Some Remarks on Agreement and on Heavy-NP Shift

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In these brief remarks I will be unable to do justice to the rich contributions to the "Antisymmetry and Minimalism" symposium made by Profs. Kitahara, Oishi and Takano. I will do little more than touch on the question of agreement and uninterpretable features that was discussed by Prof. Kitahara and on the question of Heavy-NP Shift and antisymmetry that is relevant to the contributions of Profs. Oishi and Takano.

1. Agreement

In his recent work, Chomsky (2000; 2001) has pursued the idea that movement (at least movement corresponding to classical A-movement) involves an operation Agree that in turn involves uninterpretable features of what he calls the probe. In subject-verb agreement of the familiar sort the uninterpretable phi-features of the probe T(ense) (which plays a key role in movement to subject position) may have phonetic realization.

On the other hand, phonetic realization of such uninterpretable phi-features is not essential - e.g. in English we see some overt agreement in the present tense but not in the past (except with *be*). It is very plausible that movement to subject position takes place in the same way in English in present tense sentences and in past tense sentences, with the difference in overt agreement attributable to an orthogonal PF property of those phi-features that determines whether they are spelled out or not (and how).

Somewhat different would be a case in which movement to subject position takes place, but in which the verb agrees with a different argument than the subject. There is a variety of English that appears to meet this description. This variety of English was originally discussed by Kimball and Aissen (1971). In it, one finds relative clauses like:

(1) ?the people who John think should be invited

where *think* does not agree with *John*. For Kimball and Aissen (and others), these are fully acceptable. For me, they are fairly acceptable (the question mark in (1) indicates my judgment, as will all the subsequent judgments, unless stated otherwise). As they note, even speakers who do not find (1) fully acceptable will often have very clear differential judgments (as I do, in many cases).

That *think* in (1) is agreeing with *who*, as opposed to not agreeing with anything, is clear from the contrast with:

(2) *the person who John think should be invited

It seems clear in addition that *think* in (1) is, more specifically, agreeing with the wh-phrase *who* (rather than directly with *people*). This is shown by:

(3) ?the student whose friends John think should be invited
(4) *the students whose friend John think should be invited

In examples where the wh-phrase and the head of the relative differ in number, the agreement is between the verb and the wh-phrase (*whose friends*, in (3)). Agreement between the verb and the head *students* in (4) is unacceptable in the context of a differently numbered wh-phrase.

A basic fact about the agreement in question is that it depends on wh-movement - if the relevant phrase is left in situ, the corresponding agreement is impossible:

(5) *John think those people should be invited.
(6) *John think your friends should be invited.

Similarly for:

(7) ?people that John like
(8) *John like (those) people.

Following in essence Kimball and Aissen, I thus take the verb in (1), (3) and (7) to be agreeing with the moved wh-phrase.

The question that I would like to address is one that arises from the perspective of Chomsky (2000; 2001), namely how is the movement of *John* to subject position in (1), (3) and (7) to be understood, given that it does not appear to be possible to take it to be mediated by subject-verb agreement?

On the other hand, Kimball and Aissen do take the verb in such examples to agree with the subject. Or rather, they take it to have agreed with the subject, with that agreement subsequently being overridden by agreement with the (subsequently moved) wh-phrase. Although one might attempt to 'stretch' Chomsky's probe-goal theory to allow for agreement to be overridden, such 'stretching' (weakening of the theory) does not in this case seem necessary, as I shall try to show.[1]

Putting this point another way, we can note that the (non-standard) English agreement pattern seen in (1), (3) and (7) does not appear to be cross-linguistically common. If it is not, then the theory of movement and agreement should not make it too easy to generate. This point can be illustrated using French, which does have a partial counterpart to this pattern, in the sense that its past participles can agree with a wh-moved object, but not with an in situ object:[2]

(9) la maison que Jean a repeinte ('the house that J has repainted$_{+fem}$')
(10) Jean a repeint/*repeinte la maison.

Yet French has no finite verb agreement comparable to that of non-standard English:

(11) les maisons que Jean a/*ont repeintes ('the houses that John has/have repainted$_{+f.pl}$')
(12) les gens que Jean hait/*haïssent ('the people that John hates/hate')

Thus we do not want to allow agreement with a (moved) wh-phrase to occur too readily in place of agreement with the subject.

