Ian Roberts - University of Stuttgart Auxiliary reduction and negation reduction -- a rough sketch

Reduced negation is incompatible with auxiliary reduction:

- (1) a. John hasn't finished.
 - b. John's finished.
 - c. *John's'n't finished.

(It is unlikely that phonology can explain this, since the subject of (1c) would be pronounced *jonz nt*, which doesn't violate any English syllable-structure constraints).

Now, there are reasons to think that auxiliary reduction is a process of head-movement. First, no material can intervene between a reduced auxiliary and the subject. In IP, the auxiliary must always attach to the subject (the auxiliary can attach to a Wh-constituent ("Who's John seen today?") and to a higher verb where that is deleted ("Who do you think's the best?"), but not to any other fronted material (*"Never in his life's he been so insulted!")). This is not due to phonological conditions either, as the following contrasts show:

- (2) a. I wonder if John ever is rational.
 - b. *I wonder if John ever's rational.
 - c. I wonder if living forever's rational.
- (3) a. We probably have said enough.
 - b. *?We probably've /..iv/ said enough.
 - c. We've /wiv/ probably said enough.
- (4) a. He really will finish tomorrow.
 - b. ?*He really'll finish tomorrow.
 - c. He'll really finish tomorrow.

These facts can be accounted for by saying that reduced auxiliaries occupy the head whose specifier position is filled by the subject. Therefore, as with finite verbs in French, nothing can intervene between them and the subject (see Pollock 1989). This account implies that unreduced auxiliaries occupy a lower position (see Kayne 1989).

Second, possessive *have* reduces exactly for those speakers who allow it to raise to I and C (essentially speakers of conservative and Northern varieties of British English):

- (5) a. Have you a car?
- b. I haven't a car.
- c. I've a car.

If auxiliary reduction is fed by movement to "I", then this is straightforwardly accounted for.

A final point that we need to observe is the well-known fact that negreduction cannot take place in infinitives:

- (6) a. John promised to not talk.
 - b. *John promised ton't talk.

A condition on neg-reduction seems to be that it must attach to a finite T.

We can now account for the impossibility of combined negation reduction and auxiliary reduction in terms of the head-movement constraint and the crucial (if rather suspect) idea that neg-reduction is a PF movement rule. If negation-reduction involves adjunction of Neg to the aux in T, then the HMC prevents reduction when the aux has moved on.

The problem with this approach is the following: if the aux raises from a lower position, why can it skip Neg? If it attaches to Neg (on the left -- cf. Kayne 1994), why can't the combination keep moving? And note that it can move to C:

(7) Why didn't I think of this before?

Besides stipulating that the negative forms of auxiliaries can't reduce, which is just restating the fact, I can't see any way to prevent the negated aux from raising.

References

Kayne, R. (1989) "Notes on English Agreement," CIEFL Bulletin, Hyderabad.

Kayne, R. (1994) The Antisymmetry of Syntax, MIT Press, Cambridge MA.

Pollock, J.-Y. (1989) "Verb Movement, Universal Grammar and the Structure of IP," *Linguistic Inquiry* 20: 365-424.