1. Introduction: 'Sluicing' in Japanese

Sentences such as (1a) and (1b) involve ellipsis (of IP's) known as Sluicing in the literature (Ross (1969)). (1a) and (1b) are considered to be somehow related to the sentences shown in (1c) and (1d).

(1)a. Bill stole something, but I don't know [CP what [IP e]].
   b. Someone stole a ring, but I don't know [CP who [IP e]].
   c. Bill stole something, but I don't know [CP what [IP Bill stole t]]
   d. Someone stole a ring, but I don't know [CP who [IP t stole a ring]]

The following Japanese sentences, (2a) and (2b), appear to be, at least on the surface, a phenomenon similar to what is known as Sluicing in English (Inoue (1978)).

(2)a. Bill-ga nanika-o nusunda rasii kedo, boku-wa nani-o ka
   Bill-Nom something-Acc stole seem but I-Top what-Acc Q
   siranai.
   know not
   'It seems that Bill stole something, but I don't know what (he stole).'</n
   b. Dareka-ga yubiwa-o nusunda rasii kedo, boku-wa dare-ga ka
   Someone-Nom ring-Acc stole seem but I-Top who-Nom Q
   siranai.
   know not
   'It seems that someone stole a ring, but I don't know who (stole it)'

I will refer to the phenomenon observed in (2) as 'sluicing' for ease of reference, but using this term does not mean that I am committed to any particular analysis of this phenomenon at this point.

Takahashi (1993, 1994) proposes an analysis of 'sluicing' in Japanese, which is basically analogous to the one for Sluicing in English as in (1). He argues that a wh-phrase in Japanese (optionally) moves to Spec-CP at S-Structure, as shown in (2'). (Optional S-Structure wh-movement in Japanese is argued for, on the basis of independent data, in Takahashi (1993)).

(2') a. Bill-ga nanika-o nusunda rasii kedo, boku-wa
Then, a PF deletion operation on an embedded IP will derive a 'sluicing' construction, just as in an English counterpart. Assuming the functional licensing approach to ellipsis (Lobeck (1990), Saito and Murasugi (1990)), he argues that empty IP's in (2) are licensed by a [+wh] Comp, which agrees with a wh-phrase in Spec-CP.

(3) ...[[CPWH [C [+WH] [IP e]]]

<agreement> (Takahashi 1993; 674)

For ease of reference I will call Takahashi (1993, 1994)'s analysis a wh-agreement analysis.

The purpose of this paper is to show that the wh-agreement analysis of 'sluicing' in Japanese has problems, and to propose an alternative analysis which can account for a wider range of data. More specifically, I will propose that what is involved in 'sluicing' in Japanese is ellipsis of a presuppositional part of a cleft sentence, but not S-Structure wh-movement and IP ellipsis as found in the English counterpart.

In section 2, we will see that Japanese allows 'sluicing' in non-wh clauses. In this kind of 'sluicing,' what is left in the sluice is a non-wh remnant. It will be shown that this phenomenon is a problem for the wh-agreement analysis. A revision of the wh-agreement analysis will be considered, but it will be pointed out in section 3 that it will face another problem when we look at data in which a remnant phrase can appear along with a copula. An alternative approach to 'sluicing' in Japanese will be proposed, in which we assume that what is involved in this phenomenon is a cleft construction with elliptic presuppositional part. In section 4, we will briefly discuss some other properties of 'sluicing,' namely, multiple 'sluicing' and its clausemate restriction, the subjacency effect, and a sloppy identity interpretation. Section 5 is a conclusion.

2. 'Sluicing' in non-wh clauses

In this section, I will point out a potential problem in the wh-agreement analysis. I will suggest a possible revision of the wh-agreement analysis in section 2.2 that could overcome this problem.

