'Pseudosluicing':
Elliptical clefts in Japanese and English

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This paper examines apparent cases of sluicing in Japanese and concludes that these do not instantiate sluicing as found in English, but rather a kind of reduced cleft in which the pivot is a wh-phrase. An attempt to extend this analysis to English sluicing is shown to encounter severe difficulties. Finally, the structure of the cleft in English is considered, where it is argued that the cleft is a CP complement to *be* with the pivot adjoined; a number of correct predictions are shown to follow from this analysis.

1   Introduction

The primary question which this paper seeks to answer is the following: When is a sluice not a sluice? Sluicing is an elliptical construction in which the sentential part of a constituent question is missing, as illustrated in (1) for English and Japanese.

(1)   a.   Abby saw someone, but I don't know who.
       b.   Abby-ga   dareka   -o mi-ta   ga, watashi-wa dare ka wakaranai.
             A   -*nom*   someone-*acc* see-*past* but I   -*top* who Q know.not

As is always the case in analyzing elliptical structures, it is a non-trivial task to determine what the structure of the missing material is. Two proposals will engage our attention here. The first, following the majority of work on sluicing in English, considers the missing IP source of the wh-phrase to be identical in all relevant respects to some antecedent IP in the discourse—in (1), the first conjunct. This IP is supplied either at the level of interpretation by some interpretative mechanism which copies in the content, or is deleted in the phonology under an identity relation which is established at the level of interpretation. In either case, then, the elided material will resemble the struck-through text in (2):

(2)   I don't know who [~~Abby saw {someone /___}~~].   **sluice**

The second proposal considers the source of the ellipsis not to consist necessarily of full sentential material, but rather to have the structure of a cleft whose pivot is an extracted wh-phrase, as in (3). This type of ellipsis I will call 'pseudosluicing', as it gives rise to structures seemingly indistinguishable from sluicing as in (2).

(3)   I don't know who [~~it was ___ (that Abby saw)~~].   **pseudosluice**

Both derivations, in other words, potentially give rise to structures like (1). In the following sections, I develop a number of diagnostics to distinguish the two, and argue that what appears to be sluicing in Japanese as in (1b) is in fact pseudosluicing, following much recent literature on this subject. In English, on the other hand, structures like (1a) are true sluicing constructions corresponding to derivations like (2); pseudosluicing does not exist in English.
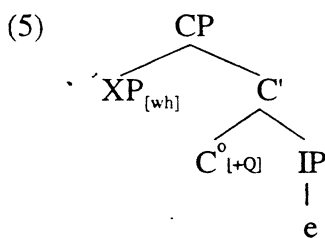
2   Background on sluicing

Sluicing has been the subject of a number of studies, mostly syntactic, since Ross's original investigation of the domain (Ross 1969, Rosen 1976, Levin 1982, Chao 1987, Lobeck 1991, 1995, Chung, Ladusaw, and McCloskey 1995, Ramos-Santa Cruz 1996, Romero 1997, among others). Here I will not provide a systematic overview of the various analyses that have been proposed, since for the most part, the exact details of these will be irrelevant for the points to be made here. Instead, I will limit myself to a brief exemplification of two of the distinctive properties of sluicing that will play some role in the argumentation in the following sections.

Examples of sluicing are given in (4); the wh-XP, embedded or not, can be of almost any type that occurs in non-elliptical questions.

(4)   a.   Jack bought a flag, but I don't know {where/how/why/when/for who(m) / on what day}.
      b.   Abby bought something, though it's unclear what.
      c.   Mark baked a cake for someone—guess for who!
      d.   A: She's shouting out the window.
           B: Really? Who to?

I will assume the following structure for sluicing, which is parallel to non-elliptical interrogative structures, differing only in that the IP is elided. This is the strcuture most researchers have defended or assumed for sluicing (see however Ginzburg 1992 for a differing view).

(5)

$$
\begin{array}{c}
\text{CP} \\
\diagup\diagdown \\
\text{XP}_{[wh]} \quad \text{C}' \\
\qquad\quad \diagup\diagdown \\
\qquad \text{C}^{\circ}_{[+Q]} \quad \text{IP} \\
\qquad\qquad\qquad | \\
\qquad\qquad\qquad e
\end{array}
$$

The syntax of (5) follows the general pattern of the syntax of ellipsis, following Chao 1987, Lobeck 1991, 1995, Saito and Murasugi 1990, among others (see Potsdam 1997 for references and discussion). Under this view, adopted here as well, the ellipsis site is an empty category in the syntax, licensed by an appropriate (agreeing) head. In sluicing in particular, the wh-XP in SpecCP agrees with C°, allowing this C° to license the empty IP. This analysis is designed to account for the general contrast between the constituent wh (agreeing) complementizer (null in English), which licenses the elliptical IP, and non-agreeing complementizers (the polar C° and the declarative C°), which do not license such ellipsis, as illustrated in (6). (But cf. Giannakidou and Merchant (to appear) for a complication in this picture, which we will ignore here for simplicity.)

(6)   The Pentagon leaked that it would close the Presidio, but ...
   a.   no-one knew for sure when.
   b.   *no-one knew for sure {whether / if / that}.

Under this conception, the resolution of the ellipsis is effected at LF by copying in an appropriate antecedent (here, an IP). See Chung et al. 1995 for details with respect to sluicing, and also Reinhart 1991 and Hazout 1995 for IP-copy in other constructions.

The second feature of sluicing that will be of relevance to us here is its apparent insensitivity to strong (syntactic) islands, as first noted by Ross himself. Sluicing of arguments with overt antecedents (usually indefinites) can apparently cross islands, as (7) through (11) demonstrate.

(7)   Max said he'd leave if somebody from his class shows up, but I can't remember who.
(8)   He'd like to find journal entries that describe a certain sea battle—guess which!
(9)   Taroo is angry because Hanako bought something, but he wouldn't say what.
(10)   Sandy was trying to work out which students would be able to solve a certain problem, but she wouldn't tell us which one.   [Chung et al. 1995:(79a)]
(11)   That certain countries would vote against the resolution has been widely reported, but I'm not sure which ones.   [Chung et al. 1995:(79b)]

These contrast starkly with their unelided counterparts, given in (12)-(16). This is one of the strongest arguments for taking the resolution of ellipsis in sluicing to be the result of an LF-copying mechanism (or equivalent interpretative mechanism), and not that of PF-deletion. If ellipsis were simply PF-deletion, and island violations are a result of syntactic (pre-Spell-out) movement, the examples of sluicing in (7)-(11) should be as degraded as their non-elliptical counterparts as in (12)-(16).

(12)   *I can't remember who Max said he'd leave if __ shows up
(13)   *Guess which he'd like to find journal entries that describe __.!
(14)   *But he wouldn't say what he is angry because Hanako bought __.
(15)   *Sandy wouldn't tell us which problem she was trying to work out which students would be able to solve__.
(16)   *I'm not sure which countries that __ would vote against the resolution has been widely reported.

Keeping these features of sluicing in mind, let us now turn to the question of sluicing in Japanese.

3   (Pseudo)sluicing in Japanese

The existence of a sluicing-like construction in Japanese was first noticed by Inoue 1976, 1978, who gave examples like that in (17).

(17)   · Dareka-ga   sono hon-o   yon-da   ga,   watashi-wa dare ka wakaranai.
        someone-*nom* that book-*acc* read-*past* but, I-*top*   who Q know.not
        'Someone read that book, but I don't know who.'

This section reviews recent arguments for and against treating such examples on a par with English sluicing, and concludes that the evidence tells heavily in favor in analyzing these as pseudosluices.

