Some Remarks on Split Controller Phenomena
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Arguments based on the coreference of two NPs in a sentence have played a significant role in the establishment of many substantial and insightful claims concerning identity deletion phenomena such as Equi, super Equi, and other constructions recently discussed by Borkin, (1972), Lawler (1972) and Green (1972). However, when the putative controllers for these deletions are "split", these arguments give conflicting results as to whether the deletion may occur. The purpose of this paper is to delineate these cases, and to discuss principles which will eliminate the inconsistency, and account naturally for variation and "fuzziness" in the data.

To begin with, I wish simply to mention the kinds of arguments I have referred to. First of all there is the reflexive argument. The reasoning is that since ordinary reflexives must have antecedents in the same simple clause, as shown by the contrast in (1), then whenever a reflexive of this type shows up, it must have had a coreferential clausemate at an earlier stage of its derivation.

1a. John pinched himself.
1b. *John told Mary that I pinched himself.
1c. *$[_s [_s$ For John to think about infinity] amuses himself].

This observation was then used to argue in particular cases that reflexives which have no overt antecedents in their superficial forms, such as those in (2) must be derived from forms such as those in (3), where they do have antecedents in the same simple clause.

2a. Help yourself!
2b. Tarzan decided to pinch himself.
2c. Thinking about himself amuses John.
2d. John recognized that it would be necessary to amuse himself.

3a. You help yourself!
3b. Tarzan decided $[_s$ Tarzan pinch himself]
3c. [John thinking about himself$_s$] amuses John.
3d. John recognized that it would be necessary $[_s$ for John to amuse himself]

Thus, arguments based on the occurrence of reflexives have been used to support a rule of Imperative Formation relating (2a) to a form including (3a), a rule of Equi-NP-Deletion relating (2b,c) to forms like (3b,c), and a rule of Super=Equi, relating forms like (2d) to forms like (3d).

Similarly, linguists observed from sentences like (5-7) that the reciprocal "pronoun" <u>each other</u> required a plural 'antecedent' in the same clause.

5a. Tom, Dick, and Harry helped each other.
5b. My cousins helped each other.
6.   *Sam helped each other.
7a. *Tom, Dick, and Harry expected [$_s$ that Sam would help each other].
7b. *My cousins arranged [$_s$ for Sam to help each other.]

On the basis of this regularity, they claimed that forms like (8), where <u>each other</u> doesn't have a plural surface antecedent in the same simple clause, are derived from structures like those in (9), where <u>each other</u> does have a plural antecedent in the appropriate position.

8.   John and Martha are likely to dislike each other.
9.   [That John and Martha will dislike each other] is likely

Thus the occurrence of a reciprocal expression has been used as evidence for a rule of subject raising into subject position.

Likewise, it was observed on the basis of sentences like (10-12) that if a clause contains two NPs and the second of them refers to a group which includes the first, then the sentence is considered grammatically deviant, even when semantically impeccable.

10a. ??I nominated us.
10b. ??Mary$_i$ told Bill$_j$ [she$_i$ would shop for them$_{ij}$ $_s$]
11a. I nominated you/myself.
11b. Mary told Bill she would shop for him/herself.
12a. I$_i$ knew Bill$_j$ would nominate us$_{ik}$.
12b. Mary$_i$ told Bill$_j$ that Sam$_k$ would shop for them$_{ij}$.

This Constraint on Inclusion was then used to argue that similarly deviant expressions such as those in (13) must be so because the NPs are in the same clause, while the 'corresponding' NPs in (14) are in separate clauses.

13a. ??I believe us to be eligible.
13b. ??Mary$_i$ says John$_j$ prefers them$_{ij}$ [to arrive on time.]
14a. I believe [that we are eligible]
14b. Mary$_i$ says John$_j$ prefers [$_s$ for them$_{im}$ to arrive on time.]

Thus, evidence based on the CoI provided one of the strong traditional arguments for subject raising into object position.

A fourth type of argument depends on the observation from sentences like (15) that certain expressions like <u>bat one's eyelashes</u>, <u>do one's best</u>, <u>make up one's mind</u>, <u>vent one's spleen</u> etc. require a subject identical to the 'owner' of the eyelashes, neck, mind, etc.

15a. John did his best to get Sara to help.
15b. *John did my best to get Sara to help.

