A Reconsideration of Island Repair by Deletion
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I. Instances of repair

A. The classic paradigm

(1) I believe that he bit someone, but they don't know who (I believe that he bit)
(2a) *I believe the claim that he bit someone, but they don't know who I believe the claim that he bit [Complex NP Constraint, noun complement]
   b(??) I believe the claim that he bit someone, but they don't know who
(3a) *Irv and someone were dancing together, but I don't know who Irv and were dancing together [Coordinate Structure Constraint]
   b(??) Irv and someone were dancing together, but I don't know who
(4a) *She kissed a man who bit one of my friends, but Tom doesn't realize which one of my friends she kissed a man who bit [Complex NP Constraint, relative clause]
   b(??) She kissed a man who bit one of my friends, but Tom doesn't realize which one of my friends
(5a) *That he'll hire someone is possible, but I won't divulge who that he'll hire is possible [Sentential Subject Constraint]
   b (?) That he'll hire someone is possible, but I won't divulge who

All above from Ross (1969)

(6) Ross argues that the phenomenon of island violation repair provides "evidence of the strongest sort that the theoretical power of [global] derivational constraints is needed in linguistic theory..." [p.277]

(7) "If a node is moved out of its island, an ungrammatical sentence will result. If the island-forming node does not appear in surface structure, violations of lesser severity will (in general) ensue.” [p.277]

(8a) (*) I don't know which children he has plans to send to college
   b He has plans to send some of his children to college, but I don't know which ones

Chomsky (1972)
(9) I don't know which children

NP  
|  
he

IP  
|  
I

VP  
|  
V

NP*

has plans to send them to college

(10) Chomsky rejects global derivational constraints, and suggests [see also Baker and Brame (1972), and, for an opposing view, Lakoff (1970), Lakoff (1972)] that * (# in Chomsky's presentation) is assigned to an island when it is crossed by a movement operation (the complex NP in (9)). An output condition forbidding * in surface structures accounts for the deviance of standard island violations.

(11) If a later operation (Sluicing in this case) deletes a category containing the *-marked item, the derivation is salvaged.

(12) For Chomsky (1972), the condition banning * applies at surface structure. The results are the same if, instead, it is a PF condition, as suggested by Lasnik (1995b), Lasnik (2001a).

**B. Possible approaches not requiring repair**

i) When ‘repair’ takes place, islandhood was not real

(13) “As regards [(3)b], many speakers find it completely ungrammatical.” Baker and Brame (1972)

(14) Mary met a man who had worked for someone famous, but she wouldn't tell me who

(15) *Mary met a man who had worked for someone famous, but she wouldn't tell me who she met a man who had worked for

(16) Mary met a man who had worked for someone famous, but she wouldn't tell me who the man had worked for Baker and Brame (1972) [and see below for more discussion of a similar proposal by Merchant (2001)]

ii) 'Pseudosluicing' (something like clefting) [First suggested by Erteschik (1973)]

(17)a Someone just left - guess who it was 'Pseudosluicing' (something like clefting)]

b Someone just left. Who was it?

(18)a Irv and someone were dancing together, but I don't know who it was

b Irv and someone were dancing together. Who was it?

(19) Maybe there is no island to repair on this copular analysis.

(20) Merchant raises the question of the ultimate source of the copular sentences, and suggests that they are actually reduced forms of clefts with an extracted wh-phrase as pivot, as in:
(21) Guess who [it was __ that just left]

(22) But on such an account, Pseudosluicing actually wouldn't address the basic phenomenon at issue - lack of island effects - since as has been known since Ross (1967), clefts obey all the same island constraints as wh-interrogatives do.

(23) Further all such accounts take it for granted that English actually has the ellipsis process illustrated in (17) and (18). I know of no evidence that this is true, and there is reason to doubt that it is.

(24) [There is a knock at the door. The occupant of the room says]
   Who *(is it)

(25) At any rate, Merchant argues convincingly that Pseudosluicing in any form cannot provide a general analysis for the Sluicing phenomenon, hence cannot provide a general answer to the repair problem.