2.1 A potential problem for the wh-agreement analysis

In what follows, we will look at data that show that Japanese allows 'sluicing' in non-wh clauses, and hence, a non-wh remnant. This phenomenon is problematic for the wh-agreement analysis, which licenses an empty IP under wh-agreement in the Spec-Head relation.
The sentence (4a) is an example of 'sluicing' in Japanese, which shows the same pattern as (2a) or (2b). Now, let us consider the sentences (4b) and (4c). Neither of them involves a wh-phrase in the second conjunct. However, they show a pattern similar to 'sluicing' examples such as (4a).

(4) a. John-ga      dareka-o     kubinisita rassi kedo,  
    John-Nom someone-Acc fired       seem but  
    boku-wa dare-o     ka siranai.  
    I-Top       who-Acc Q       know not  
    'It seems that John fired someone, but I don't know who'

b. John-ga      dareka-o     kubinisita rassi kedo,  
    John-Nom someone-Acc fired       seem but  
    boku-wa Bill-o     ka dooka    siranai.  
    I-Top       Bill-Acc whether       know not  
    '(Lit.) It seems that John fired someone, but I don't know whether Bill'

c. John-ga      dareka-o     kubinisita rassi kedo,  
    John-Nom someone-Acc fired       seem but  
    boku-wa Bill-o     to     omou.  
    I-Top       Bill-Acc that think  
    '(Lit.) It seems that John fired someone, but I think that Bill'

The remnant in each of these examples is not a wh-phrase, but rather an ordinary NP with Accusative Case, Bill-o.

The sentences (4b) and (4c) pose a problem to the wh-agreement analysis, which assumes that empty IP's are licensed under (3). Neither of them involves wh-agreement in Spec-Head relation, as schematically shown in (4').

(4')

Since neither (4b) nor (4c) satisfies the wh-licensing condition in (3), IP ellipsis should not be possible, which is contrary to fact. Although examples similar to (4b) and (4c) are mentioned in note 8 of Takahashi (1994), no account is given there.

It will be desirable to give (4a), (4b) and (4c) a unified account. In what follows, we will first attempt to provide a unified account by adding a few assumptions to the wh-agreement analysis. This revised wh-agreement analysis also turns out to be problematic, when it is confronted with another set of data showing that wh/non-wh remnants can appear with a copula. An alternative
approach will be proposed that will cover all the cases in (4), as well as the data on remnants with a copula.

2.2 A revised wh-agreement analysis

In this section, we will consider a revision of the wh-agreement analysis, which provides a unified account of examples such as (4a), (4b) and (4c). However, it will be shown in section 3.1 that this revised version of the wh-agreement analysis also fails, when it faces yet another set of data.

If we assume that the embedded object in the second conjunct in (4b) or (4c), Bill-o, has undergone scrambling and is in Spec-CP, we could argue that there is some sort of agreement relation between the head C and its Spec, and that this licenses empty IP's in these cases. This is schematically shown in (5).

Although the validity of these two assumptions, i.e., i) scrambling of NP's to Spec-CP, and ii) Spec-Head agreement relation, is not entirely clear, adding these assumptions could technically solve the problem of non-wh remnants.1

3. An alternative: a 'cleft' analysis

It will be shown in this section that there is a phenomenon which receives no explanation under the original or revised wh-agreement analysis. An alternative analysis to 'sluicing' in Japanese will be proposed in section 3.2.

3.1 A wh/non-wh remnant with a copula da/de aru

The examples in (6) show that a 'sluicing' sentence allows an optional presence of a copula da/de aru.

(6) a. John-ga dareka-o kubinisita rasii kedo,
     John-Nom someone-Acc fired seem but
     boku-wa dare-o (da/de aru) ka siranai.
     I-Top who-Acc (is) Q know not
     'It seems that John fired someone, but I don't know who'

b. John-ga dareka-o kubinisita rasii kedo,
     John-Nom someone-Acc fired seem but
     boku-wa Bill-o (da/de aru) ka dooka siranai.
     I-Top Bill-Acc (is) whether know not
     '(Lit.) It seems that John fired someone, but I don't know whether Bill'
c. John-ga dareka-o kubinisita rasi kedo,
   boku-wa Bill-o (da/de aru) to omou.
   I-Top Bill-Acc (is) that think
'(Lit.) It seems that John fired someone, but I think that Bill'

The data in (6) suggests that a remnant in the sluice can be something more than a *wh/*non-*wh* phrase.

