Sluicing, Idioms and Island Repair

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Abstract

This short note investigates idiom reconstruction in the context of sluicing constructions. We demonstrate that some idioms in English are not compatible with resumptive pronouns. Based on this observation, we argue that sluicing involves wh-gap dependencies rather than wh-resumptive pronoun dependencies, and that the island amelioration effect of sluicing does not result primarily from the island amelioration effect of resumptive pronouns.

Keywords

sluicing, idiom reconstruction, islands, island amelioration, resumptive pronouns
1. Introduction

1.1 Sluicing and Island Amelioration

As is well known, sluicing does not show some of the structural properties that non-elliptical wh-movement shows. Ross (1969) reports\(^1\), for instance, that sluicing ameliorates island violations (see also Chung, Ladusaw and McCloskey, 1995, Lasnik, 2001, Merchant, 2001 among others). The following contrast illustrates the island amelioration effect of sluicing.

(1) They want to hire someone who speaks a Balkan language, but I don’t remember which (Balkan language) (*[TP they want to hire [NP someone [CP who speaks ___]]]).

In (1), the Complex NP Constraint is violated. In the context of sluicing, the CNPC violation does not give rise to unacceptability, unlike regular wh-movement. As Merchant (2001) clearly shows, studying island amelioration can provide us with a good understanding of the nature of island constraints (see also Boeckx, 2008b, Hornstein, Lasnik and Uriagereka, 2007 for a similar point). As such, several different approaches to island amelioration have been proposed in the literature (Boeckx, 2008a, Chung, Ladusaw and McCloskey, 1995, Erteschik-Shir, 1977, Lasnik, 2001, 2005, 2007, Merchant, 2001, Pollmann, 1975, Wang, 2007). The purpose of this study is to critically evaluate one of the approaches to island amelioration effects under sluicing, namely the resumptive pronoun approach (Boeckx 2008a, Wang 2007). As Boeckx (2008a) argues\(^2\), the advantage of the resumptive pronoun approach to island amelioration is clear: the island repair effects of sluicing can be attributed to the independently observed island repair effects of resumptive pronouns (Boeckx 2008a: 218). Thus, one need not assume anything special about sluicing with respect to island repair effects. Indeed, Merchant (2001: 128-145) acknowledges the advantage of the resumptive approach. Yet, under a critical analysis, he concludes that the resumptive approach is not tenable based on four separate arguments, which we describe in
detail below. In response, however, Boeckx and Wang argue that none of Merchant’s arguments are strong enough to exclude the resumptive approach. Given the advantage of the resumptive approach, we contend that any argument in support of it requires serious attention and careful evaluation. As far as we know, however, no careful evaluation of Boeckx and Wang’s arguments has been undertaken in the literature. Therefore, in this study we would like to critically investigate their arguments. In line with Merchant, we conclude that island amelioration effects under sluicing cannot be attributed solely to the presence of resumptive pronouns. Specifically, our conclusion crucially depends on idioms under sluicing, as in (2).

(2) a. John pulled strings to get his position, but I don’t know which strings.
    b. I heard John made headway on his project, but I don’t know how much headway.

We show that these idiom chunks are not compatible with resumptive pronouns, i.e., island-violating idiom wh-questions cannot be salvaged by resumptive pronouns.

(3) a. *Which strings was Mary angry because John pulled t/Them?
    b. *What headway did the project get funded [because she was finally able to make t/it]?

Crucially, however, idioms appear in a sluicing context in which islands are violated, as the following examples suggest.

(4) a. Mary was angry because John pulled strings to get his position, but no one knows which (strings) (*[TP she was angry because he pulled ø/them]).
    b. Mary was jealous because John made headway on his project, but we don’t know how much (headway) (*[TP she was jealous because he made ø/it]).

1.2 Two Types of Approaches to Island Amelioration Effects

Under the assumption that clausal ellipsis in sluicing is associated with full-fledged clausal
structure (Lasnik, 2005, 2007, Merchant, 2001), the controversy with regard to the island amelioration effect under sluicing is concerned with the type of wh-dependency involved in sluicing. One of the controversies, which we focus on in this study, is whether sluicing involves a wh-gap (either trace or copy) dependency, like non-elliptical wh-interrogatives (Lasnik, 2001, 2005, Merchant, 2001), or a wh-resumptive pronoun dependency (Boeckx, 2008a, Wang, 2007). These two approaches suggest different views on the nature of islands. Roughly, under the theories that incorporate a wh-gap dependency, islands are understood as illegitimate representations at PF. Thus, PF-deletion operations, such as sluicing, can ameliorate island violations (Merchant 2001; Lasnik 2001, 2005 among others, cf., Chung, Ladusaw and McCloskey, 1995). On the other hand, under the theories incorporating a wh-resumptive chain, islands are understood as a condition on syntactic derivation, and not as a matter of ‘pronunciation’ of the island domains (Boeckx, 2008a, b, Wang, 2007).

1.3 Idiom Reconstruction Under Sluicing

Part of the idiom chunk of some idiomatic expressions can be moved to the left by means of wh-movement.