(26) In German, PPs can be 'survivors' of Sluicing, but can’t be pivots of clefts:
(27) *Mit wen war es, daß er gesprochen hat?
   with who was it that he spoken has
(28) Er hat mit jemandem gesprochen - rate mal mit wen!
   He has with someone spoken - guess PRT with who

(29) Further, crucially, PPs can be survivors even in island contexts.
(30) Anke wird sich ärgeren, wenn Peter mit einem der Lehrer
   Anke REFL upset if Peter with one of the teachers
   spricht, aber ich weiß nicht mehr, *(mit) welchem.
   speaks but I know not more with which
   ‘Anke will get upset if Peter talks to with one of his teachers,
   but I don’t remember which.’

(31) Romanian seems to have no cleft constructions at all, but still has Sluicing.
(32) *E Ion {ce/care} a cîştigat premiul întâi
   is Ion that/who has won prize.the first
   ‘It’s Ion that won first prize.’
(33) *E Ion pe care (l-) am întîlnit ieri
   is Ion ACC who him- have.1sg met yesterday
   ‘It’s Ion who I met yesterday’
(34) Cine-va a cîştigat premiul întâi – ghici cine!
   someone has won prize.the first guess who
   ‘Someone won first prize – guess who!’

iii) Sluicing as LF copying, not PF deletion, hence no movement in the ellipsis site

(35) Chung et al. (1995) argue that the amelioration of island effects with Sluicing follows from their account, in which there is no movement or deletion involved, but a type of LF copying.
However, Merchant (2001), following Ross (1969), provides strong evidence that syntactic movement (and hence deletion) is involved in Sluicing constructions. The evidence involves:

'Case matching': In overtly Case inflected languages (such as German), the Case of the survivor is just what the Case of the fronted WH expression would have been in the non-elliptical form, and crucially this is true even in the island violation configurations (though for Merchant, there turns out to be some equivocation on this point; more on this below).

Er will jemandem schmeicheln, aber sie wissen nicht, he wants someone.DAT flatter but they know not *wer / *wen / wem who.NOM who.ACC who.DAT 'He wants to flatter someone, but they don't know who.' Merchant, p.89

Sie will jemanden finden, der einem der Gefangenen geholfen hat, aber ich weiss nicht, she wants someone find who one.DAT of the prisoners helped has but I know not *welcher / *welchen / welchem which.NOM which.ACC which.DAT 'She wants to find someone who helped one of the prisoners, but I don't know which.' Merchant, p.91

And preposition stranding: In languages that allow P-stranding (such as English), the survivor can be the bare object of a preposition; in languages that don't (such as Greek) overwhelmingly it can't, and, crucially, this is true even in the island violation configurations.

Peter was talking with someone, but I don't know who Merchant, p.92

Peter's mom will get angry if he talks with someone from his class, but I don't remember who

I Anna milise me kapjon, alla dhe ksero *(me) pjon the Anna spoke with someone but not I know with who

I mitera tou Giannis tha thimosi an milisi me kapjon the mom of Giannis FUT get.angry if he.talks with someone apo tin taksi tou, alla dhe thimame *(me) pjon from the class his but not I.remember with who

'Giannis's mom will get angry if he talks with someone from his class, but I don't remember who.'

iv) Resumption: Either no movement in the ellipsis site, just base-generation of a resumptive pronoun; or movement leaving a resumptive not subject to islands
The Brazilian team improved after somebody from Ajax started playing for them, but I can't remember who. He wants to interview the woman who wrote some play, but I can't remember what play.

Merchant gives several arguments that resumption can’t be the general solution to the ‘repair’ problem:

a) There are wh-expressions with no corresponding resumptive forms (in English and cross-linguistically) that still display repair in Sluicing:

(48)a * Where does he want to find a person [who camped (there)]?
b * Where is she looking for journal entries [that describe a battle (then)]?

(49)a He wants to find a person who has lived somewhere specific in the Pacific but I can't remember where.
b She is looking for journal entries [sic] that describe a battle {at a certain time/in a certain year}, but I don't remember when.

b) While moved wh-phrases always take their case from their base position, wh-phrases linked to resumptives need not do so, and in general cannot. appearing instead in some default case if possible:

(50) The police said that finding someone's car took all morning, but I can't remember
   a. whose
   b. *who

(51)a * Who did the police say that finding his car took all morning?
b * Whose did the police say that finding (his) car took all morning?

