

DISCONTINUOUS DP CONSTRUCTIONS*

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1. Introduction

This paper proposes that dislocated quantifier-restrictor constructions in Algonquian languages involve overt A'-movement. Quantifiers (also numerals and demonstratives) can be separated from their associated DPs, a construction found frequently across Algonquian languages. These constructions have been discussed by Kathol & Rhodes (1999) and Tourigny (2008) for Ojibwe, and Russell & Reinholtz (1995) for Swampy Cree, who indicate that dislocated structures involve focus or contrastiveness. I present a feature driven movement account for these constructions and their associated restrictions in word order, and discuss partitive and exclusive interpretation possibilities in different configurations.

2. Quantifier Dislocation

Ojibwe and other Algonquian languages show a specific realization of discontinuous DPs. In this section I introduce these constructions, where a quantifiers (or demonstrative, or numeral) can be left-dislocated from its associated DP/restrictor to a preverbal position.

Continuous DPs have quantifiers (**bold**) appearing directly to the left of the noun phrase (*italic*) they are associated with, as in (1)-(3). In (1), for example, *kina* 'every' and *gawiin* 'not/neg' appear directly to the left of the two instances of *gegoo* 'thing', which are associated with these quantifiers.

- (1) **Kina** *gegoo* w-gii-bi-giiwewdoonaawaa wiinwaa, **gaawiin**
every thing 3-pst-along-bring.home they not
gegoo w-gii-wnitoo-siin-aa-waa...
thing 3-pst-lose-NEG-DIR-3pl
'They brought everything home, they didn't lose anything...'
(Nichols 1988:79)

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- (2) ...gii-dagshinwaad **giw** *Nishnaabeg* aapji go **kina**
 ...pst-coming.3pl those Indians very much every
gegoo shkahii gaa-zhitoowaad waa-biiskamwaad...
 thing new wh.pst-make.3pl wh.fut-wear
 ‘...the Indians were staring to come in, having made everything they
 were to wear brand new...’ (Nichols 1988:76)
- (3) Mii iw gaa-nji-baatiin’sikwaa iw gii-bmi-maawndooyaawaad
 and that wh.pst-prev-not.many that pst-prev-live
gaawiin waya ji-bkadesig..
 not someone fut-be.hungry
 ‘The reason there were not many living together was so that nobody
 would go hungry.’ (Nichols 1988:81)

In discontinuous constructions, quantifiers can also be optionally left dislocated from their DP-restrictors to a preverbal position. This is seen in (4)-(6). For example, in (4) *gakina* ‘all’ is preverbal and associates with *gidabinoojiizhiminaanag* ‘our children’ which occupies a post verbal position.

- (4) **Gakina** wesaa ga-da-nisaaganiwiwag gid-*abinoojiizh*-im-inaan-ag.
 all PART fut-da-be.killed 2-child-poss-1pl-3pl
 ‘All of our children are going to be killed.’ (Spielmann 1998:190)
- (5) **Kina** dash gii-gooje-(i)g-a-azw-ag *giw* ga-nsaajig
 all and pst-hang-INV-final-VAI-3pl those wh.pst-kill
 niw dekonwewninw-an.
 those policeman-pl
 ‘But all of those who had killed the policemen were hanged.’
 (Nichols 1988:90)
- (6) Mii dash gaw Zhaagenaash-ag bezhegoongzhiin
 and then those white.people-pl horses
 gaa-aabjihaajig **kina** gaa-zhi-gemoodwaad niw *bekwezhegan*.
 wh.pst-use all wh.pst-rel-steal that bread
 ‘But those whites who were using the horses stole all the bread.’
 (Nichols 1988:89)

The possibility of dislocating an element from an associated DP is not restricted only to quantifier constructions, but also occurs with numerals and demonstratives. In (7)a the numeral *niizh* ‘two’ appears immediately before *jiimaan* ‘boats’, but can also be dislocated as in (7)b where preverbal *niizh* associates with *animoonan* ‘puppies’, which is postverbal.