(5) a. John pulled strings to get his position.
    b. Which strings did John pull to get his position?

(6) a. John made headway on his project.
    b. How much headway did John make on his project?

among others). Like the non-elliptical wh-movement sentences in (5b) and (6b), we can find the same type of idiom in a sluicing context.

(7) a. John *pulled strings* to get his position, but I don’t know which *strings*.
    b. I heard John *made headway* on his project, but I don’t know how much *headway*.

In (7), as in non-elliptical wh-sentences, there can be idiomatic interpretations in sluiced clauses. Following the standard argument, examples like (7) suggest that the idiom chunk is reconstructed, and that the type of wh-movement involved in non-elliptical wh-movement sentences is also involved in sluicing. Therefore, idioms under sluicing can provide additional evidence for the wh-movement analysis of sluicing (Lasnik, 2001, Merchant, 2001, Ross, 1969, among others). We specifically point out that the evidence from idiom reconstruction is not easily captured under the resumptive analysis for island amelioration effects of sluicing (Boeckx, 2008a, Merchant, 2001, Wang, 2007).

2. Resumptive Approaches to Island Amelioration

Wang (2007) and Boeckx (2008a) argue for a resumptive pronoun approach to the island amelioration effect of sluicing. They attempt to link the island amelioration effect of sluicing to the island amelioration effect of resumptive pronouns. It has long been claimed in the literature that resumptive pronouns have a ‘saving function’: a resumptive pronoun is possible only when the derivation with a gap is ruled out for the violation of syntactic constraints³ (Aoun, Choueiri and Hornstein, 2001, Aoun and Li, 2003, Chomsky, 1982, Erteschik-Shir, 1992, Hornstein, Lasnik and Uriagereka, 2007, McDaniel and Cowart, 1999, McKee and McDaniel, 2001, Ross, 1967, Sells, 1984, Shlonsky, 1992, among others). Boeckx, adopting Wang’s argument, argues that if sluicing involves resumptive pronouns, and if resumptive pronouns may repair island violations, then sluicing should repair island violations. Note that the recent analyses of
resumptive pronouns assume that resumptive constructions involve regular wh-movement and that resumptive pronouns are ‘derivational residue’ of wh-movement (Boeckx, 2001, 2003, 2008a, Boeckx and Hornstein, 2008, Wang, 2007). Thus, the derivations assumed in resumptive pronoun analyses and other movement analyses are the same, as long as wh-movement is concerned. The difference lies in how they analyze island-repair effects. Under the resumptive pronoun analyses, the island-repair effects of sluicing are attributed to the independently attested cases of island-repair effects of the resumptive strategy. Under non-resumptive analyses, it must be attributed to some other means. Thus, an appealing feature of resumptive pronoun analyses is that one need not assume anything special about the island repair effect of sluicing.

Merchant (2001), however, provides arguments against the resumptive pronoun approach to the island amelioration effect of sluicing. Merchant points out that there are at least four arguments against resumption analyses of island repair, namely that: i) Case mis-match effects suggest that sluicing does not involve wh-resumptive chains; ii) some languages that lack resumptive pronouns nonetheless allow sluicing and exhibit island amelioration effects under sluicing; iii) a wh-phrase associated with a trace can have a functional reading, whereas one associated with a resumptive pronoun cannot; iv) his p-stranding generalization (i.e., the observation that languages seem to allow P-stranding in both wh-movement and sluicing constructions, or in neither) favors the wh-movement approach. What follows are Merchant’s arguments and Boeckx’s and Wang’s responses.

2.1 Case mis-match effects

Merchant’s first argument against the resumption analysis of island repair involves case (mis-)match effects. Merchant argues that a sluiced wh-phrase typically receives the same case as its antecedent, and thus the sluiced wh-phrase is generated in the same configuration as its
antecedent in the underlying structure. A wh-phrase linked to a resumptive pronoun, however, does not need to have the case that is assigned to the position that the resumptive pronoun occupies, which is the original position of the wh-phrase if the pronoun is not resumed. Thus, they tend not to be case-marked, or they bear default case. Merchant (2001: 133) cites examples like (8) and (9):

(8) *Whose_{i}/who_{i} did the police say that finding his_{i} car took all morning?

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

The case of the sluiced wh-phrase in (9) must match its genitive antecedent someone’s as in (9a), whereas the grammatical resumptive in (8) displays a case mis-match, and consequently the case-matched example is ungrammatical. If sluicing involves a wh-resumptive chain, we would expect the same case pattern in sluices and the resumptive sentences, contrary to fact. Thus, Merchant argues that sluicing does not involve wh-resumptive chains.