[Merchant hints that a variety of other languages that he investigated support this general point. However, in the section where he discusses this, he points out that none of the languages actually has relevant resumptive pronouns. This leads to a different argument:]

c) There are languages that seem to lack the resumptive pronoun island strategy but that still display apparent island violation repair under Sluicing (and with Case matching).

Merchant presents evidence from German, Russian, Polish, Czech, and Greek.

So it seems as if there is island violation repair (but see below for further discussion). Maybe along the lines of Chomsky (1972)?

Possible problem: In Chomsky's approach, "a new element is introduced..."

Lakoff (1972, p.81)

Kitahara (1999) gives an argument reminiscent of Lakoff's against an approach like Chomsky's (though for a slightly different phenomenon - ECP reduction to mere
Subjacency via deletion of *-marked trace à la Chomsky (1991), Chomsky and Lasnik (1993):

(56) "... a *-feature, which is not a lexical feature – since it appears nowhere in the lexicon – ... enters into a derivation as the output of certain movements. ...this assumption violates the Inclusiveness Condition.” p.79

(57) Technical, semi-serious, solution to the Inclusiveness problem: Everything is 'born' with a ✓. When a violation occurs, the ✓ is erased. A representation with an item lacking a ✓ is unacceptable.

(58) “It is important to note that [the # introduced in Chomsky’s derivation] must be 'invisible' with respect to deletion under identity, since when Sluicing applies, the deleted portion of the tree will contain this element, while the deleting portion will not.” Lakoff (1972)

(59) And Merchant (2001) gives an empirical argument against Chomsky's (1972) approach, based on instances of:

II. Failure of island violation repair

(60) *They want to hire someone who speaks a Balkan language, but I don't know which they do [VP want to hire someone who speaks t] Merchant (2001)

(61) Compare (62), which also involves a relative clause island:

(62) They want to hire someone who speaks a Balkan language, but I don't know which (Balkan language) [IP they want to hire someone who speaks t] Merchant (2001)

(63) In fact, Chung et al. (1995) had already claimed that Sluicing and VP ellipsis diverge in this way, concluding that the latter, unlike the former, is an instance of deletion. Their example involved an adjunct island:

(64) We left before they started playing party games.
*What did you leave before they did [VP start playing t]?

(65) Note, though, that this case, unlike Merchant's, is actually consistent with Chomsky's account (which Chung et al. (1995) do not consider), as the island is not eliminated in (64), unlike the situation in (60).

(66) Merchant, on the other hand, takes all ellipsis to be PF deletion, and argues that only some islands represent PF effects. Others, especially including relative clause islands, are LF constraints, and their violation therefore cannot be repaired by ellipsis, a PF process.

(67) (62) is then reanalyzed as:

(68) They want to hire someone who speaks a Balkan language, but I don't know which (Balkan language) [IP she should speak t] [See also Baker and Brame (1972)]

(69) They hired someone who speaks a Balkan language – Guess which [she speaks t]

(70) *They didn’t hire anyone who speaks a Balkan language, but I don’t remember which

(71) *They didn’t hire anyone who speaks a Balkan language, but I don’t remember which she speaks Merchant pp. 211-212
BUT cf.

(72) No one had a student who worked on a certain Balkan language, but I can't remember which Balkan language Lasnik (2001b)

(73) *No one had a student who worked on a certain Balkan language, but I can't remember which Balkan language she worked on.

OR even

(74) They didn't hire anyone who speaks a certain Balkan language, but I don't remember which.