*Da* or *de aru* functions as a copula in Japanese, the former being a short form of the latter. Although it is not clear precisely what structural analysis should be given to *da/de aru*, we will assume, for the purpose of discussion, the following kind of structure for a simple sentence involving a copula as in (7a).

(7) a. John-ga gakusei {da, de aru/datta, de atta}
   John-Nom student {is/was}
   'John *is/was* a student'

b.  
   IP
      I
         VP I    =de ar-u/de ar-ta
          =u /-ta (=dar-u -> da / dar-ta )
         V' Pres/Past
         VP V  
            =de ar- (-> dar-)
            ar-
      NP  V'
        V
gakusei  de
student

Since Japanese also allows a kind of copulative sentence as in (8a), in which the clause 'John fired Bill' is nominalized by '*no*', a nominalizing complementizer (NM), and combined with a copula, we might argue that a potential source for the sentence (6a) is something like (8b).

(8)a. John-ga Bill-o kubini sita no da/de aru
   John-Nom Bill-Acc fired    NM is
   'it is that John fired Bill'

b. John-ga dareka-o kubinisita rasi kedo,
   I-Top  [John-Nom who-Acc fired    NM is    Q] know not
   'It seems that John fired someone, but I don't know who John fired'
However, there is in fact no way to derive (6a) from something like (8b) by the process assumed in the wh-agreement analysis, i.e., overt wh-movement and deletion of IP. (8b') below shows an approximate structure assigned to the second conjunct of (8b), after the operation of S-Structure wh-movement of 'dare-o' ('who-Acc') to Spec-CP.3

(8b')

The licensing mechanism (3) does not allow leaving a copula in IP as a remnant part in 'sluicing' sentences. This problem also applies to the revised version of the wh-agreement analysis suggested in section 2.2. Unless we assume that the copula occupies the head C, along with a complementizer *ka, ka dooka,* or *to,* presence of a copula with a remnant wh- or non-wh-phrase receives no account in the wh-agreement analysis (cf. section 3.3).

3.2 'Sluicing' as a cleft construction with elliptic presuppositional part

In this section, I will propose an alternative analysis of 'sluicing' in Japanese. More specifically, I will propose that a 'sluicing' sentence in Japanese, which seems to be similar in its surface appearance to a phenomenon known as Sluicing in English, actually involves a cleft construction that has an elided presuppositional part. In other words, a remnant phrase in 'sluicing' is in fact a focus phrase in clefts, and this view provides a natural account for non-wh remnants and optional presence of a copula in the sluice.

The sentence in (9b) is a typical example of a cleft construction in Japanese.
(9a) John-ga Bill-o nagutta.
    John-Nom Bill-Acc hit
    'John hit Bill'

b. John-ga nagutta no wa Bill-o da.
    John-Nom hit NM Top Bill-Acc is
    'It is Bill that John hit'

It is a fairly standard view that clefts involve movement (cf. Chomsky (1977)). Following this standard assumption, we adopt (9b') as a structure for the cleft in Japanese in (9b).

(9b') [IP[CP[IP]John-ga t; nagutta]-no]-wa Bill-o da]
    John-Nom hit -NM -Top Bill-Acc is

(9b') involves null operator movement, which is also commonly assumed in accounts of relative clauses in Japanese. I propose that 'sluicing' in Japanese involves ellipsis (of some sort) of presuppositional part of clefts. This analysis will be referred to as a cleft analysis. Consider the examples in (10). In (10a), a focus position of a cleft is occupied by a $\text{wh}$-phrase, while in (10b) and (10c) it is occupied by ordinary NP's. The CP in the bold face in each example in (10) corresponds to presuppositional part that is missing in 'sluicing' construction.