Wang (2007) notes that Merchant considers resumptive chains where a higher element binds a lower resumptive pronoun. He argues, however, that resumptive chains involve wh-movement, adopting Boeckx’s (2003) theory of resumptive pronouns. Wang and Boeckx regard resumptive pronouns as ‘derivational residue’ of wh-movement, and accordingly, an argument against the ‘traditional’ analysis of the resumptive chain does not necessarily apply to his analysis. Furthermore, adopting this movement construal of resumption, Boeckx (2008a) contends that antecedents of resumptive pronouns do not participate in case-checking before movement like the wh-phrase in a non-resumptive chain. Thus, the wh-phrase does not receive case and, consequently, bears the default case. Boeckx further argues that default case is ‘assigned’ in PF. Employing the PF approach to the default case, he argues that the case
morphology on the wh-phrase in sluicing, which is assigned at PF, must be the same as the case morphology of the indefinite DP, which serves as the antecedent of the wh-phrase, for the reason of recoverability: under sluicing, the resumptive pronoun, which receives and manifests the case morphology, is absent at PF. Boeckx (2003: 219) contends that “the case morphology assigned to the wh-remnant at PF must be the same as the one borne by the relevant element in the antecedent clause for reasons of recovery.” Thus, this recoverability requirement demands the dependent wh-phrase to have the same case morphology that is assigned to the resumptive pronoun, which coincides with the indefinite DP in the antecedent clause. Following this type of argument, Boeckx concludes with the fact that the sluiced wh-phrase has a specific case morphology that does not entail the absence of a resumptive pronoun in the ellipsis.

The approach that Boeckx takes in response to Merchant’s criticisms, however, does not seem to be convincing, because Boeckx (2008a) provides neither a conclusive argument for the position that ‘recovery’ has something to do with case, nor a clear definition of ‘recovery’ from which the case matching would follow.

2.2 Island repair effects in languages without resumptive pronouns

Merchant’s (2001) second argument against the resumption analysis is that some languages, such as West Flemish, may not have resumptive pronouns but, nevertheless, allow sluicing and exhibit island amelioration effects under sluicing. Boeckx (2003a, 2008b) remarks that no language possesses a pronominal paradigm that is specific to resumptives; thus, resumptive pronouns may scarcely be distinguishable from regular pronouns. Consequently, he argues that to claim that some languages do not have resumptive pronouns may be equivalent to claiming that they do not have any pronouns. Additionally, Boeckx cites Kennedy and Lidz (2001) and argues that it may well be the case that those languages that apparently lack
resumptive pronouns do have resumptive pronouns under ellipsis. Kennedy and Lidz (2001) claim that long-distance reflexives in English are only available under ellipsis. Their reasoning is that English does not have the right morphology to spell-out long-distance reflexives, therefore long-distance reflexives may appear when morphological constraint is not at stake, namely under ellipsis (Kennedy and Lidz, 2001:323-324 for detailed discussion). Following this argument, Boeckx suggests that such languages that lack obvious resumptive pronouns also lack the morphological exponents of resumptive pronouns and thus resumptives may show up only under ellipsis. By denying Merchant’s premise that some languages lack resumptive pronouns, Boeckx argues for the resumptive analysis of island amelioration under sluicing (Boeckx 2008a, Wang 2007).

Boeckx’s argument that the languages that apparently lack resumptive pronouns do in fact have them under ellipsis does not seem to be supported by clear independent evidence. We view this argument more as an ad hoc solution to the problem presented by Merchant. At minimum, we do not find any argument in the previous literature that there is a “morphologically resumptive” pronominal series. Indeed, as argued by Boeckx, resumptive pronouns are pronouns that are used in a resumptive context, and thus the claim that a language may contain resumptive pronouns solely in a particular context would not make sense if that language had an identical distribution for all pronouns, both resumptive and otherwise.

2.3 The interpretation of the wh-phrase

Merchant’s (2001) third argument against the resumption analysis is that there are different meanings associated with a wh-phrase when it is associated with a trace compared to when it is associated with a resumptive pronoun, namely that a wh-phrase in the former can have a functional reading but the latter cannot. However, this distinction disappears under sluicing,
such that there is not a subset of wh-phrase meanings available in connection with resumptive pronouns (Merchant 2001: 145, see also Doron, 1982 and Sells, 1984 for related discussion).

Boeckx (2008a) posits that the correlation between the specific interpretation and specific wh-chain is not as strong as Merchant suggests. Boeckx argues that the restricted class of readings may have more to do with the type of resumptive pronoun with which the wh-phrase is associated than with the wh-phrase itself. While resumptive pronouns are characteristically definite, Boeckx argues that Wang’s resumptive sluicing account may involve a resumptive-type indefinite pro element, leading to more available readings than would typically be found with a definite resumptive pronoun. Thus, by this analysis, Wang’s resumptive account of sluicing relies only on the existence of an element that is resumptive in nature, though not one that is necessarily definite (Boeckx 2008a).

2.4 The P-stranding generalization

Merchant’s (2001) fourth argument against the resumption analysis derives from a preposition-stranding generalization, namely that languages that allow P-stranding in wh-movement allow P-stranding in sluicing constructions, and conversely, languages that do not allow P-stranding in wh-movement do not allow P-stranding in sluicing constructions. Merchant takes this observation as evidence for the wh-movement approach. Because resumptive pronouns rescue P-stranding violations (Boeckx, 2003), as in Welsh examples like (10), Merchant’s generalization seems to pose a serious problem for Wang’s analysis.

(10) Beth y siaradd ef ag ef/ø?

