1. Introduction

Sluicing, first discussed in Ross (1969), is an elliptical construction which involves a remnant \textit{wh}-phrase followed by an elliptical constituent as in (1b).\footnote{Remnants are the elements which have not undergone ellipsis in a sluiced clause.}

\begin{enumerate}
\item a. He is writing something, but you can’t imagine what he is writing.
\item b. He is writing something, but you can’t imagine what $\Delta$. \quad (Ross 1969: 252)
\end{enumerate}

Although the embedded clause of the second conjunct in (1b) is incomplete, its interpretation is the same as (1a). A number of works (Ross 1969, Merchant 2001, to name a few) argue that English sluicing involves \textit{wh}-movement to [Spec, CP] followed by TP-deletion as illustrated in (2).\footnote{Chung, Ladusaw, and McCloskey (1995) provide the LF-copying approach to English sluicing. I omit their discussions for expository reasons and innocently take the PF-deletion approach throughout this paper. For some relevant discussions, see Takahashi (1994), Merchant (2001), among others.}

(2) He is writing something, but you can’t imagine [CP what [TP he is writing]].

Inoue (1976) and Takahashi (1993, 1994) observe that a similar phenomenon exists in Japanese as shown in (3c).

\begin{enumerate}
\item a. Mary-\textit{ga} something-\textit{ACC} bought likely but
\item ‘It is likely Mary bought something, but…’
\end{enumerate}
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   I -TOP she -NOM what -ACC bought Q know.not
   ‘I don’t know what she bought.’

   I -TOP what -ACC Q know.not
   ‘I don’t know what.’

(Takahashi 1994: 266)

(3c) contains an incomplete embedded clause which consists of a remnant wh-phrase and a Q(uestion)-marker, but we can interpret (3c) in the same way as (3b), which contains a full indirect question. Although Takahashi (1993, 1994) proposes that the Japanese sluicing-like construction (SLC) is derived in the same way as English sluicing as in (4a), it is now widely assumed that the SLC involves a different structure from English sluicing (see Nishiyama, Whitman & Yi 1996, Saito 2004, among many others).3 According to the latter view, the SLC is derived from clefts by deleting/omitting the presupposition CP and the copula as illustrated in (4b).

(4) a. The Wh-movement Analysis
   Boku -wa [CP nani -o [ti kanozyo ga t katta] ka] wakaranai.
   I -TOP what -ACC she -NOM bought Q know.not
   ‘I don’t know what she bought.’

b. The Cleft Analysis
   I -TOP she -NOM bought that -NOM what -ACC be Q know.not
   ‘I don’t know what it is that she bought.’

In addition, although we abstract away from their discussions until section 2.3, Kizu (1997) and Craenenbroeck and Lipták (2007, 2009) claim that not only the SLC in Japanese but also the one in wh-in-situ languages should be uniformly derived from clefts. The cleft analysis of the SLC in wh-in-situ languages is now pervasive both empirically and theoretically.

In this paper, however, I argue that the Mongolian SLC could not be derived from clefts, providing some novel data from Mongolian, which is also one of the wh-in-situ languages

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(Binnick 1979, Janhunen 2003). In section 2, we first overview two major analyses of the Japanese SLC, the \textit{wh}-movement and the cleft analyses, and show that the latter is empirically preferable. In addition, we see the extension of the latter analysis to the SLC in \textit{wh}-in-situ languages discussed by Kizu (1997) and Craenenbroeck and Lipták (2007, 2009). In section 3, we first illustrate that Mongolian is one of the \textit{wh}-in-situ languages, and then provide some arguments against the cleft analysis of the Mongolian SLC: the (non-)restriction of the Case-marker, the behavior of adjuncts, and the (im)possibility of multiple sluicing and multiple clefts. Section 4 concludes this paper.