- (7) a. Mii dash giiwenh gii-waabendang aw sa
 and then reportedly pst-see.TI this EMPH
 gwiizens **niizh** *jiimaan-an* biidaasninig
 boy two boat-pl sail.toward
 ‘And then reportedly this boy saw two boats sailing towards them.’
 (Nichols 1988:86)
- b. **Niizh** dash gii-ganawenim-aa-n *animoon-an*
 two then pst-keep-DIR-OBV puppy-OBV
 ‘However, he kept two puppies.’ (Nichols 1988:129)

Demonstratives can appear adjacent to a DP or can be dislocated to a preverbal position, seen in (8).

- (8) a. Gdimaagzi pane **aw** *nini*.
 be.poor always that man
 ‘That man is always poor.’
- b.¹ **Maanda** dash ge nii n-ga-miijin *waawan*.
 this emph 1st.too 1-pst-eat egg
 ‘I shall eat this egg.’ (Kathol & Rhodes 1999:75, 79)

The following section argues that the dislocation of a quantifier/demonstrative from a DP is an A'-operation and presents syntactic movement that accounts for the restrictions found in these constructions.

3. Dislocation as Movement

Now I will present a movement account of discontinuous DPs in Ojibwe and their associated restrictions.

3.1 Restrictions on dislocation

I claim that the operation involved in dislocation must be an A'-operation, and not an A-operation, given what appears to be moving and what gets stranded as a result of the movement. Tomlin & Rhodes (1992) claim that the underlying word order in Ojibwe is VSO (9), such that argument DPs are on the right of the verb in an unmarked construction. They indicate that elements can appear preverbally to indicate “contrastiveness”, or discourse topic. Preverbal elements can be the dislocated quantifiers or demonstratives introduced in section 1, or entire DPs (10).

¹ It is not clear whether *maanda* is a canonical demonstrative in this situation, however it is treated as such by Kathol & Rhodes (1999) and Valentine (2001). Another dislocated example is given in (i), however in this construction the NP *Nishnaabeg* ‘Indians’ is also preverbal:

- (i) **Giw** dash *Nishnaabeg* w-gii-nnaandwih-aa-waa-n
 those part Indians 3-pst-to.doctor-dir-3pl-obv
 ‘So the Indians doctored him.’ (Kathol & Rhodes 1999:77)

- (9) Gii-shamaan kwe miinan binoojiiny-an
 pst-feed-*DIR*-*OBV* woman blueberries child-*OBV*
 ‘The woman fed the child the blueberries.’ (Rhodes 1994:437)
- (10) Ge go [mtigo-on]_{loc} w-gii-shkboodoon-aa-wa-an
 and [wood-*OBV*] 3-pst-saw/cut.down-*DIR*-*pl*-*OBV*
 ‘They cut down wood.’ (Adapted from Tomlin & Rhodes 1992:126)

Given that argument DPs can be displaced as well as non-argument constituents (i.e. quantifiers, numerals, demonstratives) to obtain a contrastiveness reading, the operation under question cannot be an A-operation, which assumes the movement of arguments to A-positions. Instead, I propose that quantifier-restrictor dislocation is an A'-operation that can target non-arguments, where quantifier phrases adjoined to a DP can also A'-move to a preverbal position.²

The idea that A-movement is not involved is supported by the fact that it is ungrammatical to have a quantifier on the right of its associated DP – which would be possible if the DP could (A-)move to the exclusion of an adjoined quantifier (like in Quantifier Float, see Bošković 2004, below). A quantifier can only be on the left of the DP (11)-(13).