What prt spoke he about it/ø?

“What did he speak about?” (Borsley, 1986: 73)

Boeckx, however, points out that there are numerous counterexamples to Merchant’s
generalization. Some languages that do not generally allow P-stranding in general are reported to permit preposition omission in sluicing (e.g., Brazilian Portuguese (Almeida and Yoshida, 2007), Selbo-Croatian (Stjepanovic, 2008) among others). Therefore, he casts doubt on the validity of Merchant’s P-stranding generalization.

Additionally, Wang argues that P-stranding is felicitous in otherwise non-P-stranding languages like Hebrew, when ‘separable/free’ prepositions are used. Wang argues that Hebrew allows P-less sluicing when a preposition that can be separated from nominals is used (Wang, 2007)^5:

(11) a. Dani katav le-mishehu, aval ani lo yode’a *(le-)mi.

Dani wrote to-someone, but I not know to-who

“Dani wrote to someone, but I don’t know to who.”

b. *mi Dani katav le?

Who Dani wrote to?

‘Who did Dani write to?’

c. Yoshi diber al sefer mesuyam. Aval ani lo zoxer (al) eize sefer

Yoshi talks on book specific. Aval I not remember on which book

‘Yoshi talked about a specific book, but I don’t remember which’

Wang suggests that prepositions that are prefixed to nominals are case-markers and that they are ‘inseparable’ from the nominals. As such, these prepositions must move together with the wh-phrase and, as a result, P-less sluicing is not legitimate (see Law, 1998, 2006 for a similar treatment of prepositions in Romance languages). Because these prepositions cannot be separated from the nominals and must accompany the wh-phrase, there is no such option that a resumptive pronoun be inserted after them. On the other hand, the ‘separable/free’ prepositions
can be omitted under sluicing because a resumptive pronoun can be inserted and save the P-stranding violation. Thus, Wang and Boeckx conclude first that Merchant’s P-stranding generalization is not correct, and second that the resumption analysis of sluicing can correctly capture the cross-language patterns of P-stranding under sluicing.

However, this argument seems to be empirically problematic. It seems to be the case that the ‘inseparable’ prepositions can actually be omitted. Thus, for native speakers of Hebrew\(^6\), an example like (11a) with a bare wh-phrase is not as bad as one with the preposition.\(^7\) The acceptability of the related example in (12) also supports this point.

(12) Yosi katav le-misrad mesuyam aval ani lo zoxer (le)-eize (misrad).

Yosi wrote to-office certain but I not remember (to)-which (office)

'Yosi wrote to some office but I don't remember (to) which.'

Thus, the real generalization here seems to be that P-less sluicing is possible in Hebrew, and thus Hebrew is another exceptional case for the P-stranding generalization, like Brazilian Portuguese and Serbo-Croatian. These facts from Hebrew thus may cast doubt on the validity of the P-stranding generalization, and may indeed be compatible with the resumptive approach, as Boeckx argues.

There is, however, an issue related to the P-stranding generalization that must be resolved. It is not clear whether P-less sluicing in languages without P-stranding has the same derivation as regular sluicing. It has been suggested in recent studies that P-less sluicing in non P-stranding languages is derived from the (truncated) cleft or copular source rather than the regular wh-movement structure (Craenenbroeck, 2010, Rodrigues, Nevins and Vicente, 2009, Szczegelniak, 2005, Vicente, 2008). If P-less sluicing in these languages indeed has the (truncated) cleft or copular structure, then the omission of prepositions is not related to the availability of resumptive
pronouns. Furthermore, these studies have also suggested that when the cleft/copular structure is unavailable (e.g., by means of ‘else’ modification), P-less sluicing in non-P-stranding languages is not acceptable (Craenenbroeck, 2010, Merchant, forthcoming, Rodrigues, Nevins and Vicente, 2009, Szczegelniak, 2005, Vicente, 2008). Such a correlation between the availability of cleft/copular sources and the possibility of P-less sluicing is not predicted by the resumptive analysis. Rather, if a resumptive pronoun can salvage illegal P-stranding in non-P-stranding languages, it should make P-less sluicing grammatical regardless of whether the cleft/copular source is available.

2.5 Summary

So far we have reviewed Merchant’s arguments against the resumptive pronoun analysis of island-violating sluicing and Boeckx’s responses to Merchant’s arguments. Among the four points (Case mismatch effects, island amelioration under sluicing in a language without resumptive pronouns, the difference in the interpretation of wh-gap chains and wh-resumptive pronoun chains, and the P-stranding generalization), we find Boeckx’s rebuttal to Merchant’s P-stranding generalization to be potentially compelling evidence to support Boeckx’s resumptive analysis. Even if the exceptions to the P-stranding generalization may provide some support for the resumptive analysis, the resumptive analysis of P-less sluicing remains at odds with other analyses such as the cleft analysis (Craenenbroeck, 2010, Rodrigues, Nevins and Vicente, 2009, Vicente, 2008). We conclude that Boeckx’s rebuttals to Merchant’s arguments are not conclusive at this point.