2. Japanese Sluicing as a Concealed Cleft

2.1. Problems with the Wh-movement Analysis

Takahashi’s (1993, 1994) \textit{wh}-movement analysis of the Japanese SLC involves at least two problems. First, the Japanese SLC can optionally involve the copula \textit{da} as shown in (5a), whereas its underlying source under the \textit{wh}-movement analysis cannot accommodate the appropriate place for the copula as in (5b).

\begin{align*}
(5) & \quad \text{a. John-ga dareka -o kubinisita rasii kedo,} \\
& \quad \text{John-NOM someone -ACC fired seem but} \\
& \quad \text{boku-wa [CP dare -o (da) ka] wakaranai.} \\
& \quad \text{I -TOP who -ACC be Q know.not} \\
& \quad \text{‘It seems that John fired someone, but I don’t know who. (Shimoyama 1995: 4)}
\end{align*}

\begin{align*}
(5) & \quad \text{b. …, boku-wa [CP dare-o$_i$ [TP kare-ga t$_i$ kubinisita] (*da) ka]} \\
& \quad \text{I -TOP who-ACC he -NOM fired be Q} \\
& \quad \text{wakaranai.} \\
& \quad \text{know.not} \\
& \quad \text{‘It seems that John fired someone, but I don’t know who he fired.’}
\end{align*}

Therefore, the \textit{wh}-movement analysis cannot account for the fact that the copula \textit{da} can optionally appear in the Japanese SLC.

Second, the \textit{wh}-movement analysis cannot account for the variety of possible remnants in the Japanese SLC. As in (6), the Japanese SLC allows non-\textit{wh} remnants.

\begin{align*}
\text{Although Takahashi (1994) already notices this problem, he argues against the cleft-based approach to the Japanese SLC based on some independent reasons.}
\end{align*}
In (6), the remnant is a non-\textit{wh} phrase, \textit{daiamondo-no yubiwa} ‘diamond ring’. This is problematic for the \textit{wh}-movement analysis, since it presupposes that remnants undergo \textit{wh}-movement, that is, remnants must be \textit{wh}-phrases.

2.2. The Cleft Analysis

Contrary to the \textit{wh}-movement analysis, a number of works such as Nishiyama, Whitman and Yi (1996) and Saito (2004) claim that the Japanese SLC involves clefts as its underlying source. A typical example of Japanese cleft sentences is given in (7).

\begin{itemize}
  \item (7) \textit{[Taroo -wa] tataita no] -wa Hanako( -o) da.}
\end{itemize}

\text{Taroo -NOM hit that -TOP Hanako -ACC be}

\begin{itemize}
  \item \text{‘It is Hanako that Taroo hit.’}
\end{itemize}

\text{(Mihara and Hiraiwa 2006: 249)}

Here, the elements which precede the topic marker -\textit{wa} are the presupposition and the one which underlies between the topic marker and the copula \textit{da} is the focused material. If the Japanese SLC contains clefts, the embedded clause in (3c) can be represented in full as in (4b), repeated here as (8a) and (8b) respectively.

\begin{itemize}
  \item (8) a. \textit{Boku -wa [CP nani -o ka] wakaranai.}
\end{itemize}

\text{I -TOP what -ACC Q know.not}

\begin{itemize}
  \item \text{‘I don’t know what.’}
\end{itemize}

\begin{itemize}
  \item (8) b. \textit{Boku -wa [CP [CP kanozyo -ga katta no] -ga nani -o (da)]}
\end{itemize}

\text{I -TOP she -NOM bought that -NOM what -ACC be}

\begin{itemize}
  \item \text{ka] wakaranai.}
\end{itemize}

\text{Q know.not}

\begin{itemize}
  \item \text{‘I don’t know what it is that she bought.’}
\end{itemize}
In (8b), the subject of the embedded clause *kanozyo-ga katta no* ‘that she bought’ is the presupposition and *nani-o* ‘what’ is the focused element. If the presupposition and the copula are omitted/deleted as in (4b), the surface string of (8a) can be obtained from (8b).\(^5\)

This analysis is preferable in that it can solve the problems that the *wh*-movement analysis involves. First, the cleft analysis can capture the optional presence of copulas shown in (5a), since they are also optional in clefts as in (8b). Second, it is compatible with non-*wh* remnants, since they can appear in the pivot of cleft sentences as illustrated in (9).