3.1 Overt wh-movement in Japanese?

Takahashi 1993, 1994 assumes a PF-deletion approach to sluicing, and argues that examples like (17) instantiate a kind of overt wh-movement in Japanese—normally a typical wh-in-situ language—, drawing a parallel to scrambling of wh-XPs in general. In other words, 'scrambling' of a wh-XP to SpecCP counts as wh-movement. Under this analysis, the sluiced clause will have the structure in (18), as we saw above, fully equivalent to their English counterparts on the standard analysis.

(18) The sluiced CP =   ... [$_{CP}$ dare$_1$ [$_{IP}$ t$_1$ sono hon o yon da] ka]
              who   that book-*acc* read-*past* Q
       '... who read that book.'

If this assimilation to English sluicing is correct, we expect at least the following two points to hold. First, all structures of the elliptical form in (17) should pattern with wh-agreeing English-type sluicing (cf. (6)). Second, there should obviously be no viable alternative derivation for (17), since the only real motivation for positing overt movement to SpecCP, which is apparently otherwise unattested in Japanese, is to account for these structures (see Nishiyama et al. 1996 for arguments that wh-scrambling involves adjunction to IP, not substitution into SpecCP). Unfortunately, as we will see below, neither of these points goes through.

3.2 Wh-XPs stay put: The 'sluice' is a pseudosluice

Responding to Takahashi's analysis, a number of authors (Shimoyama 1995, Kuwabara 1996, Nishiyama et al. 1996, Kizu 1997) have independently proposed to account for structures like (17) as a kind of reduced cleft. I will call such a reduced clefts a pseudosluice, defined extensionally in (19).

(19) Pseudosluice =$_{def}$ An elliptical construction that resembles a sluice in having only a wh-XP as remnant, but has the structure of a cleft, not of a regular embedded question.

For the Japanese example above, then, the proposed structure is as in (20).

(20) ˊ The sluiced CP =   ... [$_{CP}$ [$_{IP}$ *pro* dare da/de aru] ka]
              who be-*pres*   Q
       '... who it is.'

The two salient features of Japanese that led to the confusion of true sluicing with pseudosluicing are the following: first, Japanese is a null-subject (hence null-expletive) language, and second, Japanese allows optionally for omission of the copula in embedded sentences. The exact analysis of these two properties is not relevant here, and I will assume for expositional purposes that both null expletives and the null copula are given in the lexicon, though nothing hinges on these assumptions.

The main prediction of this approach is simple: we expect that the restrictions on a wh-pivot of a cleft will be the same as on the wh-XP in Japanese 'sluices' (i.e., pseudosluices). The greater part of the work of Shimoyama 1995, Kuwabara 1996, Nishiyama et al. 1996, and Kizu 1997 is devoted to showing that this prediction is correct. After a brief review of clefts in Japanese, we turn to a presentation of these authors' evidence.

3.3 Some background on Japanese clefts

Let me begin by introducing a piece of descriptive terminology which will be useful in discussing clefts (and pseudoclefts, though these will not figure in the discussion here), given in (21):

(21)   pivot $=_{def}$ The XP in 1. clefts: *it ... be* XP [relative clause (-like constituent)]
                                    2. pseudoclefts: [Free relative (-like constituent)] *be* XP

The term *pivot* is meant to be neutral with respect to the question whether the XP in clefts and pseudoclefts is necessarily a focus, or the like, and is also meant to apply regardless of surface word order (since the XP in both clefts and pseudoclefts may be displaced to some extent). This will spare us awkward locutions like 'the post-copular DP/PP/etc.', which wouldn't properly generalize to languages like Japanese in any case.

What are called clefts in Japanese have the structure given schematically in (22), where __ indicates a gap, NM marks the nominalizing complementizer *-no* (see Kuno 1973, McCawley 1978, Horie 1997), *-wa* is the topic marker (sometimes the nominative marker *-ga* is found instead, though we will not consider such cases here), and *da* is the present tense copula (other forms are found as well). The pivot may be a DP or a PP.

(22)   [$_{CP}$ [$_{IP}$ ... __ ...]-no]-wa [*pivot*] da
                                    NM *top*   copula

Most of the properties of clefts in Japanese will not concern us here (see Hoji 1990, Inoue 1976, and section 5 for discussion of the structure of clefts). For our purposes, only two properties will be relevant: the status of case-markers on pivots and the fact that clefts in Japanese, as in English, show island sensitivity.

Although the case markers *-ga* (nom), *-o* (acc), and *-ni* (dat) are not necessarily omitted in Japanese (though especially *-o* is frequently dropped in colloquial speech), there is a very strong preference to omit them when the nominal to which they would be expected to attach is the pivot of a cleft. This restriction is illustrated in the following examples:

(23)   a.   Bungo-ni Aya-o syookaisita   no-wa   [Kota-(*ga)]   da.
       b.   Kota-ga Bungo-ni syookaisita   no-wa   [Aya-(??o)]   da.
       c.   Kota-ga Aya-o syookaisita   no-wa   [Bungo-(?ni)]   da.
            K-*nom* A-*acc* introduced   C-*top* B-*dat*   is
            'It's [X] that Kota introduced Aya to Bungo.'

There is some variability among speakers in judging the acceptability of case-markers on pivots, and this variability is also attested in the literature. My informants rejected *-ga* and *-o* on pivots, but were less sure concerning *-ni*. This corresponds closely to the data reported in Nishiyama et al. 1996, who mark *-ga* and *-o* on the pivot with *, and argumental *-ni* with ? (their (19)). Hoji 1990 gives examples without a case marker as grammatical, and Kizu 1997 marks *-o* with ?? (her (11)). Shimoyama 1995 sometimes marks *-o* as fine (her (9) and (10)), though she does note that pivots "with structural Case markers sound somewhat marginal in clefts" (fn. 5, p. 16), following the judgments of Inoue 1976, and gives examples with *-ga* marked ?? and with *-o* marked ?. The generalization which I will extract from this discussion is simply the following: Japanese pivots marked with the case markers *-ga* or *-o* are highly degraded. Since there is some variation with respect to *-ni*, possibly reflecting structural vs. 'inherent' status, I will avoid examples containing *-ni*.

The second property of clefts in Japanese which will be relevant for our discussion is the fact that they, like their English counterparts, show the typical island sensitivities of unbounded dependencies. This is illustrated by the following data, showing illicit extraction from a relative clause, a temporal adjunct, and a clausal complement to a noun, respectively.

(24) *[$_{CP}$ Hanako-ga [$_{DP}$ [$_{CP}$ t$_i$ Taroo-ni ageta] hito]-ni atta no]-wa kuruma$_i$ da.
　　 H-*nom*　　　　　　 T-*dat*　 gave　 guy-*dat* met C *top* car　　 is
　　 lit. 'It's a/the car that Hanako met the guy who gave Taroo __.'

(25) *[$_{CP}$ Hanako-ga [$_{DP}$ [$_{CP}$ Taroo-ga t$_i$ katta　atode] okotteiru no]-wa kuruma$_i$ da.
　　 H-*nom*　　　　　 T-*nom*　　 bought after is.angry C *top* car　　 is
　　 lit. 'It's a/the car that Hanako is angry after Taroo bought __.'

(26) *[$_{CP}$ Taroo-ga [$_{DP}$ [$_{CP}$ Hanako-ga t$_i$ katta　toyuu] uwasa]-o　sinjiteiru no]-wa
　　 T-*nom*　　　　　 H-*nom*　　　 bought C　　 rumor-*acc* believe　 C　 *top*
　　 kuruma$_i$ da.
　　 car　　 is
　　 lit. 'It's a/the car that Taroo believed the rumor that Hanako bought __.'