- (11) a. kina gegoo gii-miij-un
 every thing pst-eat-*OBV*
 ‘He/she ate everything.’
 b. gii-miijun kina gegoo
 c. *gegoo kina gii-miijun (Donald Keshig, Ella Waukey 16/12/08)
- (12) a. gaa gegoo gii-miit-sii-n
 neg thing pst-eat-neg-*OBV*
 ‘He didn’t eat anything.’
 b. gii-miit-sii-n gaa gegoo
 c. *gegoo gaa gii-miit-sii-n (Donald Keshig, 16/12/2008)
- (13) a. nswi gii-nsaa-n gigoony-an
 three pst-kill-*obv* fish-*obv*
 ‘He has caught three fish.’
 b. *gigoony-an gii-nsaa-n nswi (Kathol & Rhodes 2000:79,82)

The data in (11)-(13) indicate that a DP argument cannot (A-)move across a quantifier it is associated with, thereby stranding that quantifier. Such A-movement is the configuration found in Quantifier Float in English, for example. (14) is a non-floated sentence where it seems that [*all the students*] A-moves as a constituent, maintaining a continuous DP. In (15) the quantifier *all* is floated, where the argument [*the students*] can A-move to the exclusion of this associated quantifier creating a DP-quantifier order. Again, this kind of

² I assume the adjunction of quantifiers (and demonstratives) to DPs, as in Bošković (2004). Further details of this assumption in section 3.2.

configuration is impossible in Ojibwe since an argument DP cannot move to the exclusion of its associated quantifier, which is possible for Quantifier Float in English.

- (14) a. All the students left.
 b. [All the students]_i [_{VP} t_i left].
- (15) a. The students all left.
 b. [The students]_i [all t_i] [_{V'} t_i left] (Bošković 2004:692)

Another restriction in these constructions is that elements may only be displaced to specific preverbal position, and cannot move to an intermediate position. In (16) for Swampy Cree, *niso* ‘two’ can be left-dislocated from the associated DP *nâpêwak* ‘men’ to a preverbal position in (a), but cannot be dislocated to a non-preverbal position as in (b):

- (16) a. **niso** kî-sipwêhtêwak otâkosihk *nâpêwak*. (Swampy Cree)
 two pst-leave yesterday men
 ‘Two men left yesterday.’
- b. * kî-sipwêhtêwak **niso** otâkosihk *nâpêwak*.
 pst-leave two yesterday men
 (Russell & Reinholtz 1995:441)

An interesting observation of quantifier-restrictor dislocation is that that no scope differences have yet been uncovered between the dislocated and non-dislocated constructions. For example, in (17) *kina* ‘every’ can be adjacent to its restrictor *binoejiiun* ‘child’ (a), or left-dislocated (b), and ambiguous scope is available in either case. The same is true in (18) which is a transitive inanimate verb form (where the internal argument is inanimate).

- (17) a. nine gii-kinowenm-aa-n *kina* binoejii-un
 man pst-look.after-DIR-OBV every child-OBV
 ‘A man looked after every child.’ $\exists > \forall, \forall > \exists$
- b. *kina* nine gii-kinowenm-aa-n binoejii-un
 every man pst-look.after-DIR-OBV child-OBV
 ‘A man looked after every child.’ $\exists > \forall, \forall > \exists$
 (Berdina Johnston 17/12/08)
- (18) a. ogamaa naakdownen-d-un *gakina* shkogen-un
 chief look.after.TI-OBV every reserve-OBV
 ‘A chief looks after every reserve.’ $\exists > \forall, \forall > \exists$
- b. *gakina* ogamaa naakdownen-d-un shkogen-un
 every chief look.after-TI-OBV reserve-OBV
 ‘A chief looks after every reserve.’ $\exists > \forall, \forall > \exists$
 (Ella Waukey 15/06/09)

The scope facts could suggest that the movement involved is A'-movement, supposing it allows for reconstruction at LF (unlike A-movement) in the dislocated cases – the universal operator associated with the internal argument can then take wide or narrow scope. However, I do not yet have data indicating the nature of the relationship between dislocated quantifiers and other operators, such as sentential negation, that could more clearly show whether scope differences appear in dislocated constructions. At this point I leave the data in (17) and (18) as simply suggestive.