\[\text{(9)}\]
\[
\begin{align*}
\text{Taroo-} & \quad [\text{CP [TP } pro, \text{ Naomi-ni hanataba-o ageta to]}] \text{ itteita } \text{ ga,} \\
\text{Taroo-NOM} & \quad \text{Naomi-DAT bouquet -ACC gave that said but} \\
\text{Ziroo-} & \quad [\text{CP [TP kare-ga kanozyo-ni ageta no} -\text{ga} \\
\text{Ziroo-TOP} & \quad \text{he } -\text{NOM she } -\text{DAT gave that -NOM} \\
\text{daiamondo-no yubiwa-} & \quad \text{to} ] \text{ itteita.} \\
\text{diamond -GEN ring -ACC that said}
\end{align*}
\]

‘Taro said that he gave a bouquet to Naomi, but Ziroo said that it is a diamond ring.’

Therefore, the cleft analysis has some empirical advantages over the *wh*-movement analysis.

### 2.3. Arguments for the Cleft Analysis of Sluicing in Wh-in-situ Languages

Some works for the cleft analysis argue that not only the SLC in Japanese but also the one in other *wh*-in-situ languages such as Korean, Chinese, and Turkish is best analyzed by the cleft-based approach. For example, Kizu (1997) observes that the SLC and the cleft construction in these languages are similar in that copulas are usually found in both constructions. Let us consider one of her examples from Korean.

\[\text{(10) a. Motwu -nun John-i nwukunka-lul salanghan-ta -ko} \\
\text{everyone-TOP John-NOM someone -ACC love -IND-that} \\
\text{malha-ciman, na -nun [CP nwukwu -lul *(i-n) -ci] molu-n-ta.} \\
\text{say -but I -TOP who -ACC be -Q know.not}
\]

‘Everyone said John loves someone, but I don’t know who.’

---

\(^5\) Informally speaking, Nishiyama, Whitman and Yi (1996) propose that the presupposition part is replaced by null pronouns, whereas Saito (2004) argues that it is elided by the process called argument ellipsis proposed by Kim (1999) and Oku (1998). Since these options are irrelevant to our discussion, I will omit their discussions.
(10a) and (10b) are the SLC and the cleft construction in Korean respectively. In both cases, the copula *'be'* can be observed, which supports the idea that the SLC derives from clefts since the latter is a kind of copular sentences.

Furthermore, building on Merchant’s (2001) [E]-feature, Craenenbroeck and Lipák (2007, 2009) propose a generalization which can capture this insight.

(11) **The Wh/Sluicing-Correlation**

The syntactic features that the [E]-feature has to check in a language L are identical to the strong features a *wh*-phrase has to check in a regular constituent question in L.

(Craenenbroeck & Lipták 2009: 9)

Abstracting away from some technical terms, (11) states that the syntax of sluicing should track that of *wh*-movement in all languages. According to this generalization, *wh*-in-situ languages such as Japanese should not exhibit sluicing, since it is well established that *wh*-phrases in these languages do not have to undergo overt movement. Therefore, they conclude that the SLC in *wh*-in-situ languages could not derive from *wh*-movement, and supports its cleft-based derivation.

3. Discrepancies between Sluicing and Clefts in Mongolian

3.1. Mongolian Sluicing = A Concealed Cleft?

“Mongolian is spoken by an estimated 6 million speakers in Mongolia, Buryatia and in the autonomic province of inner Mongolia” (cited from Janhunen 2003). Its basic word order is Subject-Object-Verb as in (12) (see Binnick 1979, Janhunen 2003, among others).

(12) Huu -Ø ene nom -ig unsh -san.

boy -NOM this book -ACC read -PERF

‘The boy read this book.’

(Janhunen 2003: 170)

6 In general, objects in Mongolian can bear either nominative (no Case marker) or accusative Case. Some works argue that this alternation is affected by the specificity of objects, but it is still controversial. Unless they are relevant, I will use accusative objects just for the expository reason.
Sluicing and Clefts in Mongolian (Yuta Sakamoto)

Here, *huu ‘boy’ and ene nom ‘this book’ function as the subject and the object respectively. As illustrated in (13), *wh*-phrases normally occupy the same position as the corresponding constituents of an affirmative clause.