(10) John-ga dareka-o kubinisita rasii kedo,
    John-Nom someone-Acc fired seem but

a. boku-wa [CP[IP]John-ga t; kubinisita]-no] -ga
    I-Top John-Nom fired NM -Nom
    who-Acc is Q know not

b. boku-wa [CP[IP]John-ga t; kubinisita]-no] -ga
    I-Top John-Nom fired NM -Nom
    Bill-Acc is whether know not

c. boku-wa [CP[IP]John-ga t; kubinisita]-no] -ga
    I-Top John-Nom fired NM -Nom
    [Bill-o] (da/de aru)] to] omou.
    Bill-Acc is that think

'It seems that John fired someone, but
a. I don't know who it is that John fired'
b. I don't know whether it is Bill that John fired'
c. I think that it is Bill that John fired'
As an illustration, the structure of the embedded question in the second conjunct of (10a) is given in (11).

(11)

```
CP        V
  C
  IP    C
  I    Q
  VP    I
  -u
  V'
  VP    V
    ar-
    V'
    Øi
    C'
    NP    V
dare-o  de
    C    who-Acc
    I    NM
    VP    I
    -la
    V'    Past
    NP    V'
    John-ga
    -Nom
    ti   kubinis
    fire
```

Our claim is that what is missing in 'sluicing' is the lower CP in (11).

Now, the first problem for the wh-agreement analysis that was pointed out in section 2.1, i.e., the problem of non-wh remnants, does not arise in the cleft analysis. A remnant phrase in 'sluicing' is in fact what occupies a focus position in a cleft sentence. So the fact observed in (4b) and (4c) can be accounted for without recourse to any new agreement relation suggested in section 2.2 (See (5)).

The second problem, pointed out in section 3.1, namely, the presence of a copula along with a remnant phrase in 'sluicing,' is no longer a problem in the cleft analysis. A copula appears in a cleft sentence, and it is part of a remnant since what is elided is a presuppositional part. Optionality of a copula in 'sluicing' is part of a more general phenomenon in Japanese. Generally, a copula may be omitted in embedded clauses. This is shown in (12).

    'John is a student'

    'I don't know whether John is a student'
I-Top Mary-Gen boyfriend-Nom who is Q know not
'I don't know who Mary's boyfriend is'

Hence, the presence or absence of a copula in 'sluicing' sentences receives a natural explanation under the cleft analysis.

3.3 Characterization of elliptic presuppositional part

I have shown that the treatment of 'sluicing' in Japanese as a case of ellipsis of presuppositional part of clefts solves the two problems in the wh-agreement analysis, namely, i) 'sluicing' in non-wh clauses and ii) a remnant phrase with a copula. So far, I have used the term 'ellipsis' rather broadly, in talking about 'ellipsis of presuppositional part of clefts.' A natural question to ask next is, what precisely the characterization of this 'ellipsis,' or a missing presuppositional part would be. Although I do not have a definite answer to this question at this point, I will discuss some of the possibilities to be pursued in future studies.

There are at least four possibilities to be considered, if we want to answer the question of what is involved in the 'ellipsis' of our analysis of 'sluicing.' Those are; i) A base-generated empty category and LF copying operation; ii) S-Structure deletion (under LF identity); iii) PF deletion, or phonological reduction (under LF identity); iv) pro.

If we take the approach i) or ii), then there arises a question of whether an empty node should be licensed by a functional licensing mechanism of the sort proposed in Lobeck (1990). As can be seen in (10a') below, the empty node, CP, seems to be something not licensed by an agreeing functional head (See its structure in (11)).

(10a') John-ga dareka-o kubinisita rasii kedo,
   John-Nom someone-Acc fired seem but
I-Top who-Acc is Q know not

Since the status of the functional licensing approach is not clear in the theory anyway, we might safely say that it has no role in the cases we are looking at.