In what follows, we show that idiom chunks that are not compatible with resumptive pronouns appear in island-violating sluicing contexts. We argue that idioms under sluicing provide evidence against the position that the resumptive chain is the primary cause of island
amelioration effects under sluicing, even though the idioms evidence does not exclude the resumption analysis.

3. Idiom Reconstruction and Island Amelioration

One way to test the validity of the resumptive analysis is to check whether elements that are incompatible with resumptive pronouns can appear in an island-ameliorating sluicing context. In this section, we point out that idioms in English are one case where such elements can appear, and we show that idiom reconstruction under sluicing raises a considerable challenge to the position that the resumptive chain is the primary cause of island amelioration effects under sluicing. The generalization on which we base our argument is that English resumptive pronouns do not participate in the idiom chunk.

First, let us examine the examples of relative clauses in which the improvement of island violations is frequently reported. Let us consider the following examples.

(13)  a. We were surprised at the headway that Mary said that John made.
     b. *We were surprised at the headway that Mary is angry because John made __/it.

(14)  a. Mary was worried about the strings that Bill said that John pulled to get his position.
     b. *Mary was worried about the strings that Bill is angry because John pulled __/them.

As the acceptability patterns in (13) and (14) suggest, resumptive pronouns do not improve the judgment of island violation examples when idioms are involved.

Boeckx (2008b: 155) reports that resumptive pronouns improve acceptability in adjunct clauses. He cites the following contrast:

(15)  a. *Which woman did John laugh [after Bill kissed __]?
b. Which woman did John laugh [after Bill kissed her]?

Native speakers of English whom we interviewed indeed detected slight improvement of the acceptability of the example with the resumptive pronoun compared to the one with the gap\textsuperscript{10} (7 out of 10 speakers). If resumptive pronouns can participate in the idiom chunk, we expect the same improvement in the judgment of the island-violating examples.

In the examples in (13) and (14) above, we employ \emph{because}-clauses, not temporal clauses like Boeckx’s original examples of adjunct islands, so that we can create a sensible context for the use of idiom chunks. For the same reason, we test the possibility of resumptive pronouns with idiom-wh-movement in the environment of the \emph{because}-clause island violations. In so doing, we tested the possibility of resumptive pronouns with non-idiom D-linked wh-phrases in \emph{because}-clauses, in order to test if the resumptive pronoun can improve the \emph{because}-clause island violation in the same way as in Boeckx’s original examples. We test the examples in (16).

\begin{enumerate}[a.]
\item *Which woman was John angry [because Bill kissed __]?
\item Which woman was John angry [because Bill kissed her]
\end{enumerate}

We once again observed that native speakers of English preferred the example with the resumptive pronoun to the one with the gap (7 out of 10 speakers).

These judgments suggest that the presence of a resumptive pronoun can indeed improve the adjunct island violation.\textsuperscript{11} Even in this environment, however, resumptive pronouns fail to ameliorate the island violation by wh-idiom-movement, as in (17), exactly like in the examples of relativization in (13b) and (14b) (0 out of 10 speakers).

\begin{enumerate}[a.]
\item *What headway did the project get funded [because she was finally able to make __/it]?
\item *What strings was Mary angry [because John pulled __/them to get his
\end{enumerate}
The same pattern extends to the other verb-object idioms. We have tested six more verb-object idioms, and none of them are acceptable with either a resumptive pronoun or a gap.12

(18) a. *How much attention is John angry because Mary paid __/it to this problem.
    b. How much attention does John think that Mary paid __ to this problem?

(19) a. *How much care of the infants was John happy because Mary took __/it?
    b. How much care of the infants does John think that Mary took __?

(20)13 a. *How close of tabs was the president thrilled because the F.B.I keeps __/them on the spy?
    b. How close of tabs does the president believe that the F.B.I keeps __ on the spy?

(21) a. *Which beans was the director of the lab angry because a lab member spilled __/them about one of their new research projects?
    b. Which beans does the director of the lab believe that a lab member spilled __ about one of their new research projects?

(22) a. *Which nerve was John angry because Mary touched __/it when she asked about his past?
    b. Which nerve did John say that Mary touched __ when she asked about his past?

(23) a. *Which picture was Mary delighted because John took __/it?
    b. Which picture did Mary say that John took __?

Different possible factors can account for the fact that resumptive pronouns cannot participate in idiom chunks. For example, it is sometimes argued that portions of idiom chunks are not referential (Rizzi, 1990, among others) but resumptive pronouns are: they must refer to an antecedent that is known to both the speaker and the hearer (Chao and Sells, 1983, Erteschik-
Shir, 1992, Sells, 1984). Thus, it is plausible to conclude that resumptive pronouns cannot take part in the idiom chunk because of these conflicting requirements.

Turning to the cases of sluicing, if sluicing in the island context involves resumptive pronouns, we expect that idioms in such contexts are not possible. However, as we have seen in (4), idioms are possible under sluicing constructions that apparently involve islands. Below we have listed idioms under sluicing that we have checked. All of them show the same pattern (10 out of 10 speakers found a clear difference in acceptability between the sluicing examples and the non-ellipsis examples).