Another kind of reason for not adopting an analysis based on the overriding of agreement comes from the fact that counterparts to (1) and (3) that contain a finite form of *be* are (for me) appreciably worse:[3]

(13) *the people who John were thinking should be invited
(14) *the student whose friends John are thinking should be invited

Similarly, although an inverted auxiliary can (and for me these are the best cases) show agreement with the wh-phrase and not with the subject:

(15) Which people do John think should be invited?

it cannot do so with a form of *be*:

(16) *Which people were/are John thinking should be invited?

Furthermore, if we take (7), repeated here:

(17) ?people that John like

there is a contrast with:

(18) *people that John are fond of

Instead of having agreement able to be overridden,[4] I would like to explore an approach that is based on the presence of an unpronounced auxiliary.[5] From this perspective, (17) would look as follows:

(19) people that John$_i$ Aux$_i$ like

If so, then such relative clauses and sentences are no longer exceptional with respect to subject-verb agreement. Even though *John* does not agree with *like*, *John* does agree with Aux, which can be taken to be associated with the T(ense) element that acts as probe. The wh-phrase in (19) (which is itself not pronounced, assuming *that* to be a complementizer) agrees with *like*, but not with Aux.

In suggesting a structure for English in which object[6] agreement with the verb is accompanied by subject agreement with an auxiliary, I am in part thinking of languages like Papago/'O'odham, in which such a pattern is readily visible, and languages like Hopi, where verbal object agreement (in number, and typically suppletive) is robust and only sometimes accompanied by subject agreement, which must involve an (unpronounced) auxiliary, if I am right. Languages that with transitive verbs show only object agreement (without having ergative Case) can be thought of in parallel fashion - movement of the subject is keyed to an (unpronounced) auxiliary.[7]

Returning to (18), its unacceptability will follow if *are* cannot be preceded by another auxiliary:

(20) *people that John$_i$ Aux$_i$ are fond of

If we express this by stating the following, for English (although not for all languages):

(21) An auxiliary (in English) must be followed by a non-finite verb.

we can simultaneously bring into the fold the fact that (17) has no counterpart in which singular and plural are reversed:

(22) *somebody that the students likes

As Kimball and Aissen note, the form in -s cannot fail to agree with the subject even as the result of agreeing with the wh-phrase. The reason now is that *likes* is necessarily finite, whereas *like* is not necessarily finite (and in fact must not be in (19)). Thus the following is not possible:

(23) *somebody that the students$_i$ Aux$_i$ likes

because finite *likes* cannot be preceded by an auxiliary.[8]

Auxiliaries in English can in some cases be followed by other auxiliaries if the latter are non-finite:

(24) John must be thinking that...
(25) John certainly could have.

This is probably related to the contrast between (18) and:

(26) ??people that John have liked

Although less acceptable than (17), this example seems better than (18). The reason must be that (26) does not violate (21) (since *have* can be non-finite, just as *like*), whereas (18) does. (If the unpronounced auxiliary of (19) is more like *do* than like modals, then the lesser acceptability of (26) as compared with (17) might be related to auxiliary *have* generally not allowing a preceding *do*.)

Whatever the exact degree of marginality of (26), it is much better than parallel examples with the form *be*:[9]

(27) *people that John be fond of

This is not expected, in particular it does not follow from (19). To account for (27), let us consider the possibility that (19) involves 'matching' in something like the sense of Groos and van Riemsdijk (1981). More specifically, the idea is that Aux in (19) can have its non-finite requirement met by *like*, once we abstract away from the plural phi-feature of *like*. Such abstraction must be dependent on the PF-identity of infinitival *like* and +plural (present tense) *like* - in effect there is in (17)/(19) a single item *like* with a +plural feature that the Aux can ignore in respecting (21).

