

Guess how?

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Abstract

This paper investigates the effect of sluicing on various island constraints. It turns out that contrary to previous assumptions not all island conditions are nullified under sluicing. Rather, the following Sluicing-Island Generalization (SIG) emerges: The markedness effect of strong islands is nullified by sluicing, but weak islands persist. This contrast argues for a split account of island effects. The specific account presented here starts with an analysis of sluicing as PF-deletion of IP. To explain the obviation of strong islands, it is argued that the extraction site is occupied by a resumptive element. The persistence of weak islands, on the other hand, is explained by the assumption that they are the effects of interpretive conditions and hence not sensitive to the difference between traces and resumptive elements. In this way, the SIG argues for a purely semantic account of weak island phenomena.

1. Introduction

Sluicing is a quite mysterious construction which hasn't attracted a lot of linguists' attention though it is attested in many languages. Recent work by Chung *et al.* (1995)¹ provided us with some understanding of the sluicing construction. In this paper, I hope to further improve our understanding of sluicing to such an extent, as to be able to make an argument going beyond sluicing towards a better understanding of the architecture of grammar. Based on the sluicing construction, I argue that there is a fundamental distinction between strong and weak islands: strong island effects occur due to the misapplication of syntactic operations; weak islands reflect interpretive violations as proposed by Szabolcsi & Zwarts (1993).

The argument for this conclusion will be based on the different behaviour of weak and strong islands in the sluicing construction. It turns out that the view underlying all previous work on sluicing, namely that all island conditions are uniformly cancelled, is wrong. Rather, the phenomena break up in an interesting way,

¹Chung *et al.* (1995) base their article on unpublished work by Chris Albert, which wasn't accessible to me.

along the lines of the weak/strong distinction. In section 2., I will establish the relevant descriptive generalization, which I call the Sluicing Island Generalization (SIG). In section 3., I will then discuss some attempts at an explanation of the SIG. The explanation that emerges as most likely to be correct crucially makes reference to a division of island conditions into syntactic constraints and interpretive conditions. In an appendix in 4., I will extend an argument the Chung *et al.* (1995) began, that in addition to sluicing we need to recognize at least one further construction which can superficially look like sluicing, but has quite different properties. I will show that the range of this construction is wider than Chung *et al.* assume and propose that this other construction involves gapping.

Sluicing in English is exemplified in (1) from (Ross 1969). The bare interrogative pronoun *who* can be used instead of the full question *who just left*. In a sense to be made precise, *who* associates with the indefinite *somebody*, asking for the identity of this somebody.²

- (1) Somebody just left. – Guess who.

In this paper, I use the term *antecedent* to refer to the clause that contains the indefinite with which the bare *wh*-word is associated (*somebody just left* in the example). The material which is perceived as being in the position following the *wh*-word but which is missing I will call the *sluiced material*. The bare *wh*-word, *who* in the example (1), I call the *remnant* of sluicing. In the examples, I will represent the sluiced material in brackets and a sans-serif font; e.g. (1) will be presented as in (2).

- (2) $\underbrace{\text{Somebody just left}}_{\text{antecedent}} - \text{Guess } \underbrace{\text{who}_1}_{\text{remnant}} \underbrace{[\text{t}_1 \text{ just left}]}_{\text{sluiced material}}$

2. The Sluicing Island Generalization

The most interesting property of sluicing is that it nullifies the effect of syntactic constraints on *wh*-extraction.³ This was first observed

²In the appendix, cases like (i) where the bare *wh*-phrase doesn't associate with an indefinite are briefly discussed. They behave differently, and aren't in the consideration.

(i) Of course, Elizabeth excelled. Guess who else.

³In fact, the island obviation is the defining property of sluicing. As we will see in the appendix, there is a construction that can yield the same output as

by Ross (1969).⁴ However, this view of sluicing cancelling all constraints on *wh*-extraction turns out to be incorrect.⁵ I will show in this section that not all constraints on *wh*-extraction are cancelled in the sluicing construction. Rather, there is a division between the strong and weak islands with respect to the cancellation. In this section, I will establish the following Sluicing-Island Generalization (SIG):

(SIG) The sluicing construction cancels only the effect of strong islands on extraction. Weak islands remain in the sluicing construction.

So in effect, weak island effects prove to be stronger than strong islands in the environment of sluicing. The SIG says that strong islands are cancelled by sluicing even for the extraction of *wh*-phrases like *how* which are blocked by weak islands as shown in 2.3. For this reason, it's necessary to state the SIG as a generalization over types of islands, and not over the type of the extracted element.