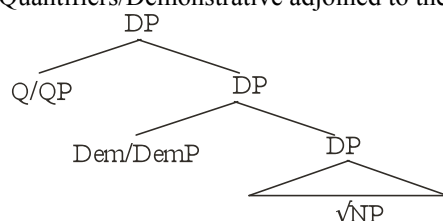
To summarize, I am claiming that quantifier dislocation from a DP is A'-movement to a fixed preverbal position that corresponds to a contrastiveness interpretation (as indicated by Tomlin & Rhodes 1992). This is the same movement to the same position that can target an entire DP (i.e. including associated quantifiers/demonstratives) and displace it to the same preverbal position (10), but cannot move a DP to the exclusion of its adjuncts (like quantifiers), indicated by the ungrammaticality of DP-quantifier word orders in (11)-(13).

3.2 Discontinuous DPs from feature driven movement

Now I will present the details of my syntactic account of these discontinuous constructions, given that they involve A'-movement of XPs to a specific preverbal position.

Suppose the DP structure in the Ojibwe constructions is like that in (19), such that quantifiers and demonstratives appear as adjuncts to DPs and constitute their own XPs. I consider QP and DemP to be adjuncts (following Bošković 2004, where quantifiers are adjoined to DP arguments) because it is possible to reorder the quantifiers and demonstratives with respect to each other, illustrated in (20) with respect to *niizh* 'two' and *gonda* 'these'.

(19) Quantifiers/Demonstrative adjoined to the Ojibwe DP



- (20) a. **Niizh** dash eta wadi **gonda** gii-zhaawag.
 two but only there these pst-go
 'Only two of these (people) went over there.'
- b. **Gonda** **niizh** gii-giinwishkwag...
 these two pst-be.a.liar
 'These other two were lying...' (Valentine 2001:575-6)

As mentioned above, the unmarked word order in Ojibwe is VSO, and orders where DPs or their associated constituents are preverbal mark certain discourse

properties of those constituents (Tomlin & Rhodes 1992). At the moment I will simplify the discourse properties involved, and generalize that a DP, quantifier or demonstrative appears preverbally in Ojibwe to indicate contrastiveness.

I propose that a phrasal element can be syntactically marked as a contrastive element by bearing a [uCon(trast)*] feature. Suppose there is a vP external projection Con(trast)P³ that matches and deletes the XPs bearing [uCon*] when they move to spec ConP. Quantifiers, numerals, demonstratives and whole DPs can occupy this position, dependent on which element is chosen to receive the contrastive interpretation in a given discourse, and therefore bears the contrastiveness feature. In (21) the QP is marked with this feature and then moves to spec ConP.

- (21) a. $[_{\text{ConP}} \text{Con}^\circ [_{\text{VP}} \text{verb} \dots [_{\text{DP}} \text{QP}^{[\text{uCon}^*]} [_{\text{DP}} \text{argument}]]]]]$
 b. $[_{\text{ConP}} \text{QP}_i^{[\text{uCon}^*]} [_{\text{ConP}} \text{Con}^\circ [_{\text{VP}} \text{verb} \dots [_{\text{DP}} t_i [_{\text{DP}} \text{argument}]]]]]$