The only verb in English for which the infinitive and plural forms are not PF-identical is the verb *be*, from which the impossibility of (27) follows, given the preceding, plus the assumption that the unpronounced Aux in question must itself be licensed by wh-movement-induced (plural) agreement on the verb below it, perhaps in a way recalling the 'selection' of *have* vs. *be*.[10]

Returning to (11)/(12), i.e. to the fact that French does not have finite verb agreement with a wh-phrase of the sort that (some) English does, we can see that a possible account lies in the combination of (19) and (21). To mimic English, French would have to have plural finite verbs identical in form to infinitives, as English does. But French infinitives are arguably always phonologically distinct from finite forms, in particular because of the infinitival -*r* suffix.[11]

The (non-standard) agreement between verb and wh-phrase seen in the variety of English under discussion would not be expected to be triggered by the wh-phrase in its derived position in the Comp area, if (object) agreement is strongly local in the Spec-head sense of Kayne (1985; 1989a),[12] and similarly for Chomsky's approach based on Agree. Evidence that there is a local relation at some point in the derivation between verb and wh-phrase may, thinking of Sportiche (1988), come from the position of the stranded quantifier in:[13]

(28) ?these people, who John all think should be invited

This type of example seems to me to be acceptable to a surprising degree, especially with stress on *all*. The surprise comes in part from the fact that with standard agreement, the corresponding sentence is sharply out:

(29) *these people, who John all thinks should be invited

This would appear to suggest that if the wh-phrase moves up through the VP-area of the matrix, then verbal agreement is obligatory in English (and that in standard English the wh-phrase does not have that option).

This obligatoriness effect may be related to another effect that holds in my English (and that shows that a simple binary distinction between standard and non-standard is not entirely adequate). Although in general I find the wh-agreement sentences less than fully acceptable, there is one case (with auxiliary *do*) that differs:[14]

(30) Which students do John think should be invited to the party?

Not only is this acceptable to me, I find the standard agreement to be less natural:

(31) (?)Which students does John think should be invited to the party?

Given our earlier reasoning, (30) must, since *John* does not agree with *do*, contain an unpronounced Aux with which *John* does agree. *Do* in (30) bears a +plural feature (it agrees with *which students*)[15] and is seen as non-finite by Aux. (In that respect it has something in common with the non-finite *do* of British English *He may do, He may have done*.) (31) suggests that in some cases agreement is preferred, even in the absence of a quantifier.

Notice that if the preceding is correct, there are two elements, Aux and *do*, between *which students* and *John* in (30), recalling both Nilsen's (2003) argument that (Scandinavian) V-2 involves phrasal (remnant) movement and Johnson's (1988) discussion of non-standard *Should have John left?*.[16]

A further point concerning (30) is that its acceptability for me is sensitive to the choice of wh-phrase:

(32) What students/?how many students/*?approximately how many students do John think should be invited to the party?

suggesting that the wh-phrase whose movement yields verbal agreement must pass through a position associated with specificity.[17]

The standard English that accepts none of the non-standard sentences under consideration, including even (30), could perhaps differ in never allowing wh-movement to pass through the relevant intermediate position. Alternatively, the difference might reside in the unpronounced Aux in question, which standard English might not have at all.

I have taken this Aux to agree with the subject in (30), (28), etc. This does not provide an immediate account (nor does Kimball and Aissen's (1971) 'overriding' approach) of the fact that a pronominal subject is impossible, for most speakers:

(33) *Which students do he think should be invited to the party?
(34) *these people, who he all think should be invited
(35) *people that he like
(36) *the people who he think should be invited

Let me briefly suggest relating this to:

(37) Here comes John again.
(38) *Here comes he again.

Although this contrast might be thought of in terms of a low position for *John* compared to a necessarily higher position for *he*,[18] I will prefer to pursue the rather opposite tack taken by Kayne and Pollock (2001), who in discussing French (relative clause) pairs like:

(39) le livre que lit Jean ('the book that reads J')
(40) *le livre que lit il ('...he')

argue that the ill-formedness of the pronoun example is due to the necessary topicalization (raising out of IP) of the subject in this 'stylistic' inversion construction, which is unavailable with a (weak) pronoun.[19]

The proposal, then, is that the counterparts of (33)-(36) with *John* in place of *he*, e.g.:

(41) ?all the people that John think should be invited

involve topicalization of *John*. Now English topics have the property that they cannot be narrow scope quantifiers:

(42) Everybody will invite somebody/at least one person.
(43) Somebody/At least one person everybody will invite.