On this basis, linguists have argued that sentences like (16) where such expressions have no overt subject, must be derived from forms like (17), where they have an overt subject.

16a. Do your (*my) best.
16b. John bought a punching bag which it will be easy to vent his spleen on.
17a. You do your (*my) best.
17b. John bought a punching bag which it will be easy [for him to vent his spleen on] \

This argument has been used to establish a rule for the deletion of second person subjects in imperatives, and recently to establish the claim that there is a rule which operates as in (16b) to delete NPs inside of relative clauses if they are coreferential to an NP outside the relative clause.

What Edes (1968) called split antecedent phenomena interacts with these arguments in a very puzzling way. Edes observed that plural pronouns could occur with split antecedents i.e. with partial antecedents in separate structural positions, which together make up the referent of the pronoun, as in (18).

18a. After John$_i$ told Sue$_j$ her slip was showing, they$_{ij}$ left the party.
18b. I$_i$ said we$_{ij}$ could bring some wine, and Jerry$_j$ agreed.

The conditions, Edes noted, are not the same for acceptable pronouns with split antecedents as they are for pronouns with single antecedents. For example, (18b) contrasts with (19), for many speakers.

19. ??I said he$_j$ would bring some wine, and Jerry$_j$ agreed.

Edes also noticed cases where the controllers for Equi-NP-Deletion were split, as in (20).

20a. Getting themselves$_{ij}$ out of Morocco worried John more than Mary.
20b. Before John could suggest winking at each other, Mary had walked out of the room.

(You notice that I am relying here on the reflexive and each other arguments to indicate that the deleted subjects of getting and winking were plural, and had as (split) antecedents the occurrences of John and Mary that show up.)

Curiously, however, the reflexive and reciprocal tests show that not all Equi deletions appear to be able to operate with split

controllers. For most speakers, (21a,b,d) are measurably worse than (20a,b).

21a. ?*John conspired with Mary to make themselves rich at my expense.[1]
21b. *I conspired with John to put ourselves at the top of the list.
21c. John and Mary conspired to make themselves rich at my expense.
21d. *John conspired with Mary to nominate each other.
·21e. John and Mary conspired to nominate each other.

But results of the idiom test conflict with this conclusion. Sentence (22a) is for most speakers, as grammatical as (22b). For some however, it is worse, though never as bad as (21a).

22a. John conspired with Mary to raise their eyebrows if any CIA agents entered the room.
22b. John and Mary conspired to raise their eyebrows if any CIA agents entered the room.

Clearly Equi can operate when the controller is split; the evidence in (20) is incontestable. But why should (21a,b,d) be ungrammatical? My first hypothesis was that
I. There is a surface restriction on reflexive and reciprocal pronouns that their surface antecedents must bear a single grammatical relation to them.
This hypothesis is supported first of all by the contrast between (20) and (21). In (20a), the split surface antecedents (SSA) of the reflexive pronouns are both subjects, in (20b), both objects. In (21a,b,d), which are ungrammatical, one is a subject, the other is not. Second, (I) is supported by cases where there is no question of a deleted cyclic antecedent. Consider for example such contrasts as those in (23) and (24).

23a. John and Mary talk about themselves.
23b. John and Mary talk to themselves.
23c. ??John talks to Mary about themselves.
24a. John and Mary were complaining to each other.
24b. John and Mary were complaining about each other.
24c. *John was complaining to Mary about each other.

In (24) there has been no deletion, but in (24c) the antecedent of the reciprocal each other is split and the sentence is unacceptable. In (24a,b) the antecedents bear the same grammatical relation to the pronoun, and the sentences are perfectly fine. Similarly in (23), except that (23c) is not as bad as (24c). It does seem to be unacceptable in some degree for all speakers I have asked. Interestingly, many speakers are much more comfortable with (25a or b) to represent what (23c) is supposed to.[2]

25a. John$_i$ talked to Mary$_j$ about himself and her$_j$.
25b. John$_i$ talked to Mary$_j$ about herself and him$_j$.
25c. ?John$_i$ talked to Mary$_j$ about her$_j$ and himself.
25d. ?John$_i$ talked to Mary$_j$ about him$_j$ and herself.
25e. ??John$_i$ talked to Mary$_j$ about her$_j$ and him$_i$.
25f. ??John$_i$ talked to Mary$_j$ about him$_j$ and her$_i$.
25g. ?*John$_i$ talked to Mary$_j$ about herself and himself.
25h. ?*John$_i$ talked to Mary$_j$ about himself and herself.
25i. *John$_i$ talked to Mary$_j$ about them$_{ij}$.