(24)  

a. Mary was angry because John pulled strings to get his position, but no one knows which (strings) (*\text{TP} she was angry because he pulled \_/them\}).

b. Mary was jealous because John made headway on his project, but we don’t know how much (headway) (*\text{TP} she was jealous because he made \_/it\}).

c. The project was funded because she was finally able to make some headway, but no one can tell how much (headway) (*\text{TP} she was finally able to make \_/it\}).

d. John was happy because Mary paid a certain amount of attention to the problem, but I don’t know exactly how much (attention) (*\text{TP} he is happy because she paid \_/it to this problem\}).  

(\text{Lasnik, 2011})

e. John was happy because Mary took care of the infants, but we don’t know how much (care) (*\text{TP} he was happy because she took \_/it of them\}).

f. The president was thrilled because the F.B.I. kept close tabs on the spy, but we don’t know how close (tabs) (*\text{TP} he was thrilled because the F.B.I. kept \_/them on the spy\}).

g. The director of the lab was angry because a lab member spilled the beans about
their new research project, but we don’t know which (beans) (*\[TP he was angry because the lab member spilled ø/them about their new research project]).

h. John was angry because Mary touched a nerve when she asked about his past, but we don’t know which (nerve) (*\[TP he was angry because she touched ø/it when she asked about his past]).

i. Mary was delighted because John took pictures of their vacation, but we don’t know which (pictures) (*\[TP she was delighted because he took ø/them of their vacation]).

If resumptive pronouns are generated in the trace position of the wh-phrase in the ellipsis, all of the examples in (24) should be excluded like those in (13) and (14) are excluded. The acceptability of these examples in (24) thus suggests that an island-violating sluice with idiom wh-movement does not involve resumptive pronouns.

Even though the idiom reconstruction under sluicing looks problematic to the resumptive analysis, we should still consider some of Boeckx’s and Wang’s arguments, especially their argument relating to the interpretation of wh-phrases. They note that the availability of a functional interpretation, which is not typically compatible with resumptive wh-chains, is not a strong counter-example to the resumption analysis because it is possible that the resumed element is a “resumptive indefinite,” and not a pronoun. This possibility is very difficult to examine given that the nature of the “resumptive indefinite” is not clear. Here, we would like to point out a potential problem with this approach. As far as we can tell, “resumptive indefinites” do not seem to be independently available outside of sluicing contexts, at least in English. One may argue still that such resumptive indefinites are available only under sluicing for morphological reasons, as Boeckx suggested regarding resumptive pronouns for languages that
lack them. However, it does not seem to be desirable to stipulate that such a special resumptive element, which is not an independently available resumptive pronoun, arises only under sluicing. Thus, if there is no compelling independent evidence for the existence of the “resumptive indefinite,” we believe it is better not to adopt such a narrow stipulation.

There is an alternative account for the idiom reconstruction in (24), namely that these examples do not involve the structure of islands. Merchant (2001) claims that the violation of so-called propositional islands is not ameliorated under sluicing. He argues that propositional islands are LF-islands, and thus PF-operations, such as deletion, cannot repair island violations. Merchant proposes that the apparent amelioration of the propositional islands under sluicing actually involves the structure of short extractions: the ellipsis involves just the structure of the embedded clause of propositional islands as illustrated in (25a), rather than the structure of the whole relative clause as in (25b) (Merchant 2001: 209).

(25) They hired someone who speaks a Balkan language.
    a. Guess which (Balkan language) \[TP \text{the}^E \text{-type speaks}^t\].
    b. Guess which (Balkan language) \[TP \text{they hired someone who speaks}^t\].

Merchant further argues that this short extraction structure involves an E-type pronoun in the subject position. Therefore, if the relative head someone is replaced with anyone or no one, which do not license an E-type pronoun, sluicing with the relative clause island is not acceptable because a short extraction source is not available (Merchant 2001: 211).

(26) They didn’t hire anyone who speaks a Balkan language,
    a. *but I don’t remember which (Balkan language) \[TP \text{the}^E \text{-type speaks}^t\].
    b. *but I don’t remember which (Balkan language) \[TP \text{they didn’t hire anyone who speaks}^t\].
On the other hand, Lasnik (2001, 2005) points out that the parallelism, such that sluicing is unacceptable when the source of sluicing does not violate an island, does not always hold. Lasnik observes that if *certain* is added in an example like (26), the acceptability of these examples improves. This type of example thus suggests that the availability of E-type pronouns in the ellipsis is not related to the acceptability of the apparent island-violating sluices.

(27) They didn’t hire anyone who speaks a certain Balkan language, but I don’t remember which (Balkan language).\(^{15}\)

Furthermore, Lasnik points out that there are some examples in which an island must exist in sluicing. Lasnik cites the following example involving *each ... the other* constructions (Lasnik 2001, 2005).