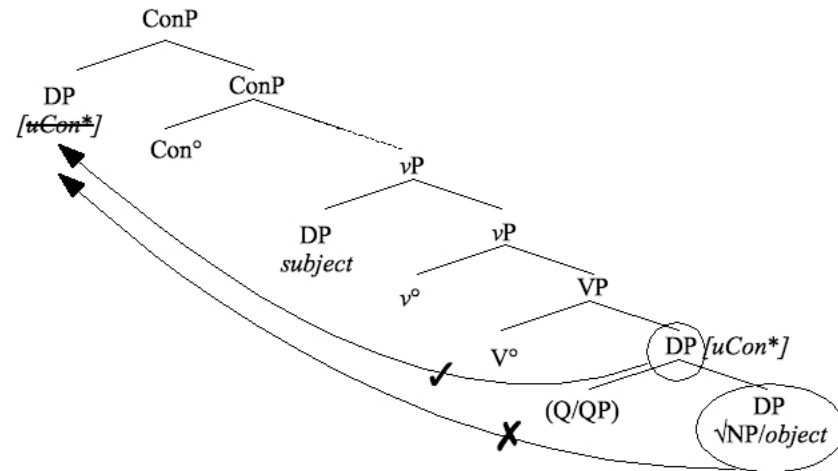
Because there is a fixed vP external position that contrastive elements move to, there cannot be a dislocated quantifier that is not preverbal, deriving the facts in (16). Also, the system I have just present covers the restriction that a quantifier can never be on the right of its associated DP (e.g. (11)-(13)). If a DP is marked as contrastive, then [uCon*] originates on D°. When D° merges there is no matching feature since ConP is above the verb phrase and so [uCon*] must percolate up through the DP levels and will end up on the highest DP label. Therefore, the highest DP label will be the target for movement to spec ConP when that projection merges to match the contrastive feature, and only the whole DP can move. That is, a DP cannot move to the exclusion of its QP or DP adjuncts in spec DP and must remain to the right of these adjuncts.⁴

The situation is illustrated in (22), showing that a construction like (11)a is possible (where *kina gegoo* originates in the complement of VP and constitutes the whole DP), but that (11)c or the similarly ungrammatical *‘Gegoo gii-miijun kina’ are not possible since these word orders would have to target an intermediate DP level for contrastiveness movement. Quantifiers (and other adjuncts in spec DP) can, however, strand their associated DPs. If a quantifier is contrasted then [uCon*] can occur on Q° which percolates up to QP, allowing QP to front to the exclusion of the DP which is not part of the QP constituent, illustrated in (23) for sentences like those in (4)-(6).

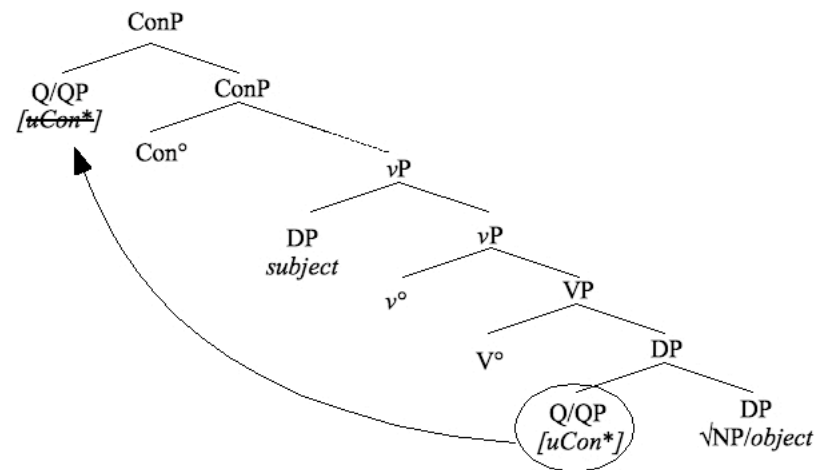
³ I use the term ‘Contrast’ rather than ‘Focus’ since I will not discuss the realization of focus in Ojibwe or the related semantics. Tourigny (2008) posits a FocusP in the position that I am calling ContrastP, and she also discusses other projections relating to discourse properties (however QPs seem to only be able to occupy FocusP). Further research could determine the relationship of the interpretation of focus with the syntactic features and movement I am proposing here.

⁴ This analysis leaves open the possibility that another kind of movement driven by other syntactic features/factors could rearrange the order of DPs and QPs/DemPs. Note that standard A-movement seems to be absent from Algonquian languages (Ritter & Rosen 2005), so the possibilities for DP movement are restricted.