This is particularly striking evidence in view of the fact that for these speakers (26a,b) are both fully grammatical.

26a. John talked to Mary$_j$ about herself$_j$.
26b. John$_i$ talked to Mary about himself$_i$.
26c. ??John talked to Mary$_j$ about her$_j$.
26d. *John$_i$ talked to Mary about him$_i$.

That is, the reflexive can have as antecedent a constituent bearing either grammatical relation, but only one constituent may serve as antecedent in any given case. Some speakers, however, seem to have a stronger condition than (I) on the surface antecedents of relexives--for them the surface antecedent must be a subject constituent. For them, something with the meaning of (26a) is almost unsayable, and for some of them, (25e,f) are the best way out of the dilemma, while for others, (25e,f) are as bad as (25i), which is uniformly terrible.

Further corroboration is provided by the contrast between (27) and (28).

27a. ?*I told George Burns$_i$ that Gracie$_i$ arranged [for Doom$_{ij}$] to wrap themselves in the flag.
27b. ?*I told George that Gracie arranged to defend each other with penknives.
27c. *George$_i$ told me you persuaded Gracie$_i$ [for Doom$_{ij}$] to wrap themselves in the flag.
27d. *George told me you persuaded Gracie to defend each other with penknives.
28a. George$_i$ said that Gracie$_j$ arranged [for Doom$_{ij}$] to wrap themselves in the flag.
28b. George said that Gracie arranged [for Doom$_{ij}$] to defend each other with penknives.
28c. ?*I told George$_i$ you persuaded Gracie$_j$ [for Doom$_{ij}$] to wrap themselves in the flag.
28d. ?*I told George you persuaded Gracie to defend each other with penknives.

In (28a,b) the split controllers are both subjects, and the sentences are for many people measurably more acceptable than (27)

or (28c,d), although the range of acceptability for these sentences varies from about .8 to .2 on a subjective scale. For some speakers it is very difficult to judge such sentences, and judgements vary from presentation to presentation. In (27a,b) part of the split controller is a subject and part is an indirect object, and the sentences are considerably less acceptable. In (28c,d), the split controllers are both objects, and the sentences, while pretty grisly, still seem to me, measurably better than (27c,d) where one is a subject and the other an object. Other speakers may not make such subtle discriminations.

There are of course, lots of sentences where reflexives in infinitive complements will be impossible with SSA. Any sentence where a 'like-subject' verb such as <u>try</u> has a complement whose subject, deleted or not, is not coreferential to its subject will be hopelessly ungrammatical, as shown in (29). There are some verbs, such as <u>decide</u>, <u>plot</u>, which require identical subjects when they have infinitive complements, but may have non-identical subjects with <u>that</u>-clause or gerund complements, as shown in (30).

29. *$John_i$ said that $Martha_j$ tried (for $them_{ij}$) to wrap themselves in the $flag.^j$

30a. John decided to wrap himself in the flag.

30b. *John decided for Martha to wrap herself in the flag.

30c. John decided that Martha should wrap herself in the flag.

30d. $John_i$ said that $Martha_j$ decided [for $Doom_{ij}$] to wrap themselves in the flag.

For some speakers these verbs may have split antecedents, as in (30d), but for others, such sentences are as ungrammatical as (29).

A claim as sweeping as (I), of course, deserves to have its mettle tested by more than a few sentences. Notice first of all that it doesn't hold for the exceptional reflexives which don't require clausemate antecedents, where reflexivization is optional for many speakers.

31a. $John_i$ gave $Mary_j$ a picture of $themselves_{ij}$/$them_{ij}$ which was taken in Tivoli.

31b. $John_i$ told $Mary_j$ that physicists like $themselves_{ij}$/$them_{ij}$ were underpaid.

31c. I informed $John_i$ that $Mary_j$ had said that as for $themselves_{ij}$/$them_{ij}$, they would never give in.