(75) There are also cases where structure that includes the island must exist in the Sluicing site in order to license an item in the Sluicing remnant:

(76) Every linguist here complained because Language published a certain kind of review of his latest book, but I'm not sure just what kind of review of his latest book

(77) *Every linguist here complained because Language published a certain kind of review of his latest book, but I'm not sure just what kind of review of his latest book every linguist complained because Language published

(78) *What kind of review of his latest book did Language publish

(79) Every linguist, met a philosopher who criticized some of his, work, but I'm not sure how much of his, work [every linguist, met a philosopher who criticized it]

(80) Each of the linguists met a philosopher who criticized some of the other linguists, but I'm not sure how many of the other linguists

(81) !How many of the other linguists did the philosopher criticize

(82) Consider now Merchant's PF islands: COMP-trace effects; derived positions (topicalizations, ?subjects)

(83) It appears that a certain senator will resign, but which senator [it appears that it will resign] is still a secret [adapted from Merchant p.185]

(84) Sally asked if somebody was going to fail Syntax One, but I can't remember who [Sally asked if it was going to fail Syntax One] Merchant p.185, from Chung et al. (1995)

(85) She said that a biography of one of the Marx brothers is going to be published this year, but I don't remember which [she said that a biography of it is going to be published this year] [adapted from Merchant p.185]

(86) Recall the apparent failure of island violation repair with Merchant's LF island:

(87) *They want to hire someone who speaks a Balkan language, but I don't know which they do [vp want to hire someone who speaks it]

(88) Surprisingly, we find the same apparent failure of repair with Merchant's PF islands [Lasnik (2001)]:

-7-
It appears that a certain senator will resign, but which senator it does [appear that t will resign] is still a secret [that-trace]

Sally asked if somebody was going to fail Syntax One, but I can't remember who she did [ask if t was going to fail Syntax One] [if-trace]

*She said that a biography of one of the Marx brothers is going to be published this year, but I don't remember which she did [say that a biography of t is going to be published this year] [subject condition]

And now notice that parallel 'failure of repair' obtains even when there was no violation in the first place.

*They said they heard about a Balkan language, but I don't know which Balkan language they said they heard about

Similarly for extraction out of an object NP:

*They heard a lecture about a Balkan language, but I don't know which Balkan language they heard a lecture about

Even short movement of a direct object shows rather similar behavior:

*They studied a Balkan language but I don't know which Balkan language they studied

Is VPE blocked when Sluicing is available (Merchant's MaxElide, sort of 'Delete as much as you can')?

Someone solved the problem. Who (?)did)?

Is a VPE site precluded from containing a WH trace?

I know what I like and what I don't Merchant p.58 [See Fiengo and May (1994) for similar examples.]

III. Towards a Solution [This section is based on Fox and Lasnik (2003)]

The constraint seems to be specific to VPE, and seems limited specifically to circumstances where an indefinite antecedes a WH-trace.

For the ill-formed VPE cases above, which contrasted with the Sluicing examples, the fact that VPE deletes a smaller portion of the structure than Sluicing (IP ellipsis) could be relevant.
But first, a prior question: Why can an indefinite antecede a WH-trace?

An old idea: a WH expression combines an interrogative and an indefinite. (See, among many other references, Stockwell et al. (1973, p.606)

The 'trace' is the indefinite.

Fred said that Mary talked to a certain girl, but I don't know which girl <Fred said that Mary talked to t>

Suppose, following Chung et al. (1995), that the indefinite must be bound by existential closure in a way that is parallel to the wh-dependency in the sluiced clause

And suppose, contra Merchant (2001), that formal parallelism is required for ellipsis. This is satisfied since the variables in the antecedent and the elided clause are bound by parallel operators and from parallel positions. [The verbal morphology facts discussed in Section 1, Part IV support the idea that some kind of formal identity is required for ellipsis.]

Now notice that in the structure shown, there are no intermediate traces in the elided portion (in angle brackets), indicating that there were no intermediate landing sites in the movement.

If there had been successive movement, under plausible assumptions the relevant portions of the antecedent and the ellipsis site would not be parallel, and this would prevent ellipsis.

This seems to be problematic under the assumption that successive cyclic movement is required by considerations of locality.

But as discussed earlier, considerations of locality are nullified under deletion (island repair, as in the proposal of Chomsky (1972) or Lasnik (2001a)).

But why is there no 'repair' with VPE?