While (43) is somewhat acceptable with *somebody* or *at least one person* having wide scope, it is clearly impossible with them having narrow scope relative to *everybody*. With this in mind, consider the contrast between (41) and:

(44) ?all the people that somebody/at least one person think should be invited

It seems to me that while (44) may be marginally acceptable with *somebody* or *at least one person* outside the scope of *all*, (44) is sharply unacceptable if *somebody* or *at least one person* is interpreted as being within the scope of *all*.[20]

If so, then *John* in (41) must be topicalized, and we have an account for the unacceptability of (33)-(36) with a weak pronoun, in a way compatible with the proposal for an unpronounced Aux (agreeing with *John*) that I have pursued.[21]

2. Heavy-NP Shift

Heaviness plays a role in:

(45) Would you mind picking that book up?
(46) *Would you mind picking the book that you just dropped up?

This kind of contrast was noted in the early years of generative syntax.[22] That it might have a syntactic (as opposed to processing) basis was suggested in Kayne (2000, chap. 15). Independently of whether or not that turns out to be correct, I would like to separate the question of (46) from the question of how exactly to allow for instances of what I will continue to informally call heavy-NP shift:

(47) You should put on the kitchen table the book you just dropped.

Here the direct object is not in its canonical position, a possibility that also seems to be sensitive to some notion of heaviness:

(48) ??You should put on the kitchen table that book.

Whether or not the notion of heaviness relevant to (48) is closely linked to the effect seen in (46) is another question I will put aside - in favor of the question of how exactly to derive sentences in which a direct object follows material that it does not normally follow.

Until Larson (1988; 1990), the standard assumption was that (47) involved rightward movement of the direct object. Larson argued that that rightward movement could be dispensed with; den Dikken (1995) subsequently argued that the derivation of (47) in fact involves leftward movement of that object (cf. also Kayne (2003)).

I take Larson and den Dikken to be on the right track, but I would like to suggest a modification based in part on the observation that not all VO languages allow heavy-NP shift. I suspect that this goes against a widely held belief among syntacticians, namely that heavy-NP shift should be automatically available in a VO language.[23]

However, Haitian and Chinese do not have it, according to Dejean (1993) and Tang (1998, 132), respectively. In addition, Gun(gbe) does not have heavy-NP shift, according to Enoch Aboh (personal communication).[24]

In a by now familiar way, we would like to know if the presence vs. absence (in a VO language) of heavy-NP shift correlates with any other property of that language. A candidate is the relative position of the definite article, in that Haitian and Gun both have DP-final definite articles, quite unlike English. This suggests the following conjecture:

(49) If a VO language has a DP-final definite article, then it lacks heavy-NP shift.

Why might this be true (if it is)? The first thing to note is that it resembles the following Greenbergian universal (cf. Dryer (1992, 102)):

(50) If a language is complementizer-final, then the language is OV.

We can think of (50) as excluding:

(51) *V X IP C

and of (49) as excluding:

(52) *V X NP D

where NP is 'heavy' (and X in (52) is material that forces NP to be heavy).

In Kayne (2000, chap. 15), I proposed excluding (51) via recourse to the idea that complementizers are merged outside of VP, rather than with the IP that they are associated with. (The C and IP 'get together' subsequently as the result of movement of the IP.) If (52) is truly akin to (51), then by parity of reasoning it should be excluded in parallel fashion, via recourse to the idea that definite articles are merged outside VP, rather than with the NP they are associated with.

That D is merged external to VP has in fact already been proposed, on different grounds, by Dominique Sportiche in a series of talks in recent years. Let me, then, adopt his proposal, with the execution as in Kayne (2003) for complementizers and prepositions, with a lower element paired with D. Thinking of Sportiche's recent (2002) GLOW paper, let me take that lower element to be Num(ber).

Let's begin with a VP already constituted containing V followed by NP and X (internal constituent structure not relevant). Then Num is merged, followed by movement of NP to Spec,Num:

(53) V NP X --> merger of Num
       Num V NP X --> movement of NP
       NP_i Num V t_i X

At this point, D is merged, and VP then moved to Spec,D:

(54) NP_i Num V t_i X --> merger of D
       D NP_i Num V t_i X --> movement of VP
       [V t_i X $]_j$ D NP_i Num t_j

This yields, abstracting away from the traces, 'V X D NP Num', which is what heavy-NP shift corresponds to in a language like English (if we further abstract away from the fact that Num (if it is -*s*) must end up directly following N).

