to LF where the lower copy of *moins* is interpreted (26)

- The standard is late-merged in the structure as a sister to the lowest constituent that contains the interpreted copy (Bhatt and Pancheva, 2004).
- Finally the whole structure is sent to PF. Only one copy is pronounced. I cross out unpronounced copies. (25)
- Whichever copy of -er is pronounced is realized as the output of the rule that maps -er + MANY to its morphological exponent.

(25) PF



- When a high copy is pronounced, either the high copy or the low one can be interpreted.
- And when the low copy is pronounced, either copy can also be interpreted (this is the situation in English).

(26) LF

- What is notable in this system is that the possibilities of covert and overt movements do not always coincide.

- That covert movement is freer than overt movement is well-known, and, in the copy-theory of movement, must be conceptualized as a restriction on the set of copies that can be pronounced (*e.g.* object quantifiers in English).

5.3 Reply to traditional counter-arguments to movement analysis of QAD

J'ai beaucoup$_i$ lu [t$_i$ [de livres]]

1. The adverbial analysis follows from the fact that the adnominal quantifiers that participate in the QAD construction are exactly those that double as VP adverbs (Kayne, 1975)

(27) a. Elle a mangé beaucoup de spaghettis.
She has eaten a_lot DE spaghetti
She has eaten a lot of spaghetti. *Canonical Q*

b. Elle a beaucoup mangé de spaghettis. QAD

c. Elle a beaucoup dormi.
She has a_lot slept
She slept a lot. *VP adverb*

(28) a. J' ai lu plein de livres.
I have read a_lot DE books
I've read many books. *Canonical Q*

b. *J'ai plein lu de livres. *QAD

c. *Elle a plein dormi.
She has a_lot slept
Intended: She slept a lot. **VP adverb*

- There is another correlation that holds with QAD operators: adnominal quantifiers that participate in the QAD construction are exactly those that can be used as arguments (29,30)

(29) a. *J' ai fait pour les pauvres
I have done for the poor

b. J' ai fait beaucoup pour les pauvres
I have done much for the poor
I did a lot for the poor

c. J' ai beaucoup fait pour les pauvres
I have much done for the poor
I did a lot for the poor

(30) a. *J' ai fait plein pour les pauvres.
I have done much for the poor

b. *J' ai plein fait pour les pauvres.
I have much done for the poor

2. A few quantifiers can occur prenominally but not preverbally. Therefore if we characterize the possibility of quantifier movement in terms of a property that Q generally have, we can't explain why the behavior of *plein* and *beaucoup* differ.

- The underlying structures that *beaucoup* and *plein* respectively take part in may be different in such a way that would predict the lack of QAD for *plein*

- The generalization above shows for instance that *beaucoup* can be used 'argumentally' but not *plein, nombre, quantité*

3. The licensing of *de*-NP does not necessarily require adjacency, e.g. negation, in fact it requires that there be no adjacency (31b). This shows that de-NP's do not need to be necessarily licensed by a strictly adjacent licenser.

(31) a. Elle n' a pas mangé de carottes.
She NEG has NEG eaten DE carrots
She didn't eat any carrots.

b. *Elle n'a mangé pas de carottes.

- Polar *de* is not the same as quantified *de*: their licensing is not subject to the same locality restrictions
  - polar *de* can be followed by countable nouns in the singular, not quantified *de* (32)

(32) a. Polar *de* licenses singular
Je n' ai pas vu de cheval.
I neg have not seen DE horse
I have not seen any horses.

b. *de* after *peu* 'little' does not license singular
*J' ai peu vu de cheval.
I have few seen DE horse
Intended: I have seen few horses.

  - the locality restrictions on polar *de* are different from those on quantified *de* (Milner, 1978). (Note though that the unacceptability of (33b) follows from the impossibility of moving *beaucoup* 'many' across a finite clause boundary.)

(33) a. Je ne crois pas qu' il ait acheté de livres.
I NEG believe NEG that he has.subj bought DE books
I don't think that he bought any books

b. *J' ai beaucoup cru qu' il a acheté de livres.
I have many believed that he has bought DE books
Intended: I thought that he bought many books.