A final question that we may ask before proceeding concerns the appropriateness of assimilating these structures in Japanese to English cleft-like structures, as is done without exception in the literature cited. After all, what we seem to be dealing with is a nominalized clause containing a gap, which is topic or case-marked as regular DPs are in Japanese (as opposed to relative clauses, for example, which do not permit such marking). Such a structure would seem to be much more closely parallel to the English pseudocleft than to a cleft. While an extensive comparison of the properties of English clefts and pseudoclefts with the Japanese cleft construction is beyond the scope of this paper, I will draw attention to one interesting fact which supports the traditional consensus and weighs against equating the Japanese cleft with the English pseudocleft. Unlike the pivot of clefts, which can easily be a wh-phrase, the pivot of a pseudocleft cannot be questioned, as the following data show (see Heggie 1988 and Heycock and Kroch 1997 for some discussion of this fact).

(27)　a.　 [What Ben is] is proud of himself.
　　　b.　 *What is [what Ben is]?
(28)　a.　 ?[Who Ben met] was the director of the institute.
　　　b.　 *{Who/which director} was [who Ben met]?
(29)　a.　 What those brats did was all get in the tub at once. [Hankamer 1974]
　　　b.　 *I wonder what [what those brats did] was.

There is no difficulty, on the other hand, in wh-extracting the pivot of a cleft:

(30)　a.　 What is it that Ben is?
　　　b.　 {Who/Which director} was it {that/?who} Ben met?
　　　c.　 I wonder what it was that those brats did.

Japanese clefts pattern with English clefts in this regard, allowing wh-pivots, as demonstrated by the following examples.

(31)　a.　 Sono hon- o. yon-da- no- wa dare desu ka?
　　　　　 that　 book-*acc* read-past-NM-*top* who is　 Q
　　　　　 'Who was it that read that book?'

b.   Jon-ga   kubinisita-no- ga   dare desu ka?
     Jon-*nom* fired   -NM-*nom* who is   Q
     'Who is it that Jon fired?'

Obviously, if Japanese clefts were actually counterparts to English pseudoclefts, this non-parallel would be quite surprising.

With this brief background on Japanese clefts, let us return to the behavior of 'sluicing'.

3.4   Parallels between clefts and pseudosluicing: Case-markers and islands

The two properties discussed above with respect to clefts in Japanese— resistance to case-markers on the pivot and island sensitivity—are equally attested in 'sluicing' constructions. This of course is direct evidence that we are not dealing with sluicing, but rather with pseudosluicing.

First, note that the restrictions on case-markers in clefts are operative in pseudosluices as well (cf. (23)), as Nishiyama et al. 1996 and Kizu 1997 show:

(32)   Dareka-ga   sono hon-o   yon-da   ga, watashi-wa dare(*-ga) ka
       someone-*nom* that book-*acc* read-*past* but, I-*top*   who-*nom* Q
       wakaranai.
       know.not
       'Someone read that book, but I don't know who.'

(33)   Taroo-ga dareka-o   nagutta ga, watashi-wa dare(??-o) ka wakaranai.
       T-*nom* someone-*acc* hit   but I-*top*   who-*acc* Q know.not
       'Taroo hit someone, but I don't know who.'   [Kizu 1997: (11a)]

In fact, as Kizu 1997 points out, wh-scrambling actually *requires* the case-marker, which is quite damning for a Takahashi-style analysis which assimilates 'sluicing' in Japanese to wh-scrambling followed by PF-deletion of the IP.

(34)   ... watashi-wa [dare*(-o)$_i$ [$_{IP}$ Taroo-ga t$_i$ nagutta] ka] wakaranai.
       I-*top*   who-*acc*   T-*nom*   hit   Q know.not
       '... I don't know who Taroo hit.'   [Kizu 1997: (11c)]

Second, pseudosluices *are* sensitive to islands, like clefts and unlike English sluicing. The data below are Kizu 1997's (22a), (23a), and (21a), respectively. Shimoyama 1995 discusses equivalent facts.

(35)   *Taroo-ga [Hanako-ga nanika-o   katta kara]   okotteiru rasii ga,
        T-*nom*   H-*nom*   something-*acc* bought because is-angry seems but
        watashi-wa nani ka siranai.
        I-*top*   what Q know.not
        'It seems that Taroo is angry because Hanako bought something, but I don't
        know what.'

(36)   *Hanako-ga [Taroo-ni nanika-o   ageta hito] -ni atta sooda ga,
        H-*nom*   T-*dat*   something-*acc* gave person-*dat* met I.heard but
        watashi-wa nani ka siranai.
        I-*top*   what Q know.not
        'I heard that Hanako met a person who gave Taroo something, but I don't know
        what.'

(37) *Taroo-ga [Hanako-ga nanika-o   katta toyuu uwasa]-o sinjiteiru ga,
     T-*nom* H-*nom*   something-*acc* bought C   rumor-*acc* believe but
     watashi-wa nani ka siranai.
     I-*top*   what Q know.not
     'Taroo believes the rumor that Hanako bought something, but I don't know
     what.'

These facts would be extremely surprising under the approach to sluicing
adopted here, where the resolution of ellipsis occurs at LF, especially since it is well
known that Japanese wh-movement at LF in Japanese is not subject to subjacency
(Nishigauchi 1990). Under the pseudosluicing approach advocated here, however, the
ungrammaticality of these examples reduces to the fact that clefts in Japanese *do* exhibit
subjacency effects. This also entails, as a side consequence which we will not pursue
here, that the ellipsis of the non-pivot of the cleft (the 'presuppositional' part) is not
sufficient to overcome island violations in the syntax.

3.5 Further support for pseudosluicing

This section addresses two further points in the analysis of pseudosluicing as
understood here: the nature of the ellipsis licensing condition, and the absence of the
copula.

3.5.1 'Sluices' with non-agreeing complementizers

As noted in section 3.1 above, if Takahashi 1994's assimilation of Japanese
'sluicing' to its English cousin were correct, we would expect that the licensing
conditions on sluicing-style ellipsis identified in Lobeck 1991, 1995 should hold in
Japanese as well. Recall that only wh- (agreeing) complementizers license the ellipsis
of their IP complements (see (6a) above). If this were the case in Japanese as well, we
expect to find that non-agreeing complementizers as in (6b) do not license elliptical IP
complements. As noted by Shimoyama 1995 and Kizu 1997, this prediction is false.
The data here are adapted from Shimoyama's (6b,c) (my informants marked the -*o*
marker on the pivot as highly degraded).

(38) John-ga dareka-o   kubinisita rasii kedo, boku-wa Bill-(??o) ka dooka siranai.
     J -*nom* someone-*acc* fired   seem but, I-*top*   B-*acc*   whether know.not
     'It seems that John fired someone, but I don't know whether (it was) Bill.'

(39) John-ga dareka-o   kubinisita rasii kedo, boku-wa Bill-(??o) to   omou.
     J -*nom* someone-*acc* fired   seem but, I-*top*   B-*acc*   that think
     'It seems that John fired someone, and I think that (it was) Bill.'

Given these data, we can safely conclude that there is nothing special about the
C[wh] in Japanese that licenses ellipsis, unlike its English counterpart.

3.5.2 Optional presence of the copula

Another point against Takahashi's analysis is that structures that seem
completely parallel to his 'sluicing' examples, and to those in the previous section,
allow the presence of a copula (and may in some cases require it). In other words, we
must countenance the presence of another construction with essentially the same
properties as 'sluicing', but with a completely different derivation. Shimoyama 1995,
Nishiyama et al. 1996, and Kizu 1997 all give relevant data; (41) and (42) are adapted
from Shimoyama's (6b,c).