To produce the unwanted (52), we could try moving NP, rather than VP, to the Spec of D. But then, if there are no multiple specifiers (and no other available relevant heads), there is nowhere to move VP to. Thus we might perhaps end up with 'NP D Num V X',[25] but not with (52) itself. In other words, there is no straightforward derivation available for (52) given the above set of premises, which is the result we want.

If we take (53)/(54) to correspond to (47), then we have a case where X contains P and furthermore P has been merged prior to the D associated with the heavy NP. Simplifying a bit, consider the derivation of the heavy-NP shift example:

(55) You should send to Mary the articles you've written.

By hypothesis, both *to* and *the* are factored out of the VP. Assume the initial order has *Mary* before *articles* (this is not central). At the point where the VP has been put together, we have (internal constituent structure aside):

(56) ...send Mary articles you've written

The derivation proceeds as follows (with K(ase) the lower element paired with P):

(57) ...send Mary articles you've written --> merger of K
       ...K send Mary articles you've written --> movement of *Mary*
       ...$Mary_i$ K send t_i articles you've written --> merger of *to*
       ...to $Mary_i$ K send t_i articles you've written --> movement of VP
       ...[send t_i articles you've written $]_j$ to $Mary_i$ K t_j

At the point, Num is merged, with the derivation continuing on almost exactly as in (53)/(54):

(58) ...Num [send t_i articles you've written $]_j$ to $Mary_i$ K t_j --> movement of NP
       ...[articles you've written$]_k$ Num [send t_i t_k $]_j$ to $Mary_i$ K t_j --> merger of *the*
       ...the [articles you've written$]_k$ Num [send t_i t_k $]_j$ to $Mary_i$ K t_j --> movement of PP

...[[send t_i t_k]$_j$ to Mary$_i$ K t_j]$_l$ the [articles you've written]$_k$ Num t_l

This yields the required word order (apart from Num, as mentioned above). Note that the movement of NP in (58) is movement from within a left branch,[26] and that in addition what is moved to Spec,*the* in the last step is the closer constituent PP, rather than the less close constituent VP. Since I am assuming no movement is possible of the complement of a given head to the Spec of that same head, movement to Spec,*the* of NumP is not an option. In effect, movement to Spec,*the* in (58) (like movement to Spec,*to* in (57)) picks out the nearest category capable of being moved, without attending to the category type.[27] This is plausibly a characterization of all movements to the Spec of P/C/D.

From this perspective, heavy-NP shift is an effect induced by the (perhaps unusually) high merger of D (as compared with P, in particular). It is for principled reasons not available in a VO language that has its D DP-final.[28]

A difficult question, then, is why Haitian and Gun, which disallow heavy-NP shift, allow postverbal objects at all, if D is systematically merged outside VP (in which case the factors that combine to exclude (52) might be expected to exclude 'V NP D' even in the absence of heaviness).

Before making an attempt at (the beginning of) an answer, let me note in passing that Haitian and Gun also both disallow right-dislocation, whereas they both allow at least some form of left-dislocation/CLLD.[29] This may suggest that (49) generalizes to right-dislocation, and more specifically that the derivation of right-dislocation also depends on a D merged (high) above VP.

Let me further note two ways in which D looks like P and C. First, Papago/'O'odham has a determiner *g* that precedes NP, yet has the property that it cannot be sentence-initial (Zepeda (1983)). This recalls in part the fact that the Italian prepositional complementizer *di* is unable to introduce subject infinitives (for a proposal, see Kayne (1999)). Second, D is prohibited from appearing in 'compounds' in English:

(59) John loves Brooklyn/the Bronx.

(60) John is a well-known Brooklyn lover/*the Bronx lover.

in a way that may be at least partially akin to the exclusion of P:[30]

(61) *John is a well-known about Brooklyn talker.

It may be that compounds of this sort 'cut off' somewhere between VP and the point at which D is merged (and similarly for P). Sportiche's D-outside-VP hypothesis thus seems to pair off in a natural way with the hypothesis that P is introduced outside VP (and similarly for C).