Alternatively, we might continue to assume that the functional licensing mechanism is at work in 'sluicing' cases, and the empty node in (10a') is in fact licensed by it. This can be achieved, as suggested to me by Mamoru Saito (p. c.), by adding some modification to the licensing mechanism in (3) and assuming additional movement in the embedded question in (10a').

Suppose that an empty IP in an embedded question can be licensed if the [+WH] feature of the head C is checked off in some way or another. It would not be unreasonable to assume that English employs Spec-Head agreement for this purpose, but Japanese employs some other way to satisfy it. Suppose further that 'dare-o' ('who-Acc') in (10a') undergoes some sort of incorporation into its head, V ('de'), and this complex further undergoes head movement and ends up in C. That is, the amalgamated 'dare-o da/de aru ka' is now under the head C. If we assume that the feature [+WH] in C is checked off by this process, the empty
IP can be licensed. Although this approach could be pursued further, it is not clear whether it can be equally extended to examples such as (4b) or (4c), where 'sluicing' is observed in non-\(\text{wh}\) clauses, unless we assume, at least, that there are features in \(\text{ka dooka}\) ('whether') and \(\text{to}\) ('that') that need to be checked off.

If we follow the approach iii) PF deletion, there is no need to worry about the functional licensing of an empty node. There is no empty node in the syntax, since deletion takes place somewhere between S-Structure and PF. It should be noted that Takahashi (1994)'s argument for PF deletion approach to 'sluicing,' as opposed to LF copying approach, based on Subjacency effect, crucially undermines his main argument in the article, i.e., the presence of an agreeing functional head in Japanese. Under the PF deletion approach to 'sluicing,' at no point in the (syntactic) derivation, is an empty IP node present. There is no empty node in syntax that needs to be licensed in the Lobeck-style licensing condition in the first place.\(^7\) If we are to i) take some sort of deletion approach, (which seems to be correct on the basis of the presence of Subjacency effect in 'sluicing,')\(^8\) and ii) argue for the presence of an agreeing head in Japanese, S-Structure deletion, but not PF deletion, must be assumed because the functional licensing approach to ellipsis could only become relevant if we assume an empty node in syntax, unless we assume with Aoun, Hornstein, Lightfoot and Weinberg (1987) that head government part of the ECP applies at PF.

We do not have much to say about the approach iv) at this point. We only point out here that this view, in which elliptic part is a \(\text{pro}\), is not incompatible with the idea suggested in Heim and Kratzer (1993) that 'one function of pronouns in natural language is very much like that of ellipsis.' If we are to assume that the elliptic presuppositional part is a \(\text{pro}\), we need to ensure that a sloppy identity interpretation of 'sluicing' in Japanese, to be briefly discussed in section 4.3, will be guaranteed in some way or another.

4. Other properties of 'sluicing' (in Japanese)

In this section we will briefly discuss some other properties exhibited in 'sluicing' in Japanese: multiple sluicing, the subjacency effect, and sloppy identity interpretation. The latter two properties are the ones shared by Sluicing in English. It will be shown that these properties follow from the cleft approach proposed in the previous section.

4.1 Multiple sluicing and the clausemate restriction

It is pointed out in Takahashi (1993, 1994) that multiple sluicing is possible in Japanese. Furthermore, it is observed that multiple sluicing obeys a clausemate restriction. These properties are shown in (13) and (14). \(\text{b)}\) and \(\text{c)}\) examples in (13) and (14) are instances of non-\(\text{wh}\) remnants.

\[\text{(13)}\]
\[
\text{Dareka-ga dareka-ni yubiwa-o okutta rasii kedo, someone-Nom someone-Dat ring-Acc gave seem but}
\]
\[
\begin{align*}
\text{a. boku-wa [dare-ga dare-ni ka] siranai.} \\
\text{I-Top who-Acc who-Dat Q know not}
\end{align*}
\]
\[
\begin{align*}
\text{b. boku-wa [John-ga Mary-ni ka dooka] siranai.} \\
\text{I-Top John-Nom Mary-Dat whether know not}
\end{align*}
\]
c. boku-wa [John-ga Mary-ni to] omou.
   I-Top John-Nom Mary-Dat that think