2.1. Strong Islands

First, let's briefly look at strong islands. That they are cancelled in the sluicing construction has already been observed in the literature (Ross 1969, Levin 1982, and Chung *et al.* 1995). This can be seen in example (3-a). (3-a) allows the interpretation that we expect for (3-b). But (3-b) is ungrammatical; it violates the *wh*-island condition and the Comp-trace filter.

- (3) a. Joan wondered whether a certain man would be at the party, but wouldn't tell us who₁ [Joan wondered whether *t*₁ would be at the party.]

sluicing, but that doesn't obviate island conditions.

⁴Ross, however, claims that sluicing leaves a residual markedness which is weaker than that in the overt examples of island violations, but subsequent research (Levin 1982, Chung *et al.* 1995) shows that sluicing can cancel the constraints on extraction completely. I assume that the slight markedness in some of the examples of Ross (1969) is due to processing and pragmatic factors: For sluicing to make sense, the antecedent indefinite must receive the wide scope interpretation, but often it's quite hard to get a wide scope reading of indefinites.

⁵Chung *et al.* (1995) introduce a distinction between sluicing and sprouting and observe that sprouting doesn't nullify islands (see footnote 3 and the appendix 4.). The SIG is different in that it claims non-nullification even for sluicing in the narrow sense.

- b. *Joan didn't tell us which man₁ she wondered whether t_1 would be at the party.

Example (4) shows that the interpretation of (3-a) is not available if the question is formed overtly from only the embedded part of the antecedent in (3-a). This shows that the 'embedded' interpretation of (3-a) cannot arise from a sluiced version of (4) amended with a semantic mechanism to achieve that 'embedded' interpretation.

- (4) Joan wondered whether a certain man would be at the party, but wouldn't tell us who₁ t_1 would be at the party.

Apparently, then, sluicing cancels the effect of both the *wh*-island condition and the Comp-trace filter. These are not the only islands sluicing seems to obviate: From the literature, we know that sluicing nullifies a whole range of further extraction islands; namely adjunct clauses, restrictive relative clauses, conditionals, subject clauses, complex noun phrases, and coordinate structures. So it seems to be safe to conclude that sluicing of *wh*-phrases that are 'referential' in the sense of Rizzi (1990) don't exhibit any island effects in the sluicing construction.

2..2. Weak Islands

Weak Islands (WIs) are characterized by a markedness effect that occurs only with certain adverbial *wh*-phrases:⁶ extraction of an individual-type *wh*-phrase out of a weak island is well formed, but extraction of a WI-sensitive *wh*-phrase isn't. In this section, I will go through the three core types of weak islands (negative, factive, and weak *wh*-islands) and present a number of examples that show that sluicing doesn't nullify the markedness effect incurred by weak islands.

2..2..1. Negative Islands

The effect of negation on the extraction of WI-sensitive *wh*-phrases was discovered by Ross (1984). The contrast in (5) shows that negation blocks the extraction of *how well* in (5-b).

- (5) a. How well₁ did you behave t_1 ?

⁶The exact distinction among WI-sensitive and WI-insensitive phrases is an open issue; e.g. a *wh*-phrase like *which man* can be WI-sensitive if it receives a functional interpretation (Cresti 1995). In this paper, I will only look at 'prototypical' WI-sensitive phrases, namely amount and degree phrases.

- b. *How well₁ didn't you behave *t*₁?

In the following, I show that the condition that blocks the extraction in (5-b) is also active in sluiced sentences. This shows that this condition has a different character from the strong islands conditions talked about in subsection 2.1.

The contrasts in examples (6) and (7) show that degree phrases obey the negative island condition in the sluicing construction. The (a) sentences show that sluicing with a degree phrase is fine, but in the (b) sentences we see that negation makes the sluiced sentence considerably worse. This holds for degree phrases, regardless of whether the extraction is from an argument position as in (6) or from an adjunct position as in (7).

- (6) a. As a child, I behaved well, and my parents can tell you how well₁ [I behaved *t*₁.]
 b. *As a child, I didn't behave well, but I don't remember how well₁ [I didn't behave *t*₁.]⁷
- (7) a. Most politicians believe that inflation will rebound strongly, and often say how strongly₁ [most politicians believe that inflation will rebound *t*₁.]
 b. *Most politicians don't believe that inflation will rebound strongly, but never say how strongly [most politicians don't believe that inflation will rebound *t*₁.]