(13) Ohin-Ø *yu -g uu -san be?*  
    girl -NOM what -ACC drink -PERF Q  
    ‘What did the girl drink?’ (adapted from Janhunen 2003: 171)

Unlike the English-type languages, the object *wh*-phrase *yu ‘what’ can stay in-situ. Therefore, we may conclude that Mongolian is one of the *wh*-in-situ languages.

A similar construction to sluicing also exists in Mongolian as illustrated in (14).?

(14) a. Oyuna-Ø yamar_negen_zuil-ig zeelle -sen.  
    Oyuna-NOM something -ACC borrow-PERF  
    ‘Oyuna borrowed something.’

b. Gevch, bi [CP Oyuna-g *yu -g zeelle -sn -ig ni]  
    but I Oyuna-ACC what -ACC borrow-PERF -ACC NI  
    med -eh -gui.  
    know -INF-not  
    ‘But, I don’t know what Oyuna borrowed.’

c. Gevch, bi [CP *yu -g ni] med -eh -gui.  
    but I what -ACC NI know -INF-NEG  
    ‘But, I don’t know what.’

The incomplete embedded clause in (14c) consists of a remnant *wh*-phrase *yu ‘what’ and the element *ni*, which is called the 3rd Personal Possessive Clitic by Hashimoto (2004), and its interpretation is the same as (14b).8

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7 There are three footnotes here. First, in Mongolian, subjects usually bear accusative Case in embedded clauses called object clauses (embedded complement clauses without complementizers). For some recent discussion, see von Heusinger, Klein, and Guntsetseg (to appear). Second, as we can see in (14b), the verb of object clauses must bear the accusative Case marker, since their categorial status is nominal rather than clausal. Here, I innocently take the category of object clauses as CP just for the expository reason. Third, in most object clauses, the presence of *ni* is actually optional, but I will always insert it to make our discussion clearer.

8 The element *ni* in a sluiced clause is obligatory. I will leave its status for future research.
In addition, the cleft construction can be observed in Mongolian as in (15b), where the elements which precede ni are the presupposition and the one which follows it is the focused element (Hashimoto 2006).  

(15) a. Oyuna-Ø ene tort -ig id -sen.
   Oyuna-NOM this cake -ACC eat-PERF
   ‘Oyuna ate a cake.’

b. Oyuna-gin id -sen ni tort-Ø.
   Oyuna-GEN eat-PERF NI cake-NOM
   ‘It is a cake that Oyuna ate.’

Then, one might argue that the Mongolian SLC such as (14c) could derive from clefts by deleting/omitting the presupposition part in the same way as the Japanese SLC as illustrated in (16).

   but I Oyuna-GEN borrow-PERF NI what-ACC NI know -INF-NEG
   ‘But, I don’t know what it is that Oyuna borrowed.’

This type of derivations is preferable from the viewpoint of the generalization proposed by Kizu (1997) and Craenenbroeck and Lipák (2007, 2009). However, in the following subsections, I point out that there are some discrepancies between the SLC and clefts in Mongolian, which would argue against the cleft analysis.

3.2. The (Non-)restriction of Case-markers

Let us first consider the typical example of Japanese cleft constructions in (17b).

(17) a. Taroo-ga Hanako-o tataita.
   Taroo-NOM Hanako-ACC hit
   ‘Taroo hit Hanako.’

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9 The subject in the presupposition of clefts in Mongolian usually bears genitive Case.
10 Since Mongolian is one of the pro-drop languages and allows argument ellipsis, the elision of arguments does not pose any problem. For the relevant data concerning the possibility of pro-drop and argument ellipsis in Mongolian, see Takahashi (2007) and Sakamoto (2012).
(17b) is the cleft sentence which corresponds to (17a). What we can know from (17b) is that the Case-maker of the pivot in Japanese clefts is optional. Then, if the cleft analysis of the Japanese SLC is correct, we predict that the Case-marker of remnants is also optional, since remnants in the SLC correspond to pivots in clefts under such an analysis. As shown in (18), this prediction is actually borne out.

(18) Boku -wa [CP nani(-o) ka] wakaranai.
‘I don’t know what.’
(adapted from Takahashi 1994: 294)

Therefore, the cleft analysis of the Japanese SLC can naturally capture the optionality of Case-markers of remnants.