(40) Dareka-ga   sono hon-o   yon-da   ga, watashi-wa dare datta ka wakaranai.
      someone-*nom* that book-*acc* read-*past* but, I-*top*   who was Q know.not
      'Someone read that book, but I don't know who it was.'

(41) John-ga dareka-o kubinisita rasii kedo, boku-wa Bill da ka dooka siranai.
      J -*nom* someone-*acc* fired seem but, I-*top*   B is whether know.not
      'It seems that John fired someone, but I don't know whether it was Bill.'

(42) John-ga dareka-o kubinisita rasii kedo, boku-wa Bill da to omou.
      J -*nom* someone-*acc* fired seem but, I-*top*   B is that think
      'It seems that John fired someone, and I think that it was Bill.'

Takahashi's account would of course be unaffected if it could be shown that the copula in such clauses cannot be absent. Unfortunately, just the opposite is the case: in embedded clauses in general, the copula can be absent:

(43) Boku-wa [[Motoko-no koibito-ga   gakusei (da)] to] omou.
      I-*top*   M-*gen*   boyfriend-*nom* student is C think
      'I think that Motoko's boyfriend is a student.'

(44) Boku-wa [[Motoko-no koibito-ga   dare (da)] ka] siranai.
      I-*top*   M-*gen*   boyfriend-*nom* who is Q know.not
      'I don't know who Motoko's boyfriend is.'   [Shimoyama 1995:(12)]

But of course the copula is not permitted to 'mark' (co-occur with) an embedded question:

(45) Boku-wa dare-o   Junko-ga aisiteiru (*da) ka wakaranai.
      I-*top*   who-*acc* J-*nom*   love   is Q know.not
      'I don't know who Junko loves.'   [Nishiyama et al. 1996:(12)]

This fact about the distribution of the copula makes a separate Takahashi-style sluicing analysis superfluous, since all the relevent structures can be reduced to other, known parts of Japanese grammar. This reduction of pseudosluicing to clefts with wh-pivots with concomittant copula-drop raises one further question with respect to other wh-in-situ languages, which we will not investigate here: In wh-in-situ languages without copula drop, is the copula obligatory in 'sluicing' structures? The initial results of Nishiyama et al. 1996 and Kizu 1997 for Korean, Chinese, and Turkish indicate a positive answer to this question.

The lack of true sluicing in wh-in-situ languages, if this is indeed so, seems to argue in favor of a PF-deletion approach to ellipsis. It would seem that the proponent of such an approach need only say that overt wh-movement is a precondition for the deletion of the remaining IP, though as noted above, the island ameliorations would still present a problem. As a proponent of the LF-copying approach, I would like to suggest that this simple conditional (sluicing only if overt wh-movement) is too simple. Instead, the same results can be derived from the Lobeck 1991, 1995 restrictions on licensing ellipsis sites (which in her theory are base-generated null categories); if it can be shown independently, as has often been argued for Japanese, that the necessary agreeing relations do not hold, we have an independent explanation for the lack of true sluicing in these languages. On the other side, there does appear to be at least one wh-in-situ language with true sluicing, Hindi, though space precludes a discussion here. For these reasons, I do not take the above discussion to necessarily favor a PF-deletion account of ellipsis over LF-copying.

In conclusion, we have seen that a substantial number of parallels exist between clefting structures and 'sluicing' (i.e., pseudosluicing) structures in Japanese (further

parallels are discussed especially by Kizu 1997: ordering of wh-DP and numeral quantifiers, multiple remnants, and concessive wh-phrases). These parallels cast serious doubt on the assimiliation of 'sluicing' structures in Japanese to their English counterparts defended in Takahashi 1994, and support the pseudosluicing analysis defended by Shimoyama 1995, Kuwabara 1996, Nishiyama et al. 1996, and Kizu 1997.

4 Wh-pivots in clefts: Can pseudosluicing be extended to English?

In this section, I will consider the obvious next question, posed in the title of this section: Can the reduction of sluicing to pseudosluicing defended above for Japanese be extended to English? The answer, we will see, is that it is highly unlikely that such a reduction is correct.

4.1 Initial considerations

Let us begin by clearing the way of a potential objection. There is nothing peculiar to Japanese which allows the ellipsis of the presuppositional (relative-clause-like) part of a cleft. Such ellipsis seems to be available in English as well (Büring 1997 concludes this as well). Compare the following pairs of questions and answers.

(46) a. Q: Who knocked?
         A: It was {Alex / me} (who knocked).
     b. Q: What did they steal?
         A: It was the TV and stereo (that they stole).
     c. Q: Why is the bus late?
         A: It's because of the traffic (that it's late).

In fact, sometimes the presuppositional part *must* be missing:

(47) Q: Who's that?
     A: It's me (*that is that).

The nature of this 'ellipsis' is quite different from the head-licensed ellipsis generally discussed in the literature (NP-ellipsis, VP-ellipsis, IP-ellipsis), consisting as it does of a CP. Since the syntactic requirements on CP ellipsis will not be my concern here, I will limit myself to pointing out two other cases of CP ellipsis:

(48) a. A: They're late again. B: I know (that they're late again).
     b. A: Will she come? B: I don't know (if she'll come).
(49) a. More people came than we thought (would come).
     b. He's sicker than the doctor thought/expected/realized/admitted (that he was).

But even granting that English licenses ellipsis of CP, it is highly implausible to assume that the expletive *it* present in clefts and the copula could be missing, since these are not properties found in English (i.e., English is neither a *pro*-drop nor a null copula language). In other words, a proponent of such an approach would posit that the clefts in (46) above should be reduceable as in (50), contrary to fact.

(50) a. Q: Who knocked?
         A: *(It was) {Alex / me} who knocked.

b. Q: What did they steal?
A: *(It was) the TV and stereo that they stole.
c. Q: Why is the bus late?
A: *(It's) because of the traffic that it's late.

In general, in fact, short ('fragment') answers do not have the same properties as pivots of clefts: they do not enforce exhausitivity the way the pivot of a cleft does, for example, nor do they have the same presuppositional properties. A cleft has a true existential presupposition (though see Prince 1978, Delin 1992 for some caveats to this blanket claim: new information can sometimes appear in the 'presuppositional' part, especially in performatives in clefts), whereas a question is typically assumed to have a conversational implicature (Karttunen and Peters 1975, 1976, etc.). This difference is illustrated here with negative quantifiers in answers, which are well-formed, while negative quantifiers in the pivot of clefts are not (since the assertion contradicts the presupposition).

(51) a. Q: What did the burglar take?
A: Nothing.
b. #It was nothing that the burglar took.

(52) a. Q: What did he do to help you?
A: Nothing at all.
b. #It was nothing at all that he did to help us.

These initial considerations cast doubt on any attempt to reduce sluicing to pseudosluicing. In the next section, I present five other differences which would seem mysterious under such a reduction.

4.2 Contra the equation 'English sluicing = pseudosluicing'

There are at least five differences between sluicing and cleft questions with wh-XP pivots. My goal here is not to offer explanations or analyses of these differences—my point is served simply by showing that they exist, since their very existence makes any assimilation of sluicing to clefts problematic. These differences concern the distinct behavior of sluices and wh-pivot clefts with respect to adjuncts and implicit arguments, prosody, agressively non-D-linked wh-phrases, 'mention-some' intepretations, and West Germanic R-pronoun inversion.

4.2.1 Adjuncts and implicit arguments

The first reason to keep sluicing and clefting distinct is provided by a simple comparison of the behavior of adjuncts and implicit arguments in these two constructions. As the data in (53) for adjuncts and that in (54) for implicit arguments show, sluicing with these is grammatical, but a wh-adjunct or implicit argument is highly degraded as a pivot of a bare cleft in English. (The cleft versions improve substantially if the presuppositional part of the cleft is retained, at the risk of prolixity. The significance of this fact is difficult to assess, however, lacking a better understanding of what makes wh-adjuncts and implicit arguments ungrammatical pivots in the first place.)