Here the split antecedents have different grammatical roles and positions and the sentences are quite grammatical. Interestingly, and significantly, a few speakers find such sentences as (31) uncomfortable in varying degrees, regardless of the form of the pronoun with the split antecedent. But the exact form of the revision of replacement for (I) should be indicated by a systematic examination of other constructions where a reflexive might have SSA, that is, constructions where an identity deletion deletes,

with split controllers, a legitimate cyclic antecedent of a re-
flexive. Such cases include various kinds of Equi, Super-Equi,
and two rules which produce infinitives in relative constructions,
as exemplified below.[3] In all of these examples, the deletee is
supposed to be third person plural, referring to the NPs mentioned
elsewhere in the sentence.

EQUI WITH INFINITIVE COMPLEMENT

21a. ?*John conspired with Mary to make themselves rich at
my expense.

21d. *John conspired with Mary to nominate each other.

28a. George$_i$ said that Gracie$_j$ arranged [for Doom$_{ij}$] to
wrap themselves in the flag.

28b. George said that Gracie arranged to defend each other
with penknives.

EQUI WITH GERUND COMPLEMENT

32a. Gracie$_i$ talked to George$_j$ about [Doom$_{ij}$] wrapping
themselves in the flag.

32b. Gracie talked to George about nominating each other.

32c. Gracie urged that George propose wrapping themselves in
the flag.

32d. Gracie urged that George propose nominating each other.

BACKWARDS EQUI

33a. [Doom$_{ij}$'s] Nominating themselves seemed foolhardy to
John$_i$, but Mary$_j$ liked the idea.

33b. [Doom$_{ij}$'s] Nominating each other struck Mary$_i$ as unwise,
but John$_j$ liked the idea.

33c. [Doom$_{ij}$'s] Getting themselves out of Morocco worried
John$_i$ more than Mary$_j$.

33d. [Doom$_{ij}$'s] Winking at each other seemed stupider to Mary$_i$
than to John$_j$.

SUPER EQUI

34a. Bernie$_i$ told Bridget$_j$ it would be immoral [for Doom$_{ij}$]
to pay themselves.

34b. Bernie told Bridget it would be immoral [for Doom$_{ij}$]
to pay each other.

34c. Bernie said that Bridget thought it would be immoral
[for Doom$_{ij}$] to pay themselves.

34d. Bernie said that Bridget thought it would be immoral
[for Doom$_{ij}$] to pay each other.

AD$_1$ (DELETION OF THE HIGHEST SUBJECT IN A RELATIVE CLAUSE, SUBJECT
TO IDENTITY TO AN NP OUTSIDE THE RELATIVE CLAUSE)

35a. ??Maude bought Walter some paints to express themselves
with.

35b. ?*Maude bought Walter a puppet to amuse each other with.

35c. Maude$_i$ thought that Walter$_j$ should buy some paints
[for Doom$_{ij}$] to express themselves with.

35d. Maude thought that Walter should buy a puppet [for
Doom$_{ij}$] to amuse each other with.

AD$_n$ (SAME THING, BUT OVER A VARIABLE)

36a. Maude bought Walter some paints which it would be easy
to express themselves with.

36b. Maude bought Walter a puppet which it would be easy to
amuse each other with.

36c. Walter knows Maude bought some paints which it will be
easy to express themselves with.

36d. Walter knows that Maude bought a puppet which it will
be easy to amuse each other with.

Three things are evident from this comparison:
1) where reflexvies are bad, sometimes (e.g. (21) (35))
reciprocals are worse. 2) In all of these cases, SSA are better
if both bear the same grammatical relation to their verb (and
consequently to their pronoun), than if they bear different gram-
matical relations. This corroborates hypothesis (I). 3) In
some cases, (Backwards Equi, Equi with a gerund, Super equi and
AD$_n$), sentences with SSA bearing different grammatical relations
to their verbs are perfectly grammatical, while in others, such
constructions are significantly less grammatical. This clearly
requires an explanation.

Although one can arrange these results for my speech in a
squish (gradience) paradigm, the results are not by that fact
terribly enlightening:

37.