Unlike Japanese, the pivot of Mongolian clefts cannot be marked by the Case other than nominative, as illustrated in (19).

(19) Oyuna-gin id -sen ni tort -Ø/ *-ig.
‘It is the cake that Oyuna ate.’

If we adopt the cleft analysis, it is then predicted that remnants of the Mongolian SLC cannot bear the Case other than nominative as well. However, this prediction is not borne out as in (14c) repeated here as (20).

(20) Gevch, bi [CP yu -g ni] med -eh -gui.
‘But, I don’t know what.’

The grammaticality of (20) shows that the cleft analysis of the Mongolian SLC could not account for the variation of the Case-marker of remnants.
3.3. The Behavior of Adjuncts

The second argument against the cleft analysis of the Mongolian SLC has to do with the behavior of adjuncts. In Mongolian cleft constructions, adjuncts cannot occur in the pivot as illustrated in (21).

(21) *Oyuna-Ø ene nom -ig hudal_dag_av_san ni uchigdur.
Oyuna-NOM this book-ACC bought NI yesterday
’It was yesterday that Oyuna bought this book.’

Since uchigdur ‘yesterday’ is a temporal adverb and is not selected by the verb, it is an adjunct and can be considered as the cause for the degradation of (21) in comparison with (15b), where the pivot involves the argument tort ‘cake’.

If the Mongolian SLC involves clefts as its underlying source, we expect that adjuncts cannot be remnants; however, it is not the case as shown in (22).

(22) Bat-Ø Mie yav -san, gevch bi [CP hezee -g ni] med -eh -gui.
Bat-NOM Mie go -PERF but I when -ACC NI know -INF-NEG
’Bat went to Mie, but I don’t know when.’

Hezee ‘when’ is an adjunct wh-phrase and functions as a remnant here. Therefore, if we take the cleft analysis of the Mongolian SLC, we could not account for the grammaticality of (22).

3.4. The (Im)possibility of Multiple Sluicing and Multiple Clefts

The last argument against the cleft analysis of the Mongolian SLC has to do with the (im)possibility of multiple sluicing and multiple clefts in Mongolian. Takahashi (1993, 1994) observes that not only one element but also multiple ones can be remnants in the Japanese SLC as illustrated in (23b).

John-NOM someone -NOM something-ACC bought that said
’John said someone bought something.’

One might wonder why the adjunct hezee ‘when’ is marked by the accusative Case marker. I do not have any concrete explanation and leave this for future research.
Sluicing and Clefts in Mongolian (Yuta Sakamoto)

b. Mary-wa [\(CP\) dare-ga nani-o ka] siritagatteiru.
   Mary-TOP who -NOM what-ACC Q wants.to.know
   ‘lit. Mary wants to know who what.’ (Takahashi 1994: 285)

With (23a) as its antecedent, (23b) is grammatical, where two wh-phrases dare ‘who’ and nani ‘what’ and a Q-marker are involved in the embedded clause, and it can mean that Mary wants to know who bought what.

Under the cleft analysis of the Japanese SLC, multiple sluicing such as (23b) should derive from multiple clefts. Koizumi (1995, 2000) and Takano (2002) claim that more than one element in fact can be focused in Japanese cleft constructions as illustrated in (24) (c. and d. are adapted from Takano 2002: 246).

   John-NOM Mary-DAT apple -ACC gave
   ‘John gave a book to Mary.’

   John-NOM Mary-DAT gave that -TOP book -ACC be
   ‘It is [a book] that John gave to Mary.’

   John-NOM gave that -TOP book -ACC Mary -DAT be
   ‘lit. It is [a book to Mary] that John gave.’

   gave that -TOP John -NOM book -ACC Mary -DAT be
   ‘lit. It is [John a book to Mary] that gave.’

In (24b), the direct object hon ‘book’ is focused; in (24c), the dative object Mary as well as the direct object is focused; in (24d), the subject John as well as the direct and indirect objects is focused. The grammaticality of (24c) and (24d) indicates that Japanese multiple sluicing can involve multiple clefts as its underlying source; for example, the underlying source of the multiple sluicing construction in (23b) could be (25).

‘lit. Mary wants to know who what it is that bought.’