- this argument does not show that a base-generation analysis is required: a movement analysis is still compatible with those facts, especially because there are different *de*'s

5.4 Event reading in CAD

- Typically quantification with 'many' focusses on individuals but since at least Obenauer (1983), much of the discussion of the difference between QAD and CQ has taken for granted that QAD *beaucoup* 'many' also involves some sort of quantification over events.
- Obenauer proposed that QAD operators have a *Multiplicity of Events* requirement (34).

(34) ***Multiplicity of Events Requirement***
QAD sentences are only true in contexts involving multiple events.

- This difference has been used as an argument against the movement analysis, in favor of a base-generation analysis.
- I show that CAD is not subject to this requirement.
- Obenauer (1983) and other defenders of the adverbial analysis argue that quantifiers in preverbal position (in QAD constructions) bind the event variable as well as the individual variable.
- Depending on the author, the MoE requirement has been viewed as a presupposition (Obenauer, 1983, p. 78) or as part of the truth-conditional meaning of the quantifiers (Burnett, 2009).
- For QAD, both ways of formalizing MoE predict that if a QAD construction is used in a context having only one event, the sentence will not be true (it will either be false or undefined).
- Unlike *beaucoup* 'many', CAD operators introduce a degree clause which gives explicit event and individual thresholds, and spell out the comparison that supposedly goes on implicitly with *beaucoup* 'many'[2].
- Under the assumption that the MoE requirement is built into the truth-conditions of CAD operators, CAD constructions evaluate to false if their truth-conditions are not met

(35) Context 1
Yesterday, Marcel gave macaroons to Aymeric and to Clarine. He had a box of 10 macaroons delivered to Aymeric and a box of 5 to

[2]The denotation of the adnominal quantifier *many* is generally taken to involve comparison with a threshold providing a contextually-relevant number of individuals (Partee, 2004).

Clarine[3]

CQ: Au bout du compte, Marcel a envoyé plus de macarons
In the end Marcel has sent more DE macaroons
à Aymeric qu' à Clarine.
to Aymeric than to Clarine

In the end, Marcel sent more macaroons to Aymeric than to Clarine

CAD: Au bout du compte, Marcel a plus envoyé de macarons
In the end Marcel has more sent DE macaroons
à Aymeric qu'à Clarine.
to Aymeric than to

In the end, Marcel sent more macaroons to Aymeric than to Clarine

- According to the truth-conditional approach to the MoE requirement, in (35), two sets of events are being compared: on the one hand, the events of sending macaroons to Aymeric by Marcel, and on the other, the events of sending macaroons to Clarine by Marcel.
- This hypothesis predicts that the CAD sentences can be true only if the cardinality of the first set is greater than the cardinality of the second set. Of course, the same comparison applies to sets of individuals, cookies in this instance.

(36) a. Context 2
As a tradition, Marcel sends macaroons to the people he knows for their birthday. Every year, he sends 10 macaroons to each of his relatives and 3 macaroons to each of his friends. This year is his grand-son's, Aymeric's, 5^{th} birthday and the 10^{th} birthday of his friend's daughter, Clarine.[4]

[3]Hier, Marcel a envoyé des macarons à Aymeric et à Clarine. Il a fait livré une boîte de 10 macarons à Aymeric et une boîte de 5 macarons à Clarine.

[4]Marcel a pour tradition d'envoyer des macarons aux gens qu'il connaît pour leur anniversaire. Tous les ans, il envoie toujours 10 macarons à chaque membre de sa famille et 3 macarons à chacun de ses amis. Cette année est le 5e anniversaire d'Aymeric, son petit-fils et le 10e anniversaire de Clarine, la fille d'un de ses amis.