(53) a. He fixed the car, but I don't know how (*it was).
b. He fixed the car, but I don't know why (*it was).
c. He fixed the car, but I don't know when (*it was).
d. He's hidden the jewels, but I don't know where (*it is).
e. He served time in prison, but I don't know how long (*it was).

(54) a. They served the guests, but I don't know what (*it was).
      b. He said they had already eaten, but I don't know what (*it was).
      c. They were arguing, but I don't know about what (*it was).

4.2.2 Prosody

The second difference comes from the intonational contour associated with sluicing. Standard cases of sluicing require that the greatest pitch accent fall on the wh-phrase (this connects to the impossibility for so-called 'stress retraction' to occur in multisyllabic wh-phrases in German under sluicing, as discussed in Merchant 1996). In wh-pivot clefts, on the other hand, the pitch accent must fall on the copula, as the following contrasts show.

(55) Someone gave me a valentine, but
      a. I don't know WHO.
      b. I don't know who it WAS.
      c. *I don't know WHO it was.

(56) a. Someone KISSED you, and you can't remember WHO?!?
      b. Someone KISSED you, and you can't remember who it WAS?!?
      c. *Someone KISSED you, and you can't remember WHO it was?!?

This is actually somewhat surprising, given that in general the pivot of a cleft must have contain the pitch accent. Note that the above contrasts cannot be simply reduced to the effects of some version of the Nuclear Stress Rule, or a preference for the nuclear accent to fall at the end of the utterance, since exactly the same judgments obtain if the embedded CP is left-dislocated, for example.

4.2.3 Agressively non-D-linked wh-phrases

Agressively non-D-linked wh-phrases (as in Pesetsky 1987) cannot occur in sluicing, though they are unobjectionable as pivots of cleft:

(57) Someone dented my car last night —
      a. I wish I knew who!
      b. I wish I knew who the hell it was!
      c. *I wish I knew who the hell!

The problem in (57c) is not with emphasis on who the hell, as the well-formedness of (58) demonstrates:

(58) Who the HELL do you think you are?!?

4.2.4 The 'mention-some' interpretation[1]

Because of the exhaustivity entailed by the pivot (see Kiss 1996), only a 'mention-all' interpretation (see Groenendijk and Stokhof 1997, sec. 6.2.3 for discussion) will be compatible with a wh-phrase in the pivot. Thus wh-pivots will be incompatible with modifiers like 'for example', which explicitly requires the 'mention-some' interpretation, in contrast to sluicing, which allows such modification. (59a) illustrates the contrast in embedded sluicing, and (59b) does so for a matrix sluice.

---

[1] Thanks to S. Tomioka for suggesting this test.

(59) A: You should talk to somebody in the legal department for help with that.
    a.   B1: Could you tell me who (*it is), for example?
    b.   B2: Who (*is it), for example?

4.2.5 West Germanic R-pronoun inversion

The final difference between sluicing and clefts comes from a somewhat intricate set of facts concerning West Germanic R-pronoun inversion. It is well-known that certain elements (known as 'R-pronouns' in the literature) can invert with a preposition, as illustrated in (60) and (61) for German:

(60)	a.	?An was	denkst du eigentlich?	[German]
	b.	Wo-r-an	denkst du eigentlich?	
		where-on	think you actually	
		'What are you thinking of, anyway?'		

(61)	a.	?Nach was	hat es gerochen?	[German]
	b.	Wonach	hat es gerochen?	
		where-after	has it smelled	
		'What did it smell like?'		

As observed in Ross 1969 and Rosen 1976, sluicing also allows a seemingly 'stranded' preposition. Van Riemsdijk 1978 and Chung et al. 1995 correctly assimilate this inversion to R-pronoun inversion in the other West Germanic languages.

(62) a.   She bought a robe, but God knows who for.
      b.   They were arguing, but we couldn't figure out what about.
      c.   This opera was written by someone in the 19th century, but we're not sure who by. [Chung et al 1995: (4d)]
      d.   He was shouting to someone, but it was impossible to tell who to.
      e.   A: She's going to leave her fortune to someone. B: Really? Who to?
      f.   He'll be at the Red Dragon, but I don't know when till.
      g.   She's driving, but God knows where to.

Like R-pronoun inversion in German and Dutch, this kind of inversion under sluicing is very restricted, though somewhat more liberal than the continental varieties of the phenomenon (see Hoekstra 1995 for a survey of the various continental dialects). In English, only certain 'minimal' wh-operators can invert: *who, what, when,* and *where* (these seem to be the same group of wh-words which can occur in wh-copying constructions in German and child English; cf. McDaniel et al. 1996). We should note here that whatever the correct account of this restriction, it is not simply a prosodic condition on inversion, as the examples with *which* demonstrate.

(63) a.   *She bought a robe for one of her nephews, but God knows which (one) for.
      b.   *They were arguing about animals, but we couldn't figure out what kind about.
      c.   *This opera was written by an Italian composer in the 19th century, but we're not sure which (one) by.
      d.   *He was shouting to one of the freshmen Republican senators supporting the bomber program, but it was impossible to tell exactly which (senator) to.
      e.   *He'll be at the Red Dragon, but I don't know what time till.
      f.   *She's driving, but God knows which town to.

Crucially, however, this inversion is impossible in wh-pivot clefts:

(64) a. It was [for Humphrey] that I voted.
     b. [For who] was it that you voted?
     c. *[Who for] was it (that you voted)?

(65) a. It was [about the election] that they were arguing.
     b. [About what] was it that they were arguing?
     c. *[What about] was it (that they were arguing)?

Again, this asymmetry between the behavior of wh-words in PPs under sluicing and as pivots of clefts would be unexpected if the former were simply a case of the latter.

4.3 Summary

This section has presented a number of reasons to be skeptical of any attempt to reduce sluicing in English to a kind of pseudosluicing as in Japanese. In addition to syntactic difficulties in accounting for the missing copula and expletive *it*, and semantic differences with respect to exhaustivity and presuppositional behavior, I provided evidence from adjuncts and implicit arguments, prosody, agressively non-D-linked wh-phrases, 'mention-some' intepretations, and West Germanic R-pronoun inversion to support the conclusion that wh-pivot clefts and sluices should be kept distinct.

5   The structure of the English cleft

The subject matter and conclusions of this final section are in large part. independent of the argumentation that has occupied us this far. Here, elliptical structures will no longer be our concern; rather, we will take a closer look at a part of the preceding analysis that has gone largely unremarked upon: the structure of the cleft itself. I will restrict myself to an examination of the English facts, as these are complex enough, and the cross-linguistic facts known to me are sometimes at odds with the English data.

I will consider two possibilities for analyzing the English cleft here, which are substantially similar in most respects. In fact, it is quite difficult to find conclusive empirical evidence to decide between the two, though I will point out areas and data that seem prima facie problematic for the second option below. Most of the arguments presented here can be used in support of either option; this being the case, this section can be considered primarily as an extended argument for the substantial correctness of something like the structures given below, and against approaches which take the pivot and the relative-clause-like constituent (here the lowest CP) not to form a post-copular constituent (such as Percus 1996).

The two possibilities are given in (66) below, with XP as pivot. (66b) is based on Rizzi 1995, Kiss 1996, Meinunger 1996, and Svenonius 1997, where F = Focus for Rizzi, Kiss, and Meinunger.