Examples (8) and (9) show that amount phrases also obey the negative island condition in the sluicing construction. Again, the (a) examples show that the sluicing is possible, but the (b) examples show that it is blocked by negation.

- (8) a. Already in the sixties, kids were allowed to watch a lot of TV, and nowadays nobody remembers how much₁ [kids were allowed to watch [*t*₁ TV].]
 b. *In the sixties, kids weren't allowed to watch a lot of TV, but nowadays nobody remembers how much₁ [kids weren't allowed to watch [*t*₁ TV].]

⁷Many of my informants mentioned (i) as a better way of expressing (6-b). But even though (i) is better than (6-b), it still contrasts with (6-a). This is expected because in (i) the PF-identity and semantic parallelism condition as negation is dropped.

- (i) ??As a child, I didn't behave well, but I don't remember how badly₁ [I did behave *t*₁.]

- (9) a. In college, all of our professors failed more than two classes, but I won't tell you how many [all of our professors failed [t_1 classes].]
- b. *In college, none of our professors failed more than two classes, but I won't tell you how many₁ [none of our professors failed [t_1 classes].]

2..2..2. Factive Islands

The second major group of examples that exhibit the WI effect involve factive verbs.⁸ The factive island condition is illustrated in (10). Where non-factive verbs like *believe* in (10-a) allow extraction of a WI-sensitive *wh*-phrase from their clausal complement, factive verbs do not, as shown in (10-b).

- (10) a. How many dollars does John believe that he lost last week?
- b. ??How many dollars does John regret that he lost last week?

With sluicing, however, it is problematic to test the effect of the factive island condition. Look at example (11-a). The antecedent of sluicing in (11-a) can in principle be either the complement of *regret* as in (11-b) or the whole preceding clause as in (11-c). However, the SIG predicts that only (11-b) should be grammatical. The problem is that the interpretations of (11-b) and (11-c) seem indistinguishable since it is already established that John regrets having lost the sum of money he lost. Hence, it is not possible to test the SIG using example (11-a). For the same reasons, it will in general be impossible to verify the SIG with factive islands.

- (11) a. John regrets that he lost several dollars last night, and I told the police exactly how many.
- b. I told the police exactly how many₁ [he lost [t_1 dollars].]
- c. *I told the police exactly how many₁ [John regrets that he lost [t_1 dollars].]

2..2..3. Weak *Wh*-Islands

The third major class of examples of WIs consists of *wh*-islands of the type exemplified in (12-b).

⁸Though the verbs that show this condition are not only factives (Hegarty 1990), I will refer to the relevant condition as the factive island condition.

- (12) a. How well₁ did John decide to behave t_1 .
 b. *How well₁ did John decide whether to behave t_1 .

The examples (13) and (14) show that sluicing of WI-sensitive *wh*-phrases is subject to the *wh*-island condition. In particular, the contrast in (14) shows that WIs in sluicing block only the extraction of WI-sensitive phrases.

- (13) a. The governor believes that inflation will rebound strongly, but didn't announce how strongly₁ [the governor believes that inflation will rebound t_1 .]
 b. *The governor investigated whether inflation will rebound strongly, but didn't announce how strongly₁ [the governor investigated whether inflation will rebound t_1 .]
 (14) a. Sandy is very anxious to see if the students will be able to solve the homework problem in a particular way, but she won't tell us (in) which (way)₁ [Sandy is very anxious to see if the students will be able to solve the homework problem t_1 .] (Chung *et al.* 1995:(89a))
 b. *Sally is very anxious to see if the students will be able to solve the homework problem in a particular way, but she won't tell us how₁ [Sandy is very anxious to see if the students will be able to solve the homework problem t_1 .]

2.3. Non-Weak Strong Islands

We saw in 2.2. that, even under sluicing, WI-sensitive *wh*-phrases are confined to weak islands. In 2.1., it was shown that strong islands are cancelled by sluicing, but we used only non-adverbial *wh*-phrases to show this. The question is now: Are WI-sensitive *wh*-phrases sensitive to strong islands under sluicing? I will show now that the answer to this question is no.

The following examples show that the cancellation of strong islands also holds for the extraction of WI-sensitive *wh*-phrases. In (15) and (16), this is shown for the adjunct condition.

- (15) a. Children should be rewarded after behaving well, but how well [children should be rewarded after behaving] is up to their parents.
 b. *How well were the children awarded after behaving?