(22) Focused DP



(23) Focused quantifier

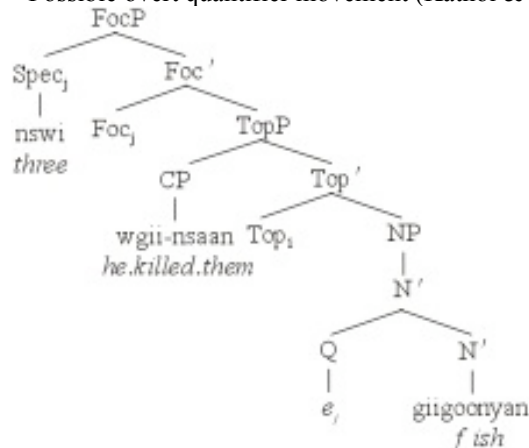


Contrastiveness is being indicated by syntactic position in Ojibwe, while in other languages, like English for example, focus or contrastiveness is realized by prosodic prominence. Tomlin & Rhodes (1992) claim that the phonological realization of contrastiveness is not available in Ojibwe.

3.3 Section summary

I have presented a syntactic account of the movement of DPs or related QPs, positing a contrastiveness feature that triggers this movement. A comparable account is outlined in Russell & Reinholtz (1995), who describe movement like that in (24) where the verbal complex is contained in the CP in spec TopP and DPs and other elements occur in non-argument positions.

(24) Possible overt quantifier movement (Kathol & Rhodes 1999:81)



I do not adopt the Russell & Reinholtz (1995) analysis because it crucially assumes that Algonquian languages are non-configurational (i.e. Jelinek 1984's Pronominal Argument Hypothesis), which does not appear to be the case (see Bruening 2001, Tourigny 2008, for example). I posit that DPs originate in argument positions and the core clause structure takes the standard shape. See Russell & Reinholtz (1995) for the details of their discussion, which differ from the present analysis.

The following section discusses a few remaining issues concerning the association of DPs and their dislocated quantifiers.

4. Association Issues

DPs with both a quantifier and a demonstrative can have one of those elements dislocated (both cannot dislocate, given there is only one spec ConP position), but we find that the differing order between Q and Dem has effects on what readings are available. Kathol & Rhodes (1999) argue that a DP with a Dem-Q⁵ order modifying it can receive either an inclusive (25)a or partitive reading (25)b. Conversely, a DP with Q-Dem, switching the order of the adjoined XPs, is claimed to only have a partitive reading (26) (the inclusive reading is implied to be unacceptable for such examples by Kathol & Rhodes).⁶

⁵ Kathol & Rhodes (1999) include numerals in the class of quantifiers.

⁶ Valentine (2001:575) claims that *kina* 'all' is "universally inclusive" and produces an inclusive reading even in a Q-Dem order:

(i) Giishpin naadmawyan mii go ji-giizhiitaayaan moonwagwaa
 if you.help.me then emph fut-finish dig
kina giw piniig.
 all those potatoes
 'If you help me I will get done digging up all those potatoes.'

- (25) a. **Gonda niizh** gii-ggiinwishkwag...
 these two pst-be.a.liar
 ‘These other two were lying...’ (Valentine 2001:576)
- b. ...aw nini gye go **giw aanind** binoojiinyag...
 ...that man and emph those some children...
 ‘...the man and some of the children...’
 (Kathol & Rhodes 1999:76)

- (26) **Niizh** dash eta wadi **gonda**gii-zhaawag.
 two but only there these pst-go
 ‘Only two of these (people) went over there.’ (Valentine 2001:575-6)

Dislocation does not change the possible readings of Dem-Q/Q-Dem construction ((27)-(28)) – the same readings are (im)possible. For example, in (28) the partitive reading is forced whether the quantifier is part of a continuous DP (a) or dislocated from it (b).