Returning to Haitian and Gun, I note that the idea that the position of D relative to NP interacts with VO/OV (in the way I have outlined) is indirectly supported by Dryer's (1989) study of what he calls 'plural words' (especially if they correspond (largely) to D), in that he finds (p. 880) that "All 15 OV languages [in the relevant sample - RSK]...place the plural word after the noun. But only two out of 29 VO languages do likewise."

As for the question how to derive 'V NP D' order in non-heavy-NP-shift contexts in Haitian and Gun, it might be that if D is introduced sufficiently low (perhaps lower than *v*) there is another head available that can be introduced just above it and into whose Spec a constituent containing V can move (whereas when D is introduced high, as in the heavy-NP-shift derivation in (54), no such head is available).

If so, this would be akin to what I suggested in Kayne (2000, chap. 15) might be happening in those languages that appear to be exceptions to the broadly valid generalization (see Dryer (1992, 83)) that VO languages have prepositions rather than postpositions (in the exceptional languages 'V DP P' would really be 'V P DP P' with a phonetically unrealized additional preposition).

This in turn recalls the striking difference concerning adjuncts that holds between Japanese and Dutch/German. The latter two have many adjunct clauses following the verb (in particular, the non-V-2 verb), whereas Japanese has its adjuncts preceding the verb. This difference holds despite the fact that all three languages are strongly OV with respect to non-prepositional objects (again, abstracting away from V-2). The key correlation is, I think, that Dutch/German adjuncts have initial P or initial C (depending on the exact feature composition of what we call subordinating conjunctions - v. Emonds (1985)), and can therefore enter into derivations of the general form of (57), yielding postverbal adjuncts, just as (57) yields a postverbal PP.[31] Japanese, on the other hand, has 'final' subordinating conjunctions (that follow the associated IP), so those derivations are not available to Japanese.

Similarly, German and Dutch allow sentential complements to readily appear postverbally in an 'extraposed' position, whereas Japanese does not, and the same holds for 'extraposed' relative clauses. In both cases, we can attribute the difference to the fact that Dutch and German clauses have an initial complementizer that will again allow derivations of approximately the form of (57).[32] Japanese, on the other hand, lacks initial complementizers and therefore lacks access to that type of derivation.

Just as Haitian and Gun lack both heavy-NP shift and right dislocation (while allowing left dislocation), so does Chinese, which does not have a definite article. That makes it look as if (49) does not apply to Chinese. On the

other hand, the derivation of the heavy-NP shift sentence given in (58) depends more precisely on the presence (in English) of an 'initial' *the*. If Chinese lacks any counterpart to initial *the*, then Chinese will (correctly) not have access to that type of derivation.[33]

That type of derivation resembles the ones proposed in Kayne (1998) for sentences with *only*, with *the* here parallel to *only* there. Jayaseelan (to appear - a) has proposed an improvement, taking *only* to be paired with a lower Focus head,[34] which would then be parallel to the Num paired with D. *Only* is relevant to Takano's careful symposium discussion of the relation between the proper formulation of antisymmetry and sentences like the following (from Branigan (1992)):

   (62) John tells jokes with any gusto only occasionally.

The question is how *any* is licensed here, given the antisymmetric prohibition against right-adjunction.

The relevant part of the derivation is (abstracting away from *John* and from the origin of *with*; the relative order within 'VP' of *with any gusto* and *occasionally* is not relevant either):

   (63) ...tells...occasionally --> merger of Foc
        ...Foc tells...occasionally --> movement of Adv
        ...occasionally$_i$ Foc tells...t$_i$ --> merger of *only*
        ...only occasionally$_i$ Foc tells jokes with any gusto t$_i$

At/By this point, the NPI *any* is licensed, as suggested by the well-formed:

   (64) John only occasionally tells jokes with any gusto.