- (16) a. Mike told me that Martha left UCLA after earning a lot, but I can't recall how much₁ exactly [Mike told me that Martha left UCLA after earning t_1 .] (Szabolcsi, p.c.)
 b. *How much did Mary tell me that you left UCLA after earning?

The coordinate structure condition as well seems to be obviated under sluicing. As (17) shows, sluicing of an amount phrase is possible out of a coordinate structure.⁹

- (17) This woman owns a house and a lot of money, but nobody knows how much [money₁ this woman owns a house and t_1 .]

A third case of non-weak strong islands seem to be complex noun phrases, as shown in (18).¹⁰

- (18) Max spread the rumour that linguists earn a lot, but I forgot how much₁ [Max spread the rumour that linguists earn t_1 .]

Fourth, look at the subject island example in (19). Again, extraction of a WI-sensitive *wh*-phrase out of a strong island seems to be possible.¹¹

- (19) That linguists all earn a certain amount of money is widely believed, but I don't remember how much [money₁ that linguists all earn t_1 is widely believed.]

We have seen four cases of strong islands that permit the

⁹A alternative analysis of the coordinate structure cases might be that the sluiced material is parallel only to one tier of a three-dimensional coordinate structure like that suggested by Moltmann (1992). I will leave it open whether such an analysis is indeed possible.

¹⁰Modal subordination marginally allows an interpretation of (i) equivalent to the one indicated in (18). If (i) was the source of the sluice in (18), island obviation wouldn't be attested. The argument hence rests on the observation that the modal subordination reading is more marginal than the the corresponding interpretation in (18).

(i) Max spread the rumour that linguists earn a lot, but I forgot how much linguists earn.

¹¹Again, the modal subordination reading is marginally available in the islandless (i). The considerations of the previous footnote apply to this case as well.

(i) That linguists all earn a certain amount of money is widely believed, but I don't remember how much money linguists all earn.

extraction of a WI-sensitive *wh*-phrase under sluicing. This result is counterintuitive since we saw before that weak islands persist under sluicing. What the result shows is that strong and weak islandhood are two independent properties contra the intuitions underlying the strong/weak terminology. Sluicing nullifies strong islandhood, but not weak islandhood.¹²

3. Explanation of the SIG

The result of the preceding section is the following Sluicing-Island Generalization:

(SIG) The island effects that the sluicing construction obviates are exactly those that lead to strong islands. Weak islands remain in the sluicing construction.

In the rest of this section, I offer an explanation of the SIG and point out implications the SIG for the theories of sluicing, weak and strong islands. In 3..1., I will give arguments for viewing sluicing as a form of XP-ellipsis, namely as IP-ellipsis. In 3..2., I will show that what is by now the standard analysis of VP-ellipsis, namely PF-deletion under phonological identity, can also account for sluicing, and especially the obviation of strong islands. In particular, I will show that such an account of sluicing makes the same predictions as the LF-reconstruction account of Chung *et al.* (1995). In 3..3., the second part of the SIG, the persistence of weak islands, will be explained.

3..1. Sluicing as IP-Ellipsis

Sluicing is usually seen as an ellipsis phenomenon similar to the better studied VP-ellipsis.¹³ I will give two arguments that support this view. The first is based on the fact that restrictions on the morphosyntactic environment that licenses ellipsis are observed in the case of sluicing. The second argument is that sluicing allows sloppy identity.

¹²We expect the remaining two core cases of strong islands—restrictive relative clauses and strong *wh*-islands—to possess both islandhood properties: in both, an operator intervenes between the trace and the extracted phrase, and in weak *wh*-islands, the operator on its own blocks extraction of WI-sensitive *wh*-phrases. It is easy to verify that this expectation is borne out.

¹³Though, see (Ginzburg 1992) for a different view.

Lobeck (1992) proposes syntactic generalizations about the environments in which elided phrases may occur. Their conditions give a uniform account why ellipsis is licensed in the cases in (20) (from Lobeck 1990), but not in the examples in (21). Roughly, the relevant generalization is that an elided XP must be the complement of a Head Y that agrees with its Specifier.

- (20) a. Although John's friends were late to the rally, Mary's [friends]_{NP} came on time.
 b. Mary knew someone was speaking at the rally, but she didn't know who [was speaking at the rally.]_{IP}
 c. Because Mary might [attend the rally]_{VP}, John will attend the rally.
- (21) a. *Although some of the friends were late to the rally, the [friends]_{NP} were still the most punctual group.
 b. *Mary expected someone to speak at the rally and Bill hoped for [someone to speak at the rally.]_{IP}
 c. *Because Mary left already to [attend the rally]_{VP}, John will attend the rally, too.