'It seems that someone gave a ring to someone, but
  a. I don't know who to whom'
  b. I don't know whether John to Mary'
  c. I think that John to Mary'

(14) Jill-ga dareka-ni [John-ga Mary-ni nanika-o okutta to]
    Jill-Nom someone-Dat John-Nom Mary-Dat something-Acc gave that
    itta rasii kedo,
    said seem but
       I-Top who-Dat what-Acc Q know not
       I-Top Tom-Dat ring-Acc whether know not
    c. *boku-wa [Tom-ni yubiwa-o to] omou.
       I-Top Tom-Dat ring-Acc that think

'It seems that Jill said to somebody that John gave something to Mary, but
  a. I don't know to whom what'
  b. I don't know whether to Tom a ring'
  c. I think that to Tom a ring'

These properties are not surprising under the cleft analysis. Multiple
'sluicing' as in (13) is allowed because multiple foci clefts are grammatical in
Japanese, as shown in (15).

(15) Yubiwa-o okutta no wa John-ga Mary-ni da.
    ring-Acc gave NM Top John-Nom Mary-Dat is
    '(Lit.) It is John to Mary that gave a ring'

Moreover, multiple foci clefts obey the clausemate restriction, as shown in (16).

(16) *[Jill-ga ø [John-ga Mary-ni ø okutta to] itta] no wa Tom-ni
    Jill-Nom John-Nom Mary-Dat gave that said NM Top Tom-Dat
    yubiwa-o da
    ring-Acc is
    '(Lit.) It is to Tom a ring that Jill said that John gave to Mary'

The availability of multiple 'sluicing' and its clausemate restriction thus follow
from our cleft analysis, since clefts show the same properties. Notice that 'multiple head' relative clauses, as in (17), is ungrammatical.

(17)*[CP[John-ga ø ø okutta]] [hon gakusei]
    John-Nom sent book student
    '(Lit.) book student that John sent'
Questions remain i) why multiple foci cleft (18) is ever possible, while its relative clause counterpart (17) is impossible, and ii) why it obeys the clausemate restriction. These questions need to be examined in future research (See Otani and Whitman (1991)).

4.2 Subjacency effect

'Sluicing' in Japanese exhibits subjacency effects, as in English (Ross (1969), Takahashi (1994)). This is shown in (19).

(19) John-ga [dareka-ga kaita e] -o sagasite iru rasii ga, John-Nom somebody-Nom painted picture -Acc looking for seem but
   a. boku-wa [dare-ga kaita e] -o ka siranai
      I-Nom who-Nom painted picture -Acc Q  know not
   b. *boku-wa dare-ga  ka siranai
      I-Nom who Nom Q  know not
   'It seems that John is looking for a picture that somebody painted, but
   a. (Lit.) I don't know who a picture that painted'
   b. I don't know who'

This fact follows from our analysis, since clefts involve (null operator or direct) movement and exhibit subjacency effects, as shown in (20).

(20)a. John-ga [Yumeji-ga kaita e] -o sagasite iru
      John-Nom Yumeji-Nom painted picture -Acc looking for
      'John is looking for a picture that Yumeji painted'
   b. John-ga sagasite iru no wa [Yumeji-ga kaita e]  da
      John-Nom looking for NM Top Yumeji-Nom painted picture is
      'It is a picture that Yumeji painted that John is looking for'
   c. ??John-ga [t kaita e] -o sagasite iru no wa Yumeji da
      John-Nom painted picture -Acc looking for NM Top Yumeji is
      '(Lit.) It is Yumeji that John is looking for a picture that painted'

As pointed out in Takahashi (1994), the fact that 'sluicing' exhibits the subjacency effect argues for a 'deletion' approach, as opposed to 'copying' approach. (But see note 8.)