If the presupposition CP is elided either by argument ellipsis or the replacement by pro and the copula da is dropped, the surface string in (23b) is obtained from (25).

Mongolian also allows multiple sluicing as shown in (26) and (27).

(26) a. Bat-Ø hen_negen -d hen_negen_zuil -ig ug-sun.
   Bat-NOM someone -DAT something -ACC give-PERF
   ‘Bat gave something to someone.’

b. Gevch, bi [CP hen-d yu -g ni] med -eh -gui.
   but I who-DAT what-ACC NI know -INF-NEG
   ‘lit. But, I don’t know to whom what.’

(27) a. Bat-Ø haa_negtee-gees yamar_negen_zuil-ig zeelle -sen.
   Bat-NOM somewhere-ABL something -ACC borrow-PERF
   ‘Bat borrowed something from somewhere.’

b. Gevch , bi [CP hezee haana-as yu -g ni] med -eh -gui.
   but I when where-ABL what-ACC NI know -INF-NEG
   ‘lit. But I don’t know when from where what.’

With (26a) and (27a) as their antecedents, (26b) and (27b) are grammatical. In the former, the embedded clause consists of two wh-phrases hen ‘who’ and yu ‘what’ and the element ni; in the latter, the embedded clause contains three wh-phrases hezee ‘when’, haana ‘where’, and yu ‘what’ and ni. The grammaticality of (26b) and (27b) suggests that not only one remnant but also multiple ones can appear in the Mongolian SLC.

Then, under the cleft analysis of the Mongolian SLC, it is predicted that Mongolian allows multiple foci in the cleft construction in the same way as Japanese since such an analysis should derive multiple sluicing from multiple clefts. However, this prediction is not borne out as illustrated in (28c) and (28d).
(28) a. Bat-Ø Oyuna-d nom-ig ug -sun.
   Bat-NOM Oyuna-DAT book-ACC give -PERF
   ‘Bat gave a book to Oyuna.’

b. Bat-in Oyuna-d ug -sun ni [nom-Ø].
   Bat-GEN Oyuna-DAT give -PERF NI book-NOM
   ‘It is [a book] that Bat gave to Oyuna.’

c. *Bat-in ug -sun ni [nom(-ig) Oyuna(-d)].
   Bat-GEN give -PERF NI book-ACC Oyuna -DAT
   ‘lit. It is [a book to Oyuna] that Bat gave.’

d. *Ug-sun ni [Bat-Ø nom(-ig) Oyuna(-d)].
   give-PERF NI Bat-NOM book-ACC Oyuna -DAT
   ‘(lit.) It is [Bat a book to Oyuna] that gave.’

The cleft construction (28b) is grammatical, where only the direct object nom ‘book’ appears in the pivot. On the other hand, (28c) and (28d) are ungrammatical, where more than one element occurs in the pivot. The ungrammaticality of (28c) and (28d) suggests that multiple foci in Mongolian cleft sentences are impossible, which leads to an argument against the cleft analysis of the Mongolian SLC. More specifically, under such an analysis, the possibility of multiple sluicing in Mongolian could not be accounted for.

4. Conclusion

In this paper, I argued that the Mongolian SLC should not be derived from clefts. We first reviewed the analyses of the Japanese SLC in terms of wh-movement (Takahashi 1993, 1994) and in terms of clefts (Nishiyama, Whitman and Yi 1996, Saito 2004, among many others), and discussed that the latter has broader empirical coverage and is widely assumed for the SLC in other wh-in-situ languages. Next, we observed that Mongolian is a wh-in-situ language and suggested a possible derivation of the Mongolian SLC in terms of clefts. However, we pointed out that there are some crucial differences between the SLC and clefts in Mongolian, and argued against the cleft analysis. There were three arguments. First, the Case-marker of the pivot in clefts is restricted to nominative, whereas the remnant of the SLC can bear the Case other than nominative. Second, though adjuncts cannot occur in the pivot, they are able to be remnants in the SLC. Finally, although multiple sluicing is possible, multiple foci in clefts are impossible. These arguments showed that the cleft analysis of the Mongolian SLC is implausible and require a reconsideration of the generalization proposed by Kizu (1997) and Craenenbroeck and Lipák (2007, 2009).
References