Since sluicing and other forms of ellipsis exhibit this uniformity with respect to the licensing environment, the default assumption should be that the analysis of sluicing and of other forms of ellipsis should be the same.¹⁴

For the analysis of sluicing, Lobeck's (1992) proposal implies in particular that it should be done along the lines of VP-ellipsis. Since VP-ellipsis has been studied much more, it is very useful to see that sluicing and VP-ellipsis behave alike and all the results of the study of VP-ellipsis carry over to the analysis of sluicing.

Another aspect in which sluicing and VP-ellipsis behave alike is that both allow a strict and a sloppy reading, as Ross (1969) already observed. The sloppy reading for sluicing is shown in (22).

- (22) Every student said that he would quit the program if his relationship with a certain professor didn't improve, but only MH said which professor₁ [she would quit the program if her relationship with *t*₁ didn't improve.]

¹⁴López (1994) argues that there are other cases of IP-ellipsis.

3..2. PF-Deletion

Given the two similarities between sluicing and VP-ellipsis, it seems desirable to have essentially the same account for the two constructions. A lot of current work assumes that VP-Ellipsis is a form of PF-Deletion (Chomsky & Lasnik 1993, Tancredi 1992, Rooth 1992, Fox 1995). Let us therefore investigate the assumption that sluicing is PF-deletion as well. One of the arguments in favor of the PF-deletion analysis of VP-ellipsis is that most of the properties of VP-ellipsis are shared by downstressing. Hence, it's natural to see VP-ellipsis as a more radical form of downstressing.

Prima facie then, a PF-deletion analysis of sluicing seems incompatible with the cancellation of strong islands. The problem is that, with respect to sluicing, downstressing yields a different result from deletion. Compare the grammatical example of sluicing in (23-a) with its downstressed counterpart in (23-b), which is ill-formed.

- (23) a. Jon won't come if a certain professor comes, but I can't tell you who_1 [Jon won't come if t_1 comes.]
 b. *Jon won't come if a certain professor comes, but I can't tell you who_1 *Jon won't come if t_1 comes.*

But, there is a way to defend the PF-deletion view of sluicing against this objection. Observe first that, for VP-ellipsis, exact phonological identity of the deleted VP and its antecedent isn't required (Sag 1976 among others). Example (24-a) illustrates this. (24-a) allows a strict interpretation, which the gender mismatch in the downstressed counterpart (24-b) prohibits. Hence, it is assumed that in (24-a) actually the masculine form of the pronoun was part of the elided material.

- (24) a. Kazuko likes her dog and Orin_1 does [like his_1 dog], too.
 b. *Kazuko likes her dog and Orin_1 *likes her₁ dog*, too.

Given this looseness of the PF-identity condition observed in VP-ellipsis, we can revise our account of sluicing accordingly. It would suffice to explain the obviation of strong islands if the elided IP would contain a resumptive element in the extraction site.¹⁵ This

¹⁵Another logical possibility would be that the sluice bears no phonetic similarity to the antecedent, but is an islandless paraphrase of the antecedent as indicated in (i). However, the Case-matching observed by Ross (1969) argues against this proposal.

is indicated in (25-a). (25-b) verifies that downstressing is indeed possible with a resumptive pronoun in the extraction site.¹⁶

- (25) a. Jon won't come if a certain professor comes, but I can't tell you who₁ [Jon won't come if that professor₁ comes.]
 b. Jon won't come if a certain professor comes, but I can't tell you who₁ *Jon won't come if that professor₁/he₁ comes.*

Chung *et al.* (1995) show that sluicing can only obviate islands, if an indefinite associate appears overtly in the antecedent. Under the view taken here, this means that only an indefinite can act as a resumptive element in the sluiced material. This restriction in turn follows from the assumption that *wh*-phrases and indefinites employ the same scope-taking mechanism along the lines of Chung *et al.* (1995).

3.3.3. The Persistence of Weak Islands

The possibility of an indefinite acting as resumptive element explains the first half of the SIG: the obviation of strong islands. In this section, I will offer an explanation of the second part of the SIG: the persistence of weak island effects in the sluicing construction. If weak islands were an effect of the same constraint on extraction as strong islands as assumed by Rizzi (1990) and others, the only way to describe the cancellation pattern of sluicing would be to differentiate between different types of extracted elements. Then only properties of the extracted element should be relevant for whether islands are cancelled or not.¹⁷ However, we saw in 2.2. and 2.3. that WI-sensitive *wh*-phrases neither uniformly escape islands nor uniformly obey island constraints in the sluicing construction; rather they can escape strong islands, but not weak islands.

