## Absence of Case-matching Effects in Mongolian Sluicing

**Synopsis:** In this paper, we provide novel data on sluicing in the Khalkha dialect of Mongolian, and show that *wh*-remnants and their correlates do not have to match in case. We then argue that Mongolian sluicing is best analyzed by the LF-copy approach (Chung, Ladusaw & McCloskey 1995), where a sluiced clause consists of a *wh*-remnant base-generated in [Spec, CP] and an empty TP into which the antecedent TP is copied in LF.

**PF-deletion and LF-copy:** Sluicing is an ellipsis construction which involves a remnant wh-phrase.

- (1) a. He is writing something, but you can't imagine what he is writing.
  - b. He is writing something, but you can't imagine what  $\Delta$ . (Ross 1969:252)

Though the embedded clause of the second conjunct in (1b) is incomplete in that it only consists of a *wh*-phrase *what*, its interpretation is the same as (1a). There are two major analyses of this construction: PF-deletion ((2a), Ross 1969, Merchant 2001) and LF-copy ((2b), Chung, Ladusaw & McCloskey 1995).

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

\*\*Movement+PF-deletion\*\*

b. [TP He is writing something], but you can't imagine [CP what [TP e].

\*\*LF-copy\*\*

In the former, the remnant *wh*-phrase is base-generated within TP and moves to [Spec, CP], which is followed by TP-deletion at PF; in the latter, a sluiced clause consists of a remnant *wh*-phrase base-generated in [Spec, CP] and an empty TP whose semantic content is obtained through LF-copy of the antecedent TP. Merchant (2001) argues for the PF-deletion analysis based on Ross's (1969) observation that a remnant *wh*-phrase must agree in case with its correlate as in German (3a).

- (3) a. Er will **jemandem** schmeicheln, aber sie wissen nicht, **{\*wen/wem}**. he wants someone.DAT flatter but they know not who.ACC/who.DAT 'He wants to flatter someone, but they don't know who.' (Ross 1969: 253)
  - b. Sie wissen {\*der Antwort/ die Antwort} nicht.
    they know the answer.DAT/ the answer.ACC not
    'They don't know the answer.'

    (Merchant 2001: 43)

Although, when it is transitive, the verb *wissen* 'know' assigns accusative case to its object as in (3b), the *wh*-remnant shares the case with its correlate in (3a), which illustrates that the case of the remnant *wh*-phrase is independent of the case which would be assigned to an object of the embedding predicate. Merchant (2001) then argues that the case-matching effect between *wh*-remnants and their correlates in sluicing is naturally explained by the PF-deletion analysis but not by the LF-copy analysis, since it seems difficult for the latter to explain how the case of a remnant *wh*-phrase base-generated in [Spec, CP] is checked (assigned) by a case-checker (-assigner) internal to an elliptical TP.

Mongolian Sluicing and Case-matching Effects: A similar phenomenon to English sluicing is also observed in Mongolian as in (4b).

- (4) a. Oyuna-Ø yamar\_negen\_zuil-ig zeel-sen.
  Oyuna-NOM something-ACC borrow-PERF
  'Oyuna borrowed something.'
  - b. Gevch, bi [yu-g n'] med-eh-gui. but I what-ACC N' know-INF-NEG 'But, I don't know what.'

The embedded clause in (4b) is incomplete in that it only consists of a remnant wh-phrase yu 'what' and an element n', which is referred to as the 3rd person possessive suffix by Janhunen (2012), but we can interpret (4b) as if nothing were elided. A surprising fact about sluicing in Mongolian is that a wh-remnant must bear accusative case regardless of the case of its correlate as in (5).

- (5) a. Bat-Ø **hen\_negen-d** ene nom-ig ug-sun.

  Bat-NOM someone-DAT this book-ACC give-PERF 'Bat gave this book to someone.'
  - b. Gevch, bi [\*hen-d/hen-ig n'] med-eh-gui. but I who-DAT/who-ACC N' know-INF-NEG 'But, I don't know to whom.'

In (5a), the correlate of the *wh*-remnant in (5b) bears dative case. Then, it would be expected that the *wh*-remnant should also bear dative case. This, however, is not the case. Therefore, we conclude that Mongolian sluicing does not exhibit the case-matching effect between *wh*-remnants and their correlates.

**Default Case and Matrix Sluicing:** It could be possible that the default case in Mongolian is accusative and *wh*-remnants in Mongolian sluicing bear default case; however, it turns out that