- (27) Dem-Q – optional partitive/non-partitive reading
- a. ...aw nini gye go **giw aanind** binoojiinyag...
 ...that man and emph those some children...
 ‘...the man and some of the children...’
- b. Mii dash **aw bezhig** gii-naadid wewiib iw
 and emph that one pst-go quickly that
 sa waagaakod
 part axe
 ‘Then the one quickly went and got the axe.’
 (Kathol & Rhodes 1999:76-77)
- (28) Q-Dem – obligatory partitive reading
- a. **aanind iw** wdagwwin
 some that her.clothes
 ‘some of her clothes’
- b. Gye dash mii **kina** gii-maajiidwaawaad **iw**
 and EMPH CLEFT all pst-take.from.them that
 wziizbaakdomni
 their.sugar
 ‘And then they took all of their sugar from them.’
 (Kathol & Rhodes 1999:83)

However the translation in (i) seems equivalent to ‘all of those potatoes’ and so does not stand as a conclusive counter example to Kathol & Rhodes’s (1999) generalization of a forced partitive reading with Q-Dem orders. We can find these types of partitive translations even with constructions involving (*ga*)*kina*:

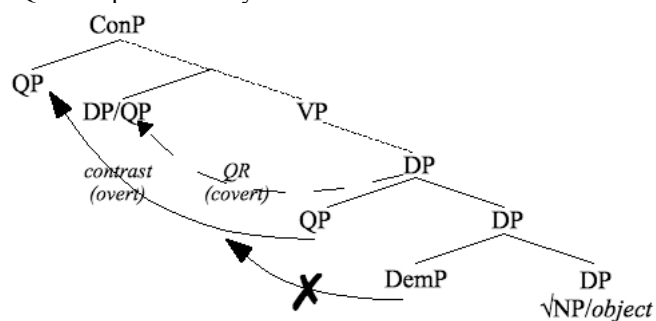
- (ii) **Gakina** gii-gagnoonaan *aniw onijjaaniiwaan*
 all pst-speak those child.pl
 ‘She spoke to each and all of her children.’ (Williams et al. 1991:68)

In these types of configurations only one associated element may be dislocated from the DP, and it appears to be whatever occupies the higher specifier. That is, it is either the Q or the Dem that can undergo contrastiveness movement, but not both (to the exclusion of the entire DP), and since the dislocated constructions maintain the reading restrictions of the non-dislocated version (according to Kathol & Rhodes 1999) it must be the higher element of the two.

I have claimed that the [uCon*] feature can only end up on the highest DP level (percolating all the way up from D°) or the highest specifier of D. If, in a Q-Dem construction, for example, the feature triggering movement were present on the DemP (with the hierarchy in (19)) this derivation should crash if the QP c-commanding DemP is considered and intervenes for this movement. [uCon*] then must appear on QP in such a case to derive a discontinuous DP – with a Q-Dem-DP word order, Q may front for focus but Dem may not because Q intervenes between Dem and ConP.

Dem is not a quantifier, and therefore does not undergo QR at LF and can be interpreted in its surface position. This setup derives the rigid partitive reading of Q-Dem constructions seen in (29)a: because Dem is not the higher specifier it cannot undergo contrast movement, and remains adjacent to the DP. Q can undergo contrast movement, but also covert QR. Importantly, there is a strict Q>Dem ordering at all levels of the construction which forces the partitive reading. On the other hand, in Dem-Q constructions, Q is not restricted to its base position in the same way, seen in (29)b. Dem can undergo contrast movement since it is higher in these constructions, thereby blocking the contrast movement of Q, but Q can still undergo QR at LF so that both Dem>Q and Q>Dem configurations are possible in the derivation. I propose that the ambiguity of the hierarchical relationship in Dem-Q constructions allows for the partitive and inclusive reading while the Q-Dem reading has a rigid hierarchy therefore restricting the readings to partitive only.

(29) a. Q-Dem: partitive only



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