(28) a. Each of the linguists met [NP a philosopher [CP who criticized some of the other linguists]], but I’m not sure how many of the other linguists.  

b. *How many of the other linguists did the philosopher criticize?*

Because *the other* must be licensed by *each* (as in (28b)) and *each* is located in the matrix clause, the ellipsis must involve the whole clause including the materials in the matrix clause.\(^{16}\)

In order to test whether idioms are possible under an island that involves sluicing, we must check whether idioms are possible in environments like (27) and (28). As the following examples in (29) suggest, even when an E-type pronoun is not licensed in sluicing, idioms are still possible (10 out of 10 speakers found these examples acceptable).

(29) a. Mary did not criticize *anyone* who pulled *certain* strings to get his position, but no one knows which (strings).  

b. The professor did not scold *anyone* who made a *certain* amount of headway on his project, but it’s not clear how much (headway).
c. John did not praise anyone who paid a certain amount of attention to the problem, but I don’t know exactly how much (attention).

d. John did not praise anyone who took a certain amount of care of the infants, but we don’t know how much (care).

e. John did not hate anyone who touched a certain nerve by asking about his past, but we don’t know which (nerve).

An example that involves each... the other is also acceptable with idioms, as in (30).\(^{17}\)

(30) a. Each of the lab members is angry because one of the lab managers helped make headway for the other lab members, but I don't know how much headway for the other lab members.

b. Each of the researchers was happy because the RA paid attention to the other researchers’ problems, but I don’t know exactly which of the other researchers’ problems.

c. Each of the lab members was happy because the lab managers took care of the problem of the other members in the current project, but no one can tell exactly which problem of the other members.

d. Each of the lab members was angry because the director of the lab spilled the beans about the other members’ research, but we don’t know which beans about the other members’ research.

e. Each of the politicians was amused because a meddlesome interviewer touched the other politicians’ nerves when he asked about their past scandals, but we don’t know which of the other politician’s nerves.

Another possible way to show that the wh-dependency spans across island domains is to
make use of bound pronouns in a wh-phrase that are bound by a quantifier in the matrix clause. Lasnik cites the following examples (Lasnik, 2001: 16):

(31)  
   a. Every linguist1 met [DP a philosopher who criticized some of his1 work], but I’m not sure how much of his1 work.
   b. ??Every linguist1 met [DP a philosopher who criticized some of his1 work], but I’m not sure how much of his1 work the philosopher criticized.

In example (31a), the pronoun is in the wh-remnant, which corresponds to the correlate generated inside a relative clause island. To establish the bound reading in the sluice, the pronoun must be bound by the quantificational subject in the same way as in the antecedent clause. If so, the ellipsis site must have a structure that involves the matrix subject and the relative island, not just the structure of the embedded clause.

Examples of idioms under sluicing that involve bound pronouns are also acceptable (7 out of 10 speakers found the difference in acceptability in (32); therefore 3 speakers did not find a difference in acceptability between the a examples and the b examples. The same 3 speakers did not find an acceptability difference in (31) either). In order to guarantee that the pronoun is contained in the wh-phrase, we focus on the examples in which the PP is part of the interrogative phrase, not as a separate constituent stranded by ellipsis.

(32)  
   a. No mother1 was disappointed because the new babysitter took care of her1 dog as well as the infants, but it is not clear how much care of her1 dog.
   b. *No mother1 was disappointed because the new babysitter took care of her1 dog as well as the infants, but it is not clear how much care of her1 dog the babysitter took ___.

(33)  
   a. No politician1 was happy because a meddlesome interviewer touched his1 nerve
When she asked about his past, but we don’t know exactly which of his nerves.

b. *No politician was happy because a meddlesome interviewer touched his nerve when she asked about his past, but we don’t know exactly which of his nerves the interviewer touched__.

(34) a. No new bride was delighted because the cameraman did not take some pictures of her husband, but it’s not clear which pictures of her husband.

b. *No new bride was delighted because the cameraman did not take some pictures of her husband, but it’s not clear which pictures of her husband the cameraman did not take__.

These examples suggest that the short extraction structure is not a requirement for achieving an idiomatic meaning under sluicing with islands. Even if a portion of an idiom is extracted out of an island, the idiom interpretation is still possible. Therefore, these examples strongly argue against the position that resumptive pronouns are the primary cause of the amelioration of island violations under sluicing.

4. Conclusions

In this short note we have shown that idiom reconstruction under sluicing provides us with a good testing ground for the competing theories of the island amelioration effects of sluicing. Based on the idiom tests, we must conclude that sluicing involves regular wh-movement without resumptive pronouns, even when islands are involved. Together with the discussion on the possibility of short extraction structures, the data from idiom reconstructions under sluicing suggest that resumptive pronouns cannot be the primary source for island-ameliorating sluicing.


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1 Under Ross’s original judgment, sluicing is still marginally island-sensitive. In this study, we follow the widely accepted judgment that island violations are absent under (argument) sluicing.

2 The analysis in which the resumptive pronoun is analyzed as the residue of movement is not specifically proposed to capture the island-amelioration effects under sluicing. Rather, Boeckx and his colleagues approach various different problems employing similar analyses. For example, Boeckx (2003) and Boeckx and Hornstein (2008) explore consequences of the movement analysis of resumptive constructions in general. Boeckx’s analysis of sluicing is to be understood as an extension of this line of analyses, and even if his analysis of sluicing poses problems, it does not necessarily contradict the movement analysis of resumptive pronouns in general.