Same gram. reln.						
REFLEXIVE	✓	✓	✓	✓	✓	✓
RECIPROCAL	✓	?	✓	✓	✓	✓
Diff. Gram. rel.						
REFLEXIVE	?*-*	??	✓	✓	✓	✓
RECIPROCAL	?*-*	?*	✓	✓	✓	✓
	Forw. Equi. (Inf)	AD$_1$ 35	Equi Forw. (Ger.) 32	Super Equi 34	AD$_n$ 36	Equi Backw. 33

Indeed, the chart distinctly separates phenomena which are gen-
erally believed to be insignificantly different manifestationc of
the same principle (the Equi transformation). Merely describing
this distribution entails finding some property which distinguishes
the two classes on the left, where hypothesis (I) makes correct
predictions, from the four on the right, where it does not; ex-
plaining it will involve showing why this difference should have
this effect, and why it should be a gradient effect.

To deal with the first question first, what sorts of differences are there between the rules on the left and those on the right? To begin with, the rules on the right are all optional rules, while the rules on the left, infinitive Equi and AD_1 are (at least usually) obligatory, as evidenced in (38a,b) compared to (38c-f).

38a. *$John_i$ arranged for $himself_i$/him_i to go to Paris.

38b. *$John_i$ bought a toy for $himself_i$/him_i to give to Mary.

38c. $John_i$ bought a toy which it would be easy (for him_i) to give to Mary.

38d. (His_i) Being in jail didn't upset $Marvin_i$ as much as we feared.

38e. $John_i$ thought it would be illegal (for him_i) to pay $himself_i$.

38f. $John_i$ talked about (his_i) nominating $himself_i$.

Second, only the two rules subject to (I), Forward infinitive Equi and AD_1 are restricted to deleting a coreferential NP in the next clause down; the other rules (partly because of their optional character) may be formulated to delete across an essential variable, that is, with the controller indefinitely many clauses away from the deletee. These considerations suggest a second hypothesis to describe the cases where (I) fails to hold, of which I will give two versions.

II. The surface antecedent of a reciprocal or reflexive pronoun must bear a single grammatical relation to it, unless a. an optional rule deleted the cyclic antecedent.
    b. a rule containing an essential variable deleted the cyclic antecedent.

Before I examine the implications of these formulations, let me point out that II does not explain the gradience observed in an individual speaker, or across speakers--it is a stab at distinguishing cases where the reciprocal or reflexive pronouns are restricted to certain positions or relations.

Implications of II. First of all, both forms of II claim that Forward Equi-infinitive and Equi-gerund are distinct rules. There seem to be good grounds for wanting to maintain this. Not only is the former obligatory while the latter is optional, but, as Zwicky has observed, Equi-infinitive cases refer clearly to future time (relative to the time of the governing verb), while Equi-gerund cases are much less particular about the tense or aspect of the embedded clause.[5] Furthermore, the two rules apply in the complements of largely distinct classes of verbs, and it seems quite telling that with one of the verbs that governs Equi with both kinds of complements, the constraint (I) holds for infinitive complements, but not for gerunds, as shown in (39).

39a. ?$George_i$ said that $Gracie_j$ hated [for $Doom_{ij}$] to defend themselves with penknives.
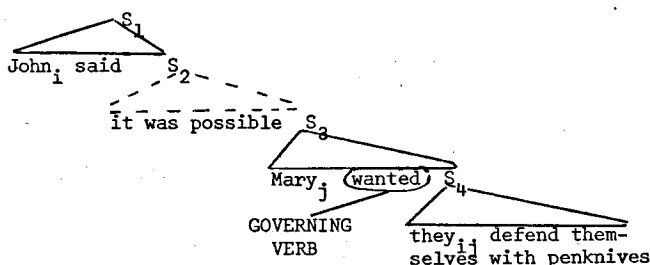
39b. ?*I told George that Gracie hated [for Doom$_{ij}$] to defend themselves with penknives.

39c. George said that Gracie hated [Doom$_{ij}$'s] defending themselves with penknives.

39d. I told George that Gracie hated [Doom$_{ij}$'s] defending themselves with penknives.

The empirical difference between Hypothesis IIa and Hypothesis IIb is that (IIa) refers to the modality of the rule (whether it must apply, or merely may), while (IIb) refers to the formal nature--whether or not the rule contains an essential variable. Neither of these factors has any obvious connection with a dependence on grammatical relations of surface split antecedents for reflexive and reciprocal pronouns. Hypothesis IIa is clearly justified by the data, Hypothesis IIb only if one accepts a form of Grinder's claim that Super-Equi contains an essential variable, and that Equi is the null-variable subcase of it. Actually, to reconcile the data in (37) with (IIb), one would have to claim that Super-equi, Backwards Equi and Equi-gerund are a single rule, distinct from forwards Equi-infinitive. This is not implausible since strict Super-Equi, backwards-Equi, and Equi-gerund are all optional and do not seem to be governed, in the sense of having apparently arbitrary exceptions while Forwards equi-infinitive is obligatory and strictly governed.[6] This accords with my gut feeling that (40a-f) are much more similar to each other than are (41a-b).