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- (i) Jon won't come if a certain professor comes, but I can't tell you who₁ [Jon is influenced by *t*₁ in his decision.]

¹⁶Most or maybe all languages don't have pronouns for WI-sensitive phrases, and consequently no 'real' resumptive pronouns for them. But, example (i) shows that overt extraction across a strong island improves significantly even for WI-sensitive *wh*-phrases if a resumptive element is inserted.

- (i) ?Guess how much money I would quit after I won that much.

¹⁷A proposal based on only a distinction of the type of extracted element has in fact been made by Reinhart (1995). The counter-argument in the text applies to her proposal.

Hence, the SIG argues for a split theory of weak and strong islands. In particular, it argues for an account of weak islands which is not sensitive to the difference between a trace and a resumptive element. This is fulfilled by an account that ascribes weak islands to an interpretive condition, because, for interpretation, a trace and a resumptive element are usually assumed to have the same effect.

While not being the only account that explains weak-island phenomena in terms of a purely interpretive condition,¹⁸ the account of Szabolcsi & Zwarts (1993) is the only one which has at least the potential to cover all three major types of weak islands – negative, factive, and *wh*-islands – uniformly. Underlying the account of Szabolcsi & Zwarts (1993) is the assumption that the way the interpretive system works imposes the following condition on movement configurations (cf. Szabolcsi & Zwarts 1993, (6)).¹⁹

In the configuration in (26), the interpretive operation associated with the intervener has to be applicable in the denotation domain of the variable. If the operation is not applicable, a markedness effect arises.

(26) *... Operator ... intervener ... variable
└──────────────────────────┘

Look at (27), which is repeated from (5), to see how the above condition can account for weak island effects. In (27-a), no operator intervenes between the *wh*-phrase *how well* and the trace position, hence no markedness arises. In (27-b), however, negation intervenes between *how well* and the trace position. The operator associated with negation is the complement operator. But in the domain of degrees, which is the domain associated with *how well* and t_1 , the complement operation is not defined because there is neither a maximal nor a minimal degree of well-ness of behaviour. Hence, (27-b) is ill-formed.

¹⁸See (de Swart 1992), (Kiss 1993), and (Rullmann 1995) for alternatives.

¹⁹Notice though that the standard way of formalizing the interpretation of operator-variable constructions doesn't predict this condition. The usual assumption is that operator-variable constructions are interpreted along the lines of variable binding in standard predicate logic. According to this view, there is no difference between (i-a) and (i-b) as far as interpretation is concerned, if the value assigned to the variable t_1 is 7 feet.

- (i) a. not [t_1 tall]
 b. not [7 feet tall]

Nevertheless, it seems to me that Szabolcsi & Zwarts's (1993) condition could possibly follow from the way interpretation actually works.

- (27) a. How well₁ did you behave t₁?
 b. *How well₁ didn't you behave t₁?

4. Appendix: Pseudo-Sluicing

In this appendix, I will attempt to delineate sluicing from constructions that can yield the same PF outputs as sluicing. That there is at least one other construction hidden within what is commonly referred to as sluicing was already observed by Chung *et al.* (1995). They claim that for 'real' sluicing the antecedent of the sluicing must contain a phonetically overt indefinite that the remnant *wh*-phrase can associate with. All cases of sluicing talked about in this paper are 'real' sluicing in this sense.

Chung *et al.* (1995) distinguish real sluicing from *sprouting*: In sprouting, there must be no overt associate of the remnant *wh*-phrase. Chung *et al.* (1995) observe that sprouting, in contrast to 'real' sluicing, is sensitive to island constraints.

The discovery of two types of sluicing distinguished in their island cancellation is important. Let me briefly point out, though, that there are more cases of pseudo-sluicing than the sprouting account predicts, namely those in (28). In (28-a), the associate is definite and, in (28-b), we have two remnant *wh*-phrases associating with strong quantifiers. (28-b) indicates that *wh*-movement is not the only movement type that may move the remnant out of the elided XP. A natural account of pseudo-sluicing would be to assume topicalization of the remnant(s) followed by IP-deletion.

- (28) a. Naturally, Norvin got an A+. But guess who₁ else [t₁ got an A+].
 b. Every professor works with most students and this list tells you who₁ with whom₂ [t₁ works t₂].

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