VPE involves deletion of a smaller constituent than the clause that is elided in sluicing (VP vs. TP):

which girl [TP he T [AspP did <VP say that I talked to g(girl)>]]

*Fred said that Mary talked to a certain girl, but I don't know which girl he did

The unacceptability of VPE follows if we assume that one of the two remaining maximal projections, AspP or TP, is an 'island' that must be circumvented by adjunction or repaired by deletion. [This roughly follows the claim of Chomsky (1986) that all XPs are potential barriers.] Since the island is not deleted, the escape hatch is required, and a violation of Parallelism is unavoidable.

An interesting consequence of this line of analysis: Movement must not be allowed to proceed in one long 'island-violating' step followed by short successive steps. If this were allowed, the ellipsis site could lack any intermediate traces, making it parallel to its antecedent. And the undeleted portion could be free of *s.
Metaphorically, when you enter the subway, once you have chosen the express, you can't switch to a local train at a local stop.

This line of reasoning straightforwardly covers the badness of the classic island situations discussed by Merchant.

IV. Another Look at a Resumption Strategy

A. Responses to Merchant’s arguments

Wang (2007) and Boeckx (2008) reject Merchant’s Case matching argument against a resumption approach.

Wang, in particular, indicates that if resumption in the relevant instances involves movement, rather than base generation, Case matching can be accommodated. The exact mechanism, though, is not clear.

Boeckx suggests another kind of approach, indicating that Wang’s specific approach is incompatible with Boeckx’s theory of resumption under movement. Instead, Boeckx indicates that Case matching might be instantiated through non-syntactic means, based on “recoverability of case information”. Here too, the exact mechanism is not clear.

Boeckx also rejects Merchant's argument based on apparent island repair in languages lacking resumptive pronouns. Boeckx observes that resumptive pronouns look like regular pronouns, so “the claim that a language lacks resumptive pronouns ... comes close to meaning that such a language lacks pronouns”.

“No language has a pronominal paradigm exclusively devoted to resumption.”

So in languages that seem to lack resumptives, what is really lacking is pronounceable resumptives, analogous to the proposal of Kennedy and Lidz (2001) that “long-distance reflexives exist in English, but they are confined to ellipsis contexts because the language lacks the right morphology to spell them out.”

This is an intriguing possibility, but one seemingly at odds with (131).

Another possible response to Merchant: Virtually all of his examples arguing against resumption as the explanation of apparent island repair involve islands that Merchant claims cannot be repaired by ellipsis. Hence, for Merchant, there was no violation in the first place, rather, there were ‘short’ sources.

BUT see pp.6-7 above for my argument that short sources are not always available, so that even Merchant’s LF islands must, in fact, be repairable by ellipsis.

B. When resumptives are unavailable

Wang (2007) argues that when resumptives are genuinely not available, repair is likewise impossible:

Sprouting

* Agnes wondered how John managed to cook, but it’s not clear what food Agnes wondered how he managed to cook RP>
b  Agnes wondered how John managed to cook [a certain food], but it’s not clear what
food <\textsubscript{rp} Agnes wondered how he managed to cook RP>

**Adjuncts**

(138) *He wants to interview someone who works at the soup kitchen for a certain reason, but
he won’t reveal yet why [ex. from Merchant (2001)]

(139) “… the non-nominal nature of such phrases blocks the resumptive strategy.”

More examples:

(140) *Mary met a student who solved the problem (somehow), but I'm not sure exactly how
(141) *That Susan will solve the problem (somehow) is unclear, and I think I know how

(142) Possible interfering factor for this part of Wang’s argument:

(143) As Benjamin Bruening pointed out to me, it is generally very difficult to get 'long
distance' readings of wh-adjuncts in Sluicing constructions altogether:

(144) John left (for some reason), but I don't know [\textsubscript{cp} exactly why [\textsubscript{ip} John left \textsubscript{t}]]

(145)*Mary claimed that John left (for some reason), but I don't know [\textsubscript{cp} exactly why [\textsubscript{ip} Mary
claimed [that John left \textsubscript{t}]]]

**Idioms?**

(146) Yoshida and Rottman (2010) argue that, consistent with Wang’s claim that resumptives
involve D-linking, idiom chunks cannot be associated with resumptives. Yet, according
to Yoshida and Rottman, they can participate in island repair.

(147) The professor praised the student who made good headway in his project, but I don't
know how much (headway).