The derivation continues on:

   (65) ...only occasionally$_i$ Foc tells jokes with any gusto t$_i$ --> movement of VP to Spec,*only*
        ...[$_{VP}$ tells jokes with any gusto t$_i$]$_j$ only occasionally$_i$ Foc t$_j$

We have derived (62), but *any* is no longer in the c-command domain of any licenser. In a familiar way, we could attribute the well-formedness of (62) to reconstruction, but, as Takano (this volume) correctly emphasizes, there are clear cases in which *any* cannot be licensed under reconstruction. To take just one of his examples:

   (66) It is not likely that anyone's parents will come to the party.
   (67) *Anyone's parents are not likely to come to the party.

However, the movement operation that removes *any* from the c-command domain of its licenser in (65) is movement of VP, and for me there are at least some (other) clear cases of VP-movement that do allow NPI-licensing under reconstruction (whatever the exact mechanism) to (at least) the same degree of acceptability as in (62) (which I in fact find less natural than (64)):

   (68) I didn't think that he would tell jokes with any gusto, and tell jokes with any gusto he hasn't/won't.

To the extent that (68) is (at least) as good as (62), there is no reason not to take (62) to have a derivation of the sort illustrated in (63)/(65).[35]

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[1]   Cf. in part Jayaseelan's (to appear - b) alternative to Boskovic (1999) and Richards (1999).

[2]   Cf. Kayne (1985; 1989a). As Chomsky (2001, note 38) observes, this is an interesting challenge for Agree. (Downward agreement is argued against by Koopman (to appear) - cf. also Kayne and Pollock (2001, note 25).)

[3]   See Kayne (1989b, discussion of (42b)). Note that this is not true of:
  (i) ?The identity of the participants are to remain a secret.
in which a different kind of non-standard agreement is not degraded by *are*. On this type, see den Dikken (2001).
(i) may or may not be close to the non-standard (ii) mentioned by Kimball and Aissen (1971):
  (ii) ?One of the men want to leave.
Again, for me, *are* is just as good:
  (iii) ?One of the men are waiting to see you.

[4]   A third reason for not letting prior agreement with a subject be overridden by subsequent agreement with a wh-phrase is that it wouldn't readily distinguish pronominal from non-pronominal subjects. For most (though not all) speakers I have asked, agreement with the wh-phrase becomes impossible if the subject is made pronominal. I return to this later.

[5]   This differs from Kayne (1989b; 1995).

[6]   Taking the term broadly here, to include the ECM-like cases such as (15).

[7]   On Papago/'O'odham, see Zepeda (1983); on Hopi, Jeanne (1978); also Frajzyngier (1993) on Mupun.

[8]   This does not seem compatible with Solà's (1994) idea that all English verb forms are participial.
   If *likes* is composed in the syntax from *like* and an independent -*s*, the text discussion needs to be revised, though by how much is not clear.

[9]   If in AAVE (27) is possible and if its counterpart without wh-movement is also possible, then AAVE may well not have any counterpart to the text construction. A then separate question would be whether the AAVE *be* that seems to be the highest auxiliary is or is not preceded by another phonetically unrealized one.

[10]   See Kayne (1993). On the other hand, auxiliary selection of the *have/be* sort is never directly sensitive to wh-movement, as far as I know.

[11]   Which I take to be present in all cases, even though it is not pronounced with first conjugation verbs (except in the complex future and conditional forms, or in (non-colloquial) liaison).
   I leave open questions raised by the literary Italian example (that looks like it has the non-standard English type of wh-agreement) brought to my attention by Guglielmo Cinque and mentioned in Kayne (1995, note 8).

[12]   Consideration of Oishi's intriguing symposium discussion of locality and antisymmetry is unfortunately beyond the scope of this short paper.

[13]   These bear in a complex way on Kitahara's careful symposium discussion of locality and the PIC.

[14]   Why *do* here favors wh-agreement remains to be understood.

[15]   Note the sharp impossibility of:
  (i) *Which student do John think should be invited to the party?
with singular *which student*.

[16]   In which *have* might turn out to be *of*, if Kayne (1997) is correct.

[17] Cf. Déprez (1998) on the interpretive effects of French past participle agreement.

[18] Cf. den Dikken (2001).

[19] For me, the examples in (33)-(36) sometimes improve somewhat with a (complex) strong pronoun, e.g.:
  (i) ??the people who he himself think should be invited
On the French counterpart with a (postverbal) strong subject pronoun, see Kayne and Pollock (2001, §6).