CQ: Au bout du compte, Marcel a envoyé plus de macarons
In the end Marcel has sent more DE macaroons
à Aymeric qu' à Clarine.
to Aymeric than to Clarine

In the end, Marcel sent more macaroons to Aymeric than to Clarine

CAD: Au bout du compte, Marcel a plus envoyé de
In the end Marcel has more sent DE
macarons à Aymeric qu'à Clarine.
macaroons to Aymeric than to

In the end, Marcel sent more macaroons to Aymeric than to Clarine

b. *Question:* Is this sentence true in the context?

c. *Predictions:*

Yes → the sentence does not have a Multiplicity of Events requirement.

No → the sentence has a Multiplicity of Events requirement.

- In context 1 (35), there is exactly one event of sending 10 macaroons to Aymeric, and exactly one event of sending 5 macaroons to Clarine. The CQ sentence is true, and the CAD sentence is true as well.
- In context 2 (36a), there is exactly 5 events of sending 10 macaroons to Aymeric each time, and exactly 10 events of sending 3 macaroons to Clarine each time. In this context, the CQ construction is true, and so is the QAD construction, even though Clarine received macaroons more times than Aymeric.
- I conclude that CAD constructions do not have a multiplicity of events requirement.
- The argument that the event quantification reading favors the base-generation analysis thus becomes irrelevant
- Notice though that even if CAD constructions had a MoE requirement, this fact would not be proof that quantifiers in preverbal positions are

base-generated. Movement gives rise to scope effects that change the truth-conditions of a sentence.

5.5 Overt movement is more restricted than covert movement

- covert movement of the degree head is subject to fewer restrictions than overt movement since it is not blocked out of finite clauses
- example (37b) is ungrammatical because *plus* has been extracted out of a tensed clause

(37) a. Jean va vouloir que plus de gens viennent au cours de
Jean goes want that more DE people come.SUBJ to.the class of
syntaxe que Marie.
syntax than Marie

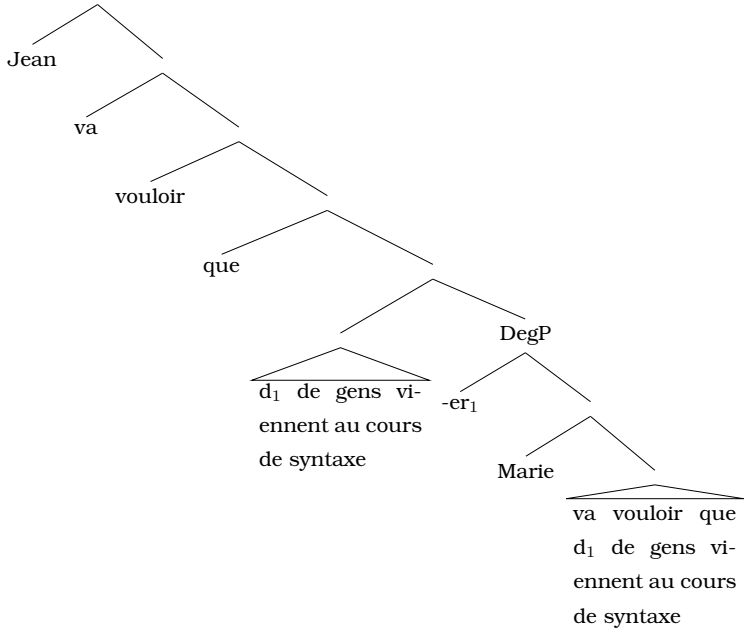
Jean will want more people to come to the syntax class than Marie will.

b. *Jean va plus vouloir que de gens viennent au cours de syntaxe que Marie.

- example (37a) can have the reading 'Jean will want more people to go to the syntax class than Marie will', which is another strong indication that *-er* must be able to scope out of the tensed clause to allow ellipsis resolution without ACD violation
- I call this reading 'reading 1'[5].
- The simplified LF in (38) illustrates why reading 1 cannot be obtained if DegP scopes below *vouloir* 'want': the structure would be a case of ACD.