40a. John thought that it would be necessary/important/easy/ legal to pay himself out of union funds.

40b. John thought about the necessity/importance/legality/ liklihood of paying himself out of union funds.

40c. John thought about paying himself out of union funds.

40d. Paying himself out of union funds bothered John.

40e. The possibility/necessity/legality/liklihood of paying himself out of union funds bothered John.

40f. That it would be possible/necessary/legal/easy to pay himself out of union funds reassured John.

41a. Joan wanted to vote for herself.

41b. Joan wanted it to be possible to vote for herself.

It is difficult to see, however, how a generalized Equi could be prevented from applying in Forwards Equi (infinitive) cases, without the equivalent of a rule ordering statement.

Further evidence against (IIb) is provided by the fact that if sentences like (28a,b) and (39a) are (ever) grammatical, then Forward Equi (infinitive) must not be stated to refer only to the cycle on the clause containing the governing verb, since it may apply from one or more clauses above that, where the second horn of the split controller is, as shown in (42).

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                    S₁
         ╱‾‾‾‾‾‾‾‾‾‾‾‾‾‾
   John_i  said    S₂ ─ ─
              ╱ ─ ─ ─ ─ ─ ─
        it was possible  S₃
                      ╱‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾
                   Mary_j  (wanted)  S₄ ─
                   GOVERNING   ╱‾‾‾‾‾‾‾‾‾‾‾‾‾‾
                     VERB    they_i,j  defend them-
                            selves with penknives
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42. John said it was possible Mary wanted to defend them-
    selves with penknives.

While the acceptability of such sentences causes severe problems
for a theory of government in a transformational grammar without
global rules, it seems to entail claiming that Forwards Equi-
Infinitive contains an essential variable even in a grammar with
global rules. In a global grammar, one could still state a rule
of F-I-Equi which permitted such sentences as (42), distinct from
Super Equi, perhaps as follows:
    Delete the subject of the complement of a FIE-governing
    verb if it is identical to a set consisting of the sub-
    ject of the FIE verb and some NP(s) higher up the tree.
    Both IIa and IIb also claim that AD_1 and AD_n are distinct rules,
since only the latter contains a variable, and only the latter is
optional. The evidence I know of which supports this is that AD_1
is also governed, while AD_n is ungoverned. AD_1 is governed by a
rather large class of verbs including accept, bring, buy, catch,
deserve, find, get, have, know about, own, talk about, want, and
win, but not break, drop, ignore, or throw away.[7] All of these
last, however, permit AD_n as shown in (43). So Hypothesis II
seems well supported at least in the form of IIa.

43a. *John dropped a book to read himself to sleep with.
43b. John dropped a book which it would be easy to read
     himself to sleep with.
43c. *John ignored a book to read himself to sleep with.
43d. John ignored a book which it would be easy to read
     himself to sleep with.

Conclusions. Regardless of whether (IIa) or (IIb) is the more
appropriate, a couple of observations are in order.
1) The relation between optionality and variable-containing
rules is close enough to make one suspect that it is not a

coincidence. Yet not all rules with essential variables are optional, WH-relative movement for instance, and not all optional rules contain variables, for example subject-raising. Surely there is more going on here than meets the eye.

2) If, from the fact that two putative rules differ in modality, government, and acceptability of output under fixed conditions we are to conclude (as I have been) that they are distinct rules, then we must conclude that there are at least four rules which delete complement subject NPs subject to identity to a commanding controller. (I argued on similar grounds in Green (1972) that strict SE and AD_1 couldn't be the same rule.)