(148)a  *John made good headway in his project, but Mary couldn't have made it yet.
   b  *How much headway can satisfy Mary if John makes it in their project?

(149) The professor didn't scold anyone who made certain headway in his project, but it's not
clear how much headway

(150) Each of the lab members is jealous because one of the lab managers helped make some of
the others' headway, but I don't know how much of the others' headway.

Possible additional example:

(151) John is angry because Mary paid a certain amount of attention to this problem, but I don’t
know exactly how much attention

(152) *How much attention is John angry because Mary paid (it) to this problem

**Reconstruction**

(153) It is well established that there can be reconstruction with Sluicing, mirroring the
reconstruction found with standard wh-movement. Can there be reconstruction with
resumptives?
BUT

Both Aoun et al. (2001) and Boeckx and Hornstein (2008) further show that there is no reconstruction into islands with resumptives.

[All from Aoun et al. (2001)]
Yet under Sluicing, reconstruction is available even into islands. Some instances were given above in (76), (79)-(80).

An additional example:

No politician likes reporters who reveal certain kinds of stories about his campaign, but I’m not sure exactly what kinds of stories about his campaign

ON THE OTHER HAND

There is evidence that in some languages, some resumptives inside islands do allow reconstruction:

Above Jordanian Arabic ex. is from Guilliot and Malkawi (2011), who present evidence that ‘weak’ resumption, but not ‘strong’ resumption, allows reconstruction into islands.

However “Welsh resumptive relative constructions where the pronoun is contained in an island systematically resist reconstruction.” Rouveret (2011, p.42)

Research question: Does Sluicing in what would be island configurations differentially allow reconstruction in these two kinds of languages? If so, that might be a powerful argument for the resumptive approach to island violation repair. But if in both types there is reconstruction into islands with Sluicing ...

ON THE THIRD HAND

There is strong evidence that, contrary to standard claims, at least in English resumption does not repair island violations. [That-trace type violation yes, but Subjacency violations no.]
To the extent that this is so, resumption could not be what is generally responsible for island violation repair under Sluicing.

Alexopoulou and Keller (2007) report that, based on their magnitude estimation acceptability study, that “resumption does not remedy island violations: resumptive pronouns are at most as acceptable as gaps, but not more acceptable.” This result obtained for a ‘weak’ island and for a ‘strong’ one:

Weak-island condition (whether-clause)
- a. Who does Mary wonder whether we will fire /him?
- b. Who does Jane think that Mary wonders whether we will fire /him?

Strong-island condition (relative clause)
- a. Who does Mary meet the people that will fire /him?
- b. Who does Jane think that Mary meets the people that will fire /him?

Heestand et al. (2011) obtained similar results, for several types of complex NPs and for adjunct islands, using on-line and off-line acceptability judgment tasks.

Their experiments “showed that RPs have no rescuing effect for violations of complex NP islands.”

Likewise, for adjunct islands “sentences with RPs again showed no advantage over sentences with gaps.”

IV. Some approaches to island constraints and repair by deletion giving substance to the idea of PF islandhood (and not requiring *-marking of islands):

Multiple Spell Out (Uriagereka (1999)): Assume the first step of Kayne's LCA
- a. If A c-commands B then A precedes B (defined on terminals).

Then for complex A, SO ‘flattens’ the structure C that contains A and c-commands B, destroying internal phrasal boundaries. This essentially turns C into a terminal and allows it to linearize via (165)a.

This deduces many islands (basically all non-complements).

Now suppose this flattening is optional. If it is not done, extraction will be possible, but, of course, linearization will ultimately fail (as the cycle demands that there will be no later opportunity to flatten).

But it won't fail if the problematic material is rendered invisible to phonetics. Thus, repair of (at least these) islands by deletion.

Fox and Pesetsky (2003) propose that at each spell-out domain, linear ordering statements are added to an ever growing Ordering Table.

When movement does not proceed from each successive phase edge, contradictory ordering statements ultimately appear in the Table.

When deletion takes place, it can have a salvation effect by eliminating all statements involving deleted material, including the contradictory statements that can result from moving too far in one jump. Island violation repair is one such situation.
References