(66)   a. <u>CP adjunction</u>   b. <u>Functional projection</u>

```
     IP                              IP
    /  \                            /  \
  it    VP                       it     VP
       /  \                            /  \
      V    CP                         V    FP
      |   /  \                        |   /  \
     be XP_i  CP                     be XP_i  F'
             /\                              /  \
           ... e_i ...                      F    CP
                                                /\
                                              ... e_i ...
```
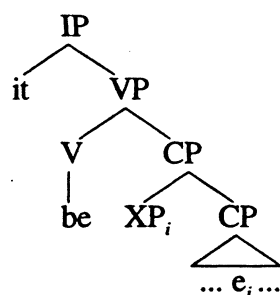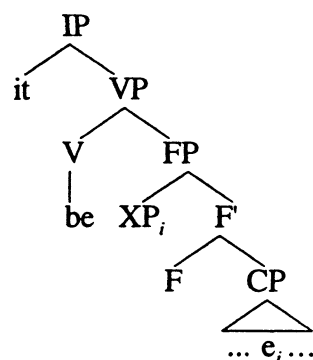
Both options will need to distinguish between moved XPs and base-generated XPs, the former categorically variable, the latter only DPs—corresponding to Pinkham and Hankamer's (1975) split between shallow [=moved] and deep [=base-generated] clefts. Though the internal structure of the CP under either account is of considerable intrinsic interest (see Svenonius 1997 for discussion and references), I will be concerned here only with the properties of the clausal structure above the lowest CP.

Note that (66b) represents a minor deviation from Kiss 1996, with *be* selecting the FP, not heading it. This correction solves the problem of auxiliary placement, as seen in (67) (assuming that *be* in F would be unable to move higher because of the presence of the other auxiliaries.

(67)   a.   It might have been Andrew they were talking about.
       b.   *It might have Andrew been they were talking about.

In the next sections, I consider the ramifications of these structures for two of the well-known properties of the clefts: the presence of the expletive *it* and the copula *be*. I then present some evidence that the pivot behaves as an adjoined element, motivating the CP-adjunction analysis. Finally, the exhaustivity of the pivot is contrasted with the semantics of *only*, supporting the conclusion that the semantics of the pivot and *only* are distinct.

5.1 The expletive

Most recent analyses of the cleft in English recognize that the *it* that appears in the matrix subject position is the 'extraposition' *it* that associates with CPs in general (one exception is Percus 1996, who derives *it* from an English-specific phonological rule that obligatorily realizes the string 'the $\emptyset$ (one) t_{CP}' in subject position as *it*; this solution obviously lacks cross-linguistic application).

(68)   It is {clear/surprising/obvious/unlikely/true} [$_{CP}$ that Bob passed].

While this fact follows directly from the structure in (66a), some additional assumptions are required to ensure that this *it* can associate properly ('anchor' in Svenonius 1994's terms) with the FP of (66b), though these assumptions are not necessarily pernicious.

A number of correct predictions arise from this analysis. First, we predict that only singular agreement will occur on *be*, regardless of the number of the pivot or of the CPs, as McCloskey 1991 shows for CP associates in general. Compare the coordinated CP associates under *be* and *seem* in (69) with the plural pivot in (70), the coordinated pivot in (71), and the coordinated pivot+CP constituents in (72).

(69) a. It {is/*are} clear [that the fires started here] and [that they spread south].
    b. It {seems/*seem} (clear) [that the fires started here] and [that they spread south].

(70) a. It {is/*are} the Jets that started the rumble.
    b. It {seems/*seem}to be the Jets that started the rumble.

(71) a. It {is/*are} Billy and Suzy who can't control themselves.
    b. It {seems/*seem}to be Billy and Suzy who can't control themselves.

(72) a. It {was/*were} [Ben who baked the cookies] and [Abby who ate them].
    b. It {was/*were} [Bill who made the mess] and [Bill who'll clean it up].
    c. It wasn't [Betsy who caught the fish] {or/and} [Ed who made the salad].

The data in (72) are especially important, since they show that the pivot+CP acts as a single constituent, subject to coordination, as the structures in (66) predict. In particular, they are problematic for an analysis like Percus 1996, which doesn't take the pivot+CP to be constituent. The fact that the matrix negation in (72c) can take scope over the coordinators *or* (i.e., $\neg[\phi \vee \psi]^2$) and *and* (i.e., $\neg[\phi \wedge \psi]$) shows that an analysis of these as some kind of forward conjunction reduction (along the lines of Hankamer 1971 among others; see Lakoff and Peters 1969 for pertinent criticism) cannot be correct.

Another problem for Percus 1996 are the following data, translations of McCloskey 1979:114's Irish data.

(73) a. They were looking for a leprechaun.
    b. It was a leprechaun they were looking for.   [both *de re* and *de dicto*]
    c. The one they were looking for was a leprechaun.   [only *de re*]

The indefinite in (73a) has both *de dicto* and *de re* readings. As McCloskey points out, both *de dicto* and *de re* readings survive under clefting. The putative source for (73b) under Percus's account—namely something semantically equivalent to (73c)—does not, however, have a *de dicto* reading. Further problems for his account (non-DP pivots, differences with respect to true relative clause extrapositon, etc.) are discussed by Cottell 1997.

· ´ If CPs can only be licensed by anchoring to the expletive *it* and not to the DP-expletive *there*, it is expected in particular under the structure in (66a) that *there* will not appear, even when the pivot is an appropriate associate for *there*. The data in (74) and (75) give the relevant contrast. Note that this also distinguishes the expletive in clefts from constructions like locative inversion.

(74) a. It's a madman that they're looking for!
    b. It seems to be a madman they're looking for!
(75) a. *There's a madman that they're looking for!
    b. *There seems to be a madman that they're looking for!

· Similarly, a DP pivot is not a possible target for raising:

(76) a. *A madman is that they're looking for!
    b. *A madman seems to be that they're looking for!

---

2   In fact, wide scope for the disjunction is impossible here. This can also be seen clearly in the ungrammaticality of 'scope-marking' *either* appearing above negation (see Larson 1985):
       (i)   a.   *Either it wasn't [Betsy who caught the fish] or [Ed who made the salad].
               b.   *It either wasn't [Betsy who caught the fish] or [Ed who made the salad].

In this regard, clefts differ from small clause complements to verbs like *regard (as)*, *consider*, *call*, and the like: *Ben was called [$_{FP}$ __ an idiot].* Obviously, proponents of the structure in (66b) have the task of locating the relevant difference.

5.2   The CP complement to *be*

The CP complement to *be* (under the analysis of (66a)) has the same distribution as the CP complement to *seem*:

(77) a. It seems that Fred will resign.
     b. *That Fred will resign seems.
(78) a. It was Max that we invited.
     b. *That we invited was Max.
     c. *Max that we invited was.

These have the structures given in (79) and (80), respectively. Neither segment of the CP complement to *be* can be fronted.

(79) a. It seems [$_{CP}$ that Fred will resign].
     b. *[$_{CP}$ That Fred will resign]$_1$ seems t$_1$.
(80) a. It was [$_{CP}$ Max [$_{CP}$ that we invited]].
     b. *[$_{CP}$ That we invited]$_1$ was [$_{CP}$ Max t$_1$].
     c. *[$_{CP}$ Max [$_{CP}$ that we invited]]$_2$ was t$_2$.

I have nothing to add to the literature on this puzzling distribution (see Davies and Dubinsky 1995 for one approach and references); the point here is only to make plausible the phrase structure of (66a) by pointing out that it would not be unique in its c-selectional properties.

5.3   Evidence for the adjoined position of the pivot

This section presents two related kinds of data that support locating the pivot in a structural adjunct position: extraction of the pivot from weak islands, and extraction of a proper subpart of the pivot from the same environments. Surprisingly, we will see that all types of wh-phrases are sensitive to weak islands when extracted from the pivot position of a cleft.