If this is so, then "Super equi" is one more rule that is not one rule, but a family of rules, all with similar effect on similar input. It thus joins ranks with sentence adjective phenomena (Green 1970), dative movement (Green 1973), Verb agreement$_8$(Morgan 1972), reflexive rules (Ross 1970), subject-verb inversion^8 and the extraposition rules, as target-structure creating rules. That there is a reason for languages to have target structures seems clear enough: having to learn only a limited number of surface constructions would seem to ease the burden of the language learner considerably. That a language should need four separate principles for deleting complement subjects under identity to a commanding NP or four separate principles for establishing inversion does not seem so clear or reasonable.^{9}

A final observation. At many points I have mentioned idiolect variation and reports of indecision as to the acceptability of sentences which are not contextually or semantically bizarre. Some of this variation includes judgements ranging from perfectly good to perfectly awful for the same sentence with the same interpretation. And we are not dealing with some construction limited to certain styles of speech--on which speakers of the same speech community might be expected to differ idiosyncratically. We are dealing with ordinary clausemate-antecedent reflexives--a construction which children master in the clear cases by the time they are four or so. But there is a hitch in the examples discussed here: in all of the cases where a sentence was less than perfectly acceptable it was either not the case, or not evident that it was the case, that the antecedent for the reflexive was the optimal one--the subject of the reflexive's clausemate verb. This means that it is not transparently clear (and I use this term with intentional reference to phonology) whether or not the NP in question should be reflexive. Thus in (21a,b) and (23a), the optimal antecedent is only partially coreferential to the reflexive, and this seems to be not quite coreferential enough. In sentences like (28a), the cyclic antecedent is not uniquely recoverable. As sentence (44) shows, it might be George and

44. George said that Gracie arranged to play tennis with some Marines.

Gracie, or it might be merely Gracie who/which is the subject of play. These sentences are problematical, because if Gracie is

taken as the cyclic antecedent, for the reflexive in (28a), then the reflexive themselves is deviant, but if George and Gracie is taken to be the cyclic antecedent, then this antecedent is being deleted partly by normal Equi, and partly by a generalized Equi or Super Equi. Some speakers apparently allow this; others can hardly conceive of it.

What I would like to suggest as an explanation for this echoes a conclusion of Morgan (1972): There is a simple clausemate rule for reflexives, common to all speakers of English, learned by them relatively early. But it fails to cover complex cases, such as split clausemate antecedents, and antecedents deleted under identity to split controllers. Confronted with the necessity to use or interpret such constructions, three options are available to the speaker: 1) he can judge the sentence ungrammatical because it fails to strictly meet the structural description of his reflexive rule. It may be that the constraint on inclusion is a consequence of the condition on reflexives, that structures such as (10) are forbidden because the criterion determining whether or not a NP should be reflexive cannot be satisfied. That is, the structure of (10) confounds the principle determining the occurrence of reflexives: to the extent that the object of nominate in (10a), us, refers to the speaker and is coreferential to the subject, the object should be reflexive, but the extent that it refers to the hearer, and is not coreferential to any clausemate, it should not be reflexive. Thus this NP both should and should not be reflexive. Is it any wonder that the sentence makes speakers somewhat uncomfortable? There is a similar conflict in (10b) as to whether the partial coreference of the object them to the subject she counts as coreference or non-coreference. Similarly for (31), for those speakers who find all of the sentences weird in some degree.
2) He can patch up his grammar to include some or all of the problem cases as grammatical by revising his rule, or adding auxiliary principles to his internal grammar, principles such as I and II.
3) He can refuse to deal with the problem cases--close his eyes and pretend they don't exist, as it were. This means that he will have difficulty judging the grammaticality of such sentences, may use and understand them, but will feel that they are not quite right.

Given such a set of options, it is plausible that reciprocals are subject to stronger, or merely different restrictions than reflexives, and it is no wonder that not all speakers have comparable reactions to the sentences which for me support a principle like (IIa). It is no wonder that some find many of these sentences simply hard to judge. And it is no wonder that some speakers find ungrammatical almost all of the examples crucial to support a generalization like (IIa). One thing which this shows, I think, is that when a grammatical phenomenon is fuzzy, there may be a reason for the fuzz--in this case, that the grammar has been rubbed the wrong way.