[20] With standard agreement:
  (i) all the people that somebody/at least one person thinks should be invited
I find the narrow scope reading for *somebody/at least one person* to be appreciably more accessible than in (44).

[21] If the parallel with French is pushed further, we will arrive at the conclusion that the English construction also involves IP-raising past the topic position. A salient difference between English and French would then be that in French the topicalized subject can be followed only by certain components of IP, whereas in English 'everything' follows the subject (meaning that everything else must be extracted from IP prior to IP-preposing).
    English would then be in this construction even more similar to certain Bantu languages (that I take to have 'stylistic' inversion in relatives, of the French type, but with VSX order) discussed by Demuth and Harford (1999) than to French. (Demuth and Harford take there to be head-movement to C in those relatives, but I think the kinds of arguments given for (certain) VSO languages by Lee (2000), Massam (2000) and Rackowski and Travis (2000) in favor of phrasal remnant movement will carry over to Bantu.)
    Those (few) speakers who accept non-standard agreement with a pronominal subject may have a way of avoiding obligatory (stylistic inversion and) topicalization entirely - what the parameter(s) is/are remains to be understood.

[22] Cf., for example, Fraser (1976) and Kroch (1979).

[23] Cf. for example Saito and Fukui (1998).

[24] According to Koopman (1992, 581), Bambara, too, lacks heavy-NP shift. How closely Bambara (an SOVX language - v. Kayne (2003)) can be fit into the text discussion remains to be seen. (Gun also has some SOVX constructions - v. Aboh (1999).

[25] Whether this sequence corresponds to a legitimate derivation is a complex question - see Kayne (2003) on the parallel question for postpostions.

[26] For an account of (i) (a typical apparent 'left-branch violation') that is compatible with the text assumption that such movement is allowed, see Kayne (2002, §1.8):
  (i) *Quanti hai letto libri? (Italian - 'how-many have-you read books')

[27] Cf. the discussion of 'pure EPP' movement in Holmberg (2000).

[28] Although Scandinavian has a D that can be immediately postnominal, that kind of D does not match the text description, since it cannot follow relative clauses.

[29] On subtypes of left-dislocation/CLLD, see Cinque (1977; 1990).

[30] In addition, there is an intriguing interaction between P and D (to the effect that P sometimes makes D unnecessary - in an especially dramatic way in Romanian) that may fit in here - for recent discussion, see Himmelman (1998).

[31] Left open is the question why German and Dutch have only limited possibilities for postverbal simple PPs - see Hoekstra (1984).
    Perhaps there is a link to the fact (so far unexplained from the text perspective) that German and Dutch generally lack postverbal 'heavy NPs', i.e. why can their D not mimic their complementizers and subordinating conjunctions?

(Perhaps relevant is the relation in Dutch and German between definite articles and demonstratives.)
    The comparative status of right dislocation in Dutch/German and Japanese needs to be looked into.

[32]   See Kayne (2003) for some discrepancies between P and C.

[33]   If (definite) D is a necessary component of all languages, then Chinese must have an unpronounced D (and presumably Num) that is unable to participate in the kind of derivation given in (58), perhaps because it is 'final' (with an interesting learnability question attached) in the sense of Haitian/Gun D. (Thinking of Kayne (2003) on postpositions, a 'final' D might (unlike an initial one) need to be paired with a D', in addition to Num.)
    Since English allows heavy-NP shift with indefinites:
  (i) John put on the table a book that he had just bought.
it may be, if Perlmutter (1970) is right in arguing that *a* is a reduced form of numeral *one*, that indefinites always have a silent D (which would be 'initial', i.e. able to participate in (58), mimicking in that respect overt *the*).

[34]   Cf. in part Simpson and Wu (2002).

[35]   In which case sentences like (62) are compatible with the antisymmetry formulation of Kayne (1994).
    I also accept fairly well, with stress on *older* and on *never*:
  (i) (?)To any of his older friends, he never shows his work.
as opposed to:
  (ii) *To any of his older friends, he occasionally shows his work.
Similarly:
  (iii) (?)To any of the kids on the block, he didn't say anything about it at all.
  (iv) *To any of the kids on the block, he said a great deal about it.