5.3.1   Extraction of the pivot

Let us begin by giving a range of control cases. In (81) and (82) we see that the full range of wh-phrases can be pivots of clefts, and undergo wh-movement.

(81) a. What was it __ that the patient last ate?
     b. Which vegetable was it __ that the patient last ate?
     c. Who (the hell) was it __ that they were thinking of hiring?
     d. Which candidate was it __ that you voted for in the last election?
     e. How long was it __ that you spent in prison?
(82) a. When was it __ that the patient last ate?
     b. Where was it __ that you found the victim?
     c. Why was it __ that you quit your last job?
     d. How was it __ that you managed to fix that disk drive?
     e. How (the hell) long is it __ that you've been in Amsterdam?

Likewise, these wh-phrases can be extracted over bridge verbs:

(83) a. What did the chart indicate it was ___ that the patient last ate?
     b. Which vegetable did the chart indicate it was ___ that the patient last ate?
     c. Who did you say it was ___ that that they were thinking of hiring?
     d. Which candidate did he claim it was ___ that he voted for in the last election?

(84) a. When did you say it was ___ that the patient last ate?
     b. Where did you think it was ___ that you found the victim?
     c. Why do you think it is ___ that we're firing you?
     d. How long did he say it's been ___ that he's been in Amsterdam?

Rizzi 1994 (pp. 370-374) was the first to notice that extraction of *who* is impossible from negative clefts and from under *whether/if* clauses. The following data show that this effect is in fact completely widespread, and applies to extraction of all kinds of wh-phrases (not just *who*), from all kinds of weak islands.

Negation of the matrix cleft *be*:
(85) a. *What wasn't it ___ that the patient last ate?
     b. *Which vegetable wasn't it ___ that the patient last ate?
     c. *Who (the hell) wasn't it ___ that they were thinking of hiring?
     d. *Which candidate wasn't it ___ that you voted for in the last election?
     e. *How long wasn't it ___ that you spent in prison?

(86) a. *When wasn't it ___ that the patient last ate?
     b. *Where wasn't it ___ that you found the victim?
     c. *Why wasn't it ___ that you quit your last job?
     d. *How wasn't it ___ that you managed to fix that disk drive?
     e. *How (the hell) long isn't it ___ that you've been in Amsterdam?

Negation in a higher clause:
(87) a. *What didn't the chart indicate it was ___ that the patient last ate?
     b. *Which vegetable didn't the chart indicate it was ___ that the patient last ate?

(88) a. *When didn't you say it was ___ that the patient last ate?
     b. *How long didn't he say it is ___ that he's been in Amsterdam?

Whether/if-clauses:
(89) a. *Who were you wondering whether it was ___ that that they were thinking of hiring?
     b. *When did the doctor ask if it was ___ that the patient last ate?

Factives:
(90) a. *Which vegetable did the nurse deny that it was ___ that the patient last ate?
     b. *Where did you regret it was ___ that you found the victim?

Negative quantifiers/*only*-phrases:
(91) a. *What did no chart indicate it was ___ that the patient last ate?
     b. *How long did only Albert say it is ___ that he's been in Amsterdam?

'Extraposition':
(92) a. *Which candidate was it a shame that it was ___ that he voted for in the last election?
     b. *How was it a shame that it was ___ that she managed to fix that disk drive?

This non-asymmetry between the extraction of arguments and adjuncts cannot be accounted for by existing semantic accounts of weak islands (Szabolcsi and Zwarts

1993, Rullmann 1995), since in these cases, the domain of quantification (of the wh-extractee) remains the same: an unordered set of individuals (which naturally forms a Boolean algebra). This lends support to the syntactic approach to weak islands pursued in Rizzi 1990, 1994, and Manzini 1997.[3]

Significantly, the extraction of wh-pivots out of weak islands is much worse than extraction of small clause/functional projection subjects. These of course can be extracted as usual, as the control cases in (93) illustrate:

(93) a. {Who/Which candidate} do you regard __ as your strongest competitor?
b. {Who/Which official} did you call __ an idiot?
c. {When/What time of the day} do you consider __ the best time for fishing?

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[3] Since this conclusion is an unwelcome one to me, and since the intuition that 'weak' (selective) islands are not a syntactic phenomenon is a strong one, I will sketch a possible way of reconciling the data in this section with a non-syntactic approach here, though space precludes a thorough implementation. The basic intuition is that what is going wrong in extraction from negative clefts and the like is pragmatic: there are too many possible correct answers to such questions, and hence no useful purpose could be served by asking one. This is essentially Kuno and Takami 1997's 'Ban on questions that solicit uninformative answers', which is just a statement of this fact. (Note that the data in this section fall under the more specific constraint they propose as well: the 'Ban on extraction of the focus of negation'). Kuno and Takami's exposition is extremely informal; here, I provide a more clear formal example to flesh out the intuition.

Since cleft questions are just identificational questions with existential and uniqueness presuppositions, let us begin by examining a simple case. Consider the identificational question in (ia), and its representation in a Karttunen semantics in (ib), assuming a Russellian ι-operator for the definite (for simplicity, I represent the presupposition 'ιypresident(y)' as simply conjoined with the question [i.e., globally accomodated], glossing over the difficult question of how to incorporate presuppositions into such representations).

(i) a. Who is the president of the United States?
b. ιypresident(y) $\wedge$ λp[$\exists$xperson(x) $\wedge$ $^{\vee}$p $\wedge$ p = $^{\wedge}$[x = y]]

Now consider the negation of (ia), which is distinctly odd:

(ii) a. #Who isn't the president of the United States?
b. ιypresident(y) $\wedge$ λp[$\exists$xperson(x) $\wedge$ $^{\vee}$p $\wedge$ p = $^{\wedge}$[¬(x = y)]]

The reason this seems odd is that any person who is not the president provides a suitable true answer, and, as Kuno and Takami discuss, it is extremely difficult to imagine situations where such an answer would serve a conversational purpose. Viewed from the perspective of a Groenendijk and Stokhof semantics of questions, for example, the answer would have to be the exhaustive list (or characterization) of everyone who is not the president, which under reasonable assumptions will either be an unspeakably long list or a tautological response like "Everyone who's not the president is not the president".

Exactly the same considerations apply to wh-pivot questions. Consider for example (iii) and its negative counterpart (iv).

(iii) a. Which book was it that Abby read?
b. ιy[book(y) $\wedge$ read(a,y)] $\wedge$ λp[$\exists$xbook(x) $\wedge$ $^{\vee}$p $\wedge$ p = $^{\wedge}$[x = y]]
(iv) a. #Which book wasn't it that Abby read?
b. ιy[book(y) $\wedge$ read(a,y)] $\wedge$ λp[$\exists$xbook(x) $\wedge$ $^{\vee}$p $\wedge$ p = $^{\wedge}$[¬(x = y)]]

Again, crucially, the formula in (ivb) is satisfied by any book which is not the unique one that Abby read. In essence, then, this approach places the burden of accounting for the ill-formedness of negative cleft questions on the pragmatics, and not on the semantics: the question denotations themselves are well-formed, but the question asked is practically useless.

If the approach sketched here can be successfully extended to other weak islands, the data in section 5.3.1 do not necessarily support an adjunction structure for the pivot.

But the usual argument/adjunct asymmetry is clearly detectable when these small clause subjects are extracted from under weak islands, as the following examples using *regard* [$_{SC}$ __ *as ...*] and *call* [$_{SC}$ __ *an idiot*] show. (94) illustrates the effect for negation, (95) for *whether/if*-clauses, (96) for factives, and (97) for a negative (here, downward monotonic) subject.