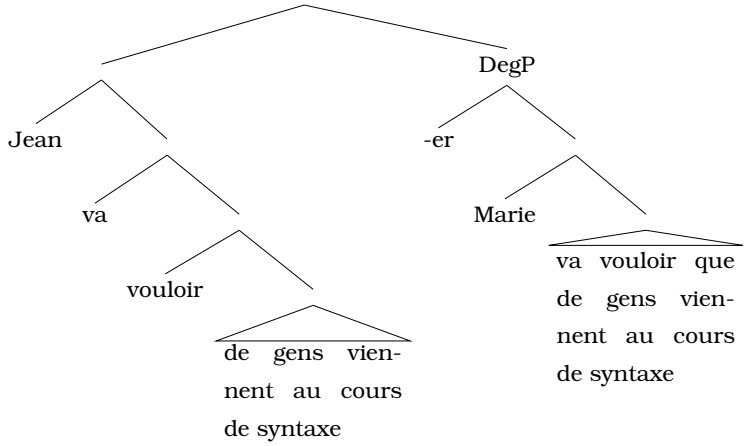
[5]The other reading 'reading 2' can be roughly paraphrased as 'Jean will want more people to come to syntax than just Mary'.

(38) vouloir » DegP, reading 1: *ACD



- The only way to derive reading 1 for (37) is then for DegP to take scope above *vouloir* 'want' as (39) illustrates.

(39) DegP » vouloir, reading 1: ✓



- Example (37) with reading 1 is an example in which *plus* can move covertly but not overtly.
- CAD movement is not isomorphic to DegP movement, and one can occur independently of the other.

5.6 *devoir* 'must' as a PPI

- For the scope argument with intensional verbs to hold it is crucial that the scope-bearing element should not be able to raise covertly, otherwise covert movement of this scope-bearing element could give it scope over *moins* where it is pronounced.

(40) Two potential ways to obtain Deg » MODAL

a. Raising of modal: MODAL . . . Deg [. . . t . . . [de NP] . . .]

b. Reconstruction: Deg [. . . MODAL . . . t [de NP] . . .]

- Modals in French have been argued not to be able to move covertly by Hacquard (2006, p. 44).
- A challenge is that Homer (2011, p. 217) claims that *devoir* 'must' is a PPI, which can escape out of the scope of negation by moving covertly out of its scope.
- Here is how the challenge might be answered.
  1. First it is not clear that *moins* includes negation.
  2. Secondly, if the modal raising is the reason why it looks as if *moins* had reconstructed below it, we would expect there to be this possibility every time we find the sequence *moins devoir*.
- If inverse-scope was due to the covert movement of *devoir*, it should be available no matter what the embedded complement looks like (+CAD or -CAD).
- A questionnaire study with 6 people trained in linguistics confirmed indicate that inverse scope (devoir»moins) is only available when the complement is +CAD

(41) a. +CAD complement

Vos enfants vont moins devoir envoyer de lettres que ça.
your children go fewer must send de letters than that

Your children are going to be required to send fewer letters than that.

b. -CAD complement

Je vais moins devoir aller voir le directeur que ça.
I go less must go see the director than that

I'm going to be required to go see my boss less than that.

- On the movement approach those facts are naturally explained, since when the complement is -CAD, *moins* does not move from a position below the modal so it has nowhere to reconstruct to

(42) +CAD complement:
Un enseignant raconte l'anecdote suivante à des parents d'élèves : l'année dernière, certains enfants du collège ont envoyé jusqu'à 50 lettres de candidature pour trouver un stage. Évidemment, les enfants peuvent en envoyer autant voire plus mais il n'est pas non plus nécessaire d'en envoyer tant.

a. Vos enfants vont moins devoir envoyer de lettres que ça (50 lettres).

b. Vos enfants vont devoir envoyer moins de lettres que ça (50 lettres).

(43) -CAD complement:
D'habitude, je suis obligé d'aller voir le directeur au moins 2 fois par semaine mais je ne suis pas autorisé à aller le voir plus de 5 fois par semaine. Cette semaine, je ne suis obligé d?aller le voir qu?1 fois.

a. Je vais moins devoir aller voir le directeur que ça (2 fois).

b. Je vais devoir aller moins voir le directeur que ça (2 fois).