Notes

[1]From such sentences as

a. ?*John conspired with Mary to make themselves rich at my expense.
b. *I conspired with Mary to make ourselves rich at the expense of the Laputans.
c. You conspired with Mary to make yourselves rich at my expense.
d. *Mary must have conspired with you to make yourselves rich at my expense.

it appears that this is not a general phenomenon. That is, it appears that combinations of first and third persons and second and third persons work differently from combinations of third and third, and differently from each other, and that second and third works differently from third and second, but appearances are deceiving. I am convinced that if you is read as singular a reading which is forced by the addition of yourself), then (c) is as bad as (a), but the plural reading for you interferes so strongly that the sentence is heard as parallel to the perfectly good (e).

e. They conspired with me to make themselves rich at your expense.

[2]*If both NPs refer to individuals of the same number and sex, there is a real problem, which is probably most often resolved, if at all, with the choice paralleling (28c):

(i) $John_i$ talked to $Bill_j$ about $\left\{ \begin{array}{l} ??himself_i \text{ and } him_j \\ ??himself_i \text{ and } him_i^j \\ ?themselves \\ ??him_i \text{ and } himself_j \\ ??him_i \text{ and } himself_i^j \\ ?*him_i^j \text{ and } him_i \\ ?*him_i \text{ and } him_i^j \\ *himself_i \text{ and } himself_i \\ *himself_i^i \text{ and } himself_j^j \end{array} \right\}$

But these cases seem to reduce to the problem of the unacceptability or not of sentences like

(ii) Haj_i visited $George_j$'s class and $he_{\{i j\}}$ told $him_{\{i\}}$ that hedges were a squish.

[3]There are two rules which delete NPs under identity to a commanding NP which I do not consider here. The first is the deletion of the subject of a purpose clause as in (ib)

ia. I put on some perfume (in order) that I might make myself smell nice.
ib. I put on some perfume (in order) to make myself smell nice.

I have excluded it from consideration because it does not allow split antecedents at all, as the following sentences show

ic. Mary gave me a signal (in order) that we might leave to-
gether.

id. ?*Mary gave me a signal (in order) to leave together.

ie. John insisted that Mary go away (in order) that they might
make up their minds without interference.

if. ?*John insisted that Mary go away (in order) to make up
their minds without interference.

ig. John insisted that Mary go away in order to make up her
mind without interference.

ih. John insisted that Mary go away in order to assert his
dominance.

The second case I have excluded is the Government Deletion
cases of Equi discussed by Lawler, as in (iia,b)

iia. Joan wanted [Doom$_{\text{U.S. Gov't}}$] to bomb Hanoi.
iib. Dudley$_i$ voted [Doom$_{\text{SENATE}}$] to censure himself$_i$.

The reason I have excluded these cases is that it is not at all clear
what would constitute a split controller, since the 'controller' NP
is a small subset of the deletee in the first place. That is, it is
not clear that anything substantially different has happened in the
derivation of iid,e compared to iic:

iic. Rennie$_{\text{YIPPIE}}$ wants $\left\{\begin{array}{l}\text{Doom}_{\text{Yippies}} \\ \text{*Doom}_{\text{Cops}}\end{array}\right\}$ to spread themselves out.

iid. Abbie$_y$ said Rennie$_Y$ wanted $\left\{\begin{array}{l}\text{Doom}_y \\ \text{*Doom}_C\end{array}\right\}$ to spread themselves out.

iie. Someone told Abbie that Rennie wanted to spread themselves$_Y$
out.

[4]It remains a mystery to me why Equi-gerund, which is usually
optional, is not so in the case of a verb which also governs Equi-
infinitive. Compare: I hate to wash pots.
              ?*I hate for me to wash pots.
               I hate washing pots.
              ?*I hate my washing pots.

[5]It is not clear to me whether such sentences as I thought
about washing the pots are vague or ambiguous with respect to
whether what I thought about was a past action, a future action,
or a generic activity. I find all three interpretations plausible
and distinct.

[6]I know of no reason to consider strict SE or BE governed.
They seem to occur with any verb that can have a sentential comple-
ment and an argument coreferential to something in that complement.
Equi-gerund is apparently limited to verbs which permit a complement
unspecified as to time reference (cf. fn5).

[7] In Green (1972) I claimed incorrectly that both rules were governed by the same large class of verbs.

[8] E.g. those in: Who can you trust?
                       Here comes the bus.
                       Into the room ran a little old man.
                       Never have I seen him so angry.

[9] For that matter, it is not clear why English should have the movement rules which feed the subject inversion rules, but given that it does, those subject-verb inversion rules perform the function of reserving the second major constituent position in the sentence for the verb.

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