4.3 Sloppy identity interpretation

As pointed out in Takahashi (1994), 'sluicing' in Japanese, just as in Sluicing in English, allows a sloppy identity interpretation. Consider the following examples.
(21) a. Mary-wa [zibun-ga naze sikarareta ka] siranai kedo,
    Mary-Top self-Nom why was scolded Q know not but
    Tom-wa [naze ka] sitte iru
    Tom-Top why Q know
    'Mary doesn't know why she was scolded, but Tom knows why'

b. Mary-wa [zibun-no imooto-ga dare-ni atta ka] siranai kedo,
    Mary-Top self-Gen sister-Nom who-Dat met Q know not but
    Tom-wa [dare-ni ka] sitte iru
    Tom-Top who-Dat Q know
    'Mary doesn't know who her sister met, but Tom knows who'

The second conjunct of (21a) can either mean i) 'Tom knows why Mary was scolded' (strict reading), or ii) 'Tom knows why he, Tom, was scolded' (sloppy reading). The second conjunct of (21b) also allows i) a strict reading ('Tom knows who Mary's sister met') and ii) a sloppy reading ('Tom knows who his own sister met').

Under the cleft approach, each second conjunct of (21a) and (21b) is related, at some level of representation, to (22a) and (22b) respectively.

(22)a. Tom-wa [[zibun-ga sikarareta no]-ga naze ka] sitte iru
    Tom-Top self-Nom was scolded NM Nom why Q know
    'Tom knows why it is that he was scolded'

b. Tom-wa [[zibun-no imooto-ga atta no]-ga dare(?-ni) ka] sitte iru
    Tom-Top self-Gen sister-Nom met NM Nom who -Dat Q know
    'Tom knows who it is that his sister met'

Although a question remains how to get an appropriate LF structure that will guarantee the sloppy identity reading in (21), this is not a question only relevant to our analysis. An analysis of Sluicing in English that provides an appropriate LF structure to get sloppy identity reading should be extended to our treatment of 'sluicing.'

If we adopt the approach iv) in section 3.3, that is, the assumption that elliptic presuppositional part is a pro, then we need to consider how to ensure a sloppy identity reading. Notice that if this presuppositional part of a cleft is expressed by an overt pronoun sore ('it'), no sloppy reading is possible, as noted in Takahashi (1994). If we replace the second conjunct of (21a) and (21b) with (23a) and (23b) respectively, sloppy identity interpretation is no longer available.

(23)a. Tom-wa [sore-ga naze ka] sitte iru
    Tom-Top it-Nom why Q know

b. Tom-wa [sore-ga dare(?-ni) ka] sitte iru
    Tom-Top it-Nom who-Dat Q know

We might consider pro's in 'sluicing' to have functions similar to definite descriptions, or alternatively, functions similar to pronouns of laziness. Whatever an analysis would be, it should be something that can differentiate pro
from the overt pronoun *sore* (‘it’), in terms of availability of a sloppy identity interpretation.

5. Conclusion

In this paper, we examined properties of ‘sluicing,’ a phenomenon in Japanese that appears similar to Sluicing in English. Some problems in the wh-agreement analysis have been pointed out. We provided an alternative analysis, in which we assumed that what is involved in ‘sluicing’ in Japanese is ellipsis of presuppositional part of clefts.

It should be noted that it is not impossible for these two approaches to coexist. This view appears to be reasonable if we consider the following English sentences.

(24)
a. They say that John fired somebody, but I don’t know who (John fired).
b. They say that John fired somebody, but I don’t know who it is (that John fired).

We might assume, for English at least, that the examples in (24) involve two distinct phenomena.