(94)   a.   {Who/Which candidate} don't you regard __ as your strongest competitor?

      b.   {Who/Which official} didn't you call __ an idiot?

      c.   ??{When/What time of the day} don't you consider __ the best time for fishing?

(95)   a.   {Who/Which candidate} were you wondering whether he regards __ as his strongest competitor?

      b.   {Who/Which official} were you wondering whether he called __ an idiot?

      c.   ??{When/What time of the day} did you ask if the baitman considers __ the best time for fishing?

(96)   a.   {Who/Which candidiate} did they deny that they regarded __ as the strongest competitor?

      b.   {Who/Which official} do you regret calling __ an idiot?

      c.   ??{Where/Under which mattress} did Mark regret that he had considered __ the best place to hide his money?

(97)   a.   {Who/Which candidate} does no-one regard __ as the strongest competitor?

      b.   {Who/Which official} would no-one call __ an idiot?

      c.   ??{When/What time of the day} did no-one consider __ the best time for fishing?

Again, if sensitivity to weak islands is indeed a structural, syntactic property, then the fact that extraction of the pivot of a cleft is uniformly sensitive to them while extraction of typical small clause subjects (in the specifier of the functional projection) makes a successful assimilation of the former to the structure of the latter appear unlikely. If, on the other hand, adjuncts are sensitive to weak islands by virtue of their structural properties (e.g., adjunct status), we have direct support for the structure proposed in (66a).

5.3.2 Extraction of a subconstituent of the pivot

A further piece of evidence in favor of an adjoined position of the pivot comes from the behavior of proper subconstituents of the pivot under extraction. Extraction of these has the same status as extraction from an adjunct, as (98) and (99) show.

(98)   a.   ??What was it [a picture of __] that they used for their logo?

      b.   ?Which mountain was it [a picture of__] that they used for their logo?

      c.   ??Who was it [a picture of __] that they were thinking of hanging above their bed?

      d.   ??Which candidate was it [a picture of__] that the student newspaper wanted?

(99)   a.   ??What was it [arguments about __] that led to their divorce?

      b.   ??Which theory is it [arguments for __] that you find so unconvincing?

      c.   ??Which principle is it [appeals to __] that make Jorge angry?

Though constraints on placing the appropriate kind of DP (i.e., indefinite singulars and bare plurals, since these are the easiest DPs to extract from) in the pivot position may be thought to be able to account for some of the deviance found in (98)

and (99) (though I do not find such indefinites in pivot position at all unacceptable), the following data from Hiberno-English show that any such approach is on the wrong track (thanks to Jim McCloskey for these data). In Hiberno-English, in contrast to standard American and British varieties, APs and VPs can appear in the pivot position, as in (100).

(100) a.   It's fond of you (that) he is.
       b.   It was frying bacon (that) I was.

Crucially, extraction from these pivots is also on a par with extraction from adjuncts, as seen in (101).

(101) a.   ??Which of them is it [fond of __] that he is?
       b.   ??What was it [frying __] that he was?

Again, the extraction of subparts of pivots constrasts with extraction of subparts of typical small clause subjects, which is quite acceptable, as illustrated in (102). This asymmetry is another point in favor of the adjunction analysis over the functional projection analysis.

(102) a.   Which bill do you regard [supporters of __] as idiots?
       b.   Which bill did the president call [supporters of __] 'misguided at best'?
       c.   Which bill did you see [supporters of __] chanting slogans?

It has been proposed (Tancredi 1990, Kuno and Takami 1997) that one cannot extract (certain kinds of) focussed XPs. While the very fact that extraction of wh-pivots is possible at all is problematic for such a view, one might suppose that a modification of this principle could be held accountable for the deviance seen with extraction of subparts of the pivot, assuming the pivot is indeed a 'focus position'. In other words, one might postulate that extraction from an XP that contains a focus is illicit; this would account for the data discussed in this section. But we can see immediately that such an approach is simply wrong: as in the data in (103) show, there is nothing wrong with extracting subparts of the DPs which contain a focus (here 'narrow' or 'contrastive' focus). (103e) demonstrates that even parasitic gaps can be licensed in such environments.

(103) a.   What did you only hear [RUmors about __]?
       b.   Which bill did they only file [a PROtest against __], not an injunction?
       c.   Who do you only know [FRIENDS of __]?
       d.   Which newspaper does Bill only talk to [rePORTers from __]?
       e.   What theory do only [supPORTers of __] ever discuss __?

We have seen in these two subsections that data from extraction of the pivot and subparts of the pivot lend support to the simple phrase stucture proposed in (66a) above. We have noted a number of asymmetries between these extractions and extractions from prototypical small clause functional projection subjects which are puzzling under the phrase structure for clefts in (66b) often supposed in the literature.

5.4 Exhausitivity of the pivot and *only*

I conclude with some brief remarks on the semantic interpretation of the pivot position in the cleft and the import of this for the semantics of *only*. A pivot is interpreted exhaustively in the standard cases, as Kiss 1996 shows, and I will not repeat her evidence here (see also footnote 2). What is interesting about this semantic fact is the light it sheds on the interpretation of *only*, which has often been thought to

encode only exhaustivity as well. From this perspective, it is somewhat surprising that *only* can modify a pivot:

(104) a. It's (only) Newton who invented calculus.
       b. It was (only) Susan who the captain picked.
       c. It's (only) Frank that solved problem 3.
       d. It was (only) Ben that climbed Mt. Everest.
       e. It's (only) Susan who drives a Fiat.

The versions with *only* do not seem merely redundant—instead, *only* seems to indicate scalarity here (cf. *Ben arrived only yesterday*). In other words, the fact that *only* can occur in the pivot supports the conclusions of Kiss 1996, Schwarzschild 1996, and Tomioka 1997 that *only* isn't (just) exhaustive.

This conclusion is further supported by the data in (105). If uniqueness is imposed by the presupposition, a cleft is fine, but *only*-modification is impossible (see Szabolcsi and Zwarts 1993 for some discussion of such predicates, though they do not discuss *only* modification).

(105) a. It's (*only) Newton who first invented calculus.
       b. It was (*only) Susan who the captain picked last.
       c. It was (*only) FDR who was president when the war broke out.
       d. It's (*only) the sun that's the center of the solar system.
       e. It's (*only) The Pickwick Papers that was Dickens' first book.
       f. Of the triplets, it was (*only) Paul that was born first.

Similarly, with comparative superlatives (Szabolcsi 1986, Farkas and Kiss 1995), only the absolute reading survives with *only*, while both readings survive under clefting.

(106) a. It's (only) Frank that solved the hardest problem.
       b. It was (only) Ben that climbed the highest mountain.
       c. It's (only) Susan who drives the fastest car.

Thus it is reasonable to conclude that while the pivot of a cleft enforces true exhaustivity, *only* does not.

6 Conclusions

This paper has ranged over a number of disparate, but connected topics. Proceeding from the most recent discussion, it was argued on the basis of a number of phenomena that the pivot+CP of the cleft forms a constituent, that this constituent is the complement to *be*, and that it acts like a CP with respect to the expletive subject *it* and agreement. Both proposals considered in section 5 can plausibly account for these properties, though we saw some reasons to prefer an adjunction structure over the standard functional projection analysis.

Preceding that discussion, the similarities and differences between sluicing and wh-pivots in clefts in English were investigated, with the conclusion that sluicing *sensu stricto*, as it occurs in English, cannot be reduced to a cleft-like underlying derivation.

The Japanese 'sluicing' data examined, on the other hand, lent themselves much more readily to an analysis which took these structures to instantiate elliptical clefts and not sluicing of the English variety.

Finally, then, we can give an answer to the question that opened the paper: a sluice is not a sluice when it's a pseudosluice.

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