3 Recent experimental studies have cast doubt on the ‘saving function’ of resumptive pronouns in English (see, Alexopoulou and Keller, 2008, Heestand, Xiang and Polinsky, 2011, Omaki and Nakao, 2010 among others). These experimental studies argue against resumptive analysis of island amelioration as they show that resumptive pronouns do not ameliorate island violations.

4 Note that the nature of this *pro* element is not clear in Boeckx’s argument. An element like an indefinite *pro* has been reported in the literature, for example, in Greek (Giannakidou and Merchant, 1997, among others). However, it is not clear whether the indefinite null object in Greek and the resumptive indefinite *pro* element that Boeckx argues for show the same
distribution and licensing conditions. Because it has not been made clear what exactly this pro element is, it is not possible to validate Boeckx’s analysis based on this element.

5 This observation is originally made by one of the pre-published drafts of Fox and Lasnik (2003). (The data are reported in the version that is available on Danny Fox’s website).

6 We consulted three native Hebrew speakers about the judgment of all the sentences reported in this paper.

7 The native Hebrew speakers that we consulted judged both (11a) and (12) to be acceptable with or without the preposition on the wh-phrase. They suggested that these examples can be frequently seen in colloquial speech.

8 Merchant (2001) and Agüero-Bautista (2007) offer similar types of arguments. Merchant argues that in English (and also in Irish), some wh-phrases, such as the adjunct wh-phrases when, where and how much do not have their resumptive pronoun counterparts. Merchant shows, however, that even these wh-phrases can be extracted from island domains under sluicing (Merchant 2001: 129-130). Agüero-Bautista shows that a certain type of pair-list reading is available under sluicing, and he argues that such reading is possible only if sluicing involves successive cyclic wh-movement. He further points out that the pair-list reading is not available with a resumptive-chain (see Chao and Sells, 1983, McCloskey, 1979, Sells, 1984, Sharvit, 1999). Thus, Agüero-Bautista’s argument also supports the position that sluicing involves a regular wh-gap chain rather than a wh-resumptive chain (Agüero-Bautista, 2007). Our argument accords with the types of arguments they offer.

9 Note, in other languages, that it has been observed that resumptive pronouns can participate in the idiom chunk (see Aoun, Benmamoun and Choueiri, 2010 for Arabic, and Salzmann, 2006 for Zurich German). Thus the properties of “resumptive pronouns” can be subject to cross-language
variations. The facts from Arabic and Zurich German are indeed predicted from the movement approach to resumptive constructions. This difference between English and these languages raises a question of the status of “resumptive pronouns” in English, i.e., English “resumptive pronouns” and those in other languages are different elements.

Note that none of the speakers we interviewed reported a crystal clear difference in acceptability in this pair of examples. Nonetheless, they reported that the example with the resumptive pronoun is more acceptable than the one without.

See, however, findings in recent experimental studies noted in fn. 3.

We consulted 10 native speakers of English about the judgment of the examples in (18) through (23). No speakers found any difference in acceptability in these examples except (22), where 2 out of 10 speakers detected a slight improvement of the resumptive example (22a).

An anonymous LI reviewer suggested that “how close of tabs” may not be acceptable. We checked the acceptability of (20a) and (20b) independently with additional 5 native speakers, and 3 speakers agreed that (20a) is less acceptable than (20b) and that an idiomatic reading with “how close of tabs” is possible. We also searched “how close of tabs” on Google, and found 1696 hits in which “how close of tabs” is used as an idiom (duplicates and unclear cases excluded). Though there were 2 native speakers who did not accept the expression “how close of tabs,” based on the judgments we collected and the naturally occurring examples on Google, in this study we assume that “how close of tabs” is grammatical.

We have to be careful about the notion of referentiality. Idioms can serve as antecedents of pronouns as in (i) and (ii) (see Numberg, Sag and Wasow, 1994: 502 for related observations and discussion):

(i) John promised to pull a lot of strings to get me this job and I hope he pulls them soon.
(ii) John made significant headway, but sadly it was in the wrong direction.

Therefore it is not clear how non-referential idiom chunks are. Here, we follow Rizzi’s argument and assume that idiom chunks are not referential, though we recognize this to be controversial.

Furthermore, the contrast between these pronouns, which can refer to part of the idiom chunk, and the resumptive pronoun, which cannot refer to part of the idiom chunk, may suggest that these pronouns are different types of pronouns in nature.

15 This is Lasnik’s judgment. We independently checked the acceptability of this example with 10 native speakers, and they all reported that (27) is more acceptable than (26).

16 We checked the acceptability of the examples in (28) with 10 native speakers, and 7 out of 10 speakers found the contrast in the examples in (28).

17 We consulted 10 native speakers about the judgment of the examples in (30). We compared these examples with simple wh-interrogative counterparts without ellipsis (which/how many/how much of the other DP…). 7 out of 10 speakers found the contrast between the sluiced examples and the non-elliptical wh-interrogatives.