As for Japanese, the cleft analysis proposed in this paper covers all the cases of ‘sluicing’; ‘sluicing’ with *wh* or non-*wh* remnants, and with or without a copula. We might still retain the wh-agreement analysis, since it covers a subset of the cases covered by the cleft analysis, namely, ‘sluicing’ with *wh* remnants without a copula. I believe that whether this redundancy should be allowed in the grammar or not partially depends on the validity of the argument for S-Structure wh-movement in Japanese. If evidence for S-Structure wh-movement in Japanese turns out to be not strong, this redundancy would be rather costly.

Notes

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1. A possibility of some kind of ‘focus’ agreement in (5b) was suggested by Akira Watanabe (p. c.).

2. We simply adopt the idea that ‘*no*’ in (8) is a nominalizing complementizer, but this assumption is not crucial to the analysis in this paper. (See e.g., Kitagawa and Ross (1982), Kuno (1973).)

3. The verb ‘*kubi ni suru*’ (‘fire’) in (8) is by no means monomorphemic, and needs to be broken into smaller parts. It is treated as if it is a simple monomorphemic verb in (8b’), only because a more detailed analysis is not relevant to the point we are concerned here.
4. As pointed out by Ellen Woolford (p. c.), it is not clear how the NP in the focus position in (9b), 'Bill-o,' can get Accusative Case. This might be evidence for a direct movement approach to clefts, and against a null operator movement approach, as suggested by Akira Watanabe (p. c).

5. A Case-marker in a remnant phrase in 'sluicing' can be left out in some cases. It appears to be the case that NP's without structural Case markers (-ga (-Nom), -o (-Acc)) sound better than other bare NP's.

i) Dareka-ga Mary-ni yubiwa-o watasita rasii kedo,
    someone-Nom Mary-Dat ring-Acc handed seem but
    boku-wa dare [-ga/ø] ka siranai
    I-Top who -Nom Q know not

ii) John-ga Mary-ni nanika-o watasita rasii kedo,
    John-Nom Mary-Dat someting-Acc handed seem but
    boku-wa nani [-o/ø] ka siranai
    I-Top what -Acc Q know not

iii) John-ga dareka-ni yubiwa-o watasita rasii kedo,
    John-Nom someone-Dat ring-Acc handed seem but
    boku-wa dare [-ni/?ø] ka siranai
    I-Top who -Dat Q know not

iv) Bill-ga dareka-ni (yotte) kaiko sareta rasii kedo,
    Bill-Nom someone-by fired seem but
    boku-wa dare [-ni (yotte)/*ø] ka siranai.
    I-Top who -by Q know not

It should be noted that focus NP's with structural Case markers sound somewhat marginal in clefts (cf. Inoue (1976)), as shown in v) and vi) below, compared to remnant NP's in 'sluicing' marked with -ga or -o in i) and ii).

v) Mary-ni yubiwa-o watasita no-wa John {??-ga/ø} da
    Mary-Dat ring-Acc handed NM Top John -Nom is

vi) John-ga Mary-ni watasita no-wa yubiwa {?-o/ø} da
    John-Nom Mary-Dat handed NM Top ring -Acc is

7. Thanks to Kiyomi Kusumoto for bringing up a relevant point, and to Akira Watanabe for discussion.
8. If we assume that QR exists, contrary to Takahashi's assumption, and that Subjacency applies at LF, LF copying approach should still be a possibility.

9. Takahashi (1994) attempts to account for the clausemate restriction of multiple sluicing by assuming, following Saito (1994), that a lower wh-phrase adjoins to a higher one, and that this complex wh-phrase moves to Spec-CP, as in i).

i) a. \ldots [C' [IP \ldots WH_i \ldots ] C] \ldots
   b. \ldots [CP[WH_i-[WH_i]] [C [IP e ] C] \ldots

It is not clear how we can get the correct word order under this analysis, although it could be argued that the lower wh-phrase first scramble to the front of the higher one, and then adjunction takes place.

10. Takahashi (1994) notes a difference in availability of sloppy reading depending on the presence or absence of a copula. The judgement is very subtle here. If the contrast turns out to be significant, re-examination of the analysis presented here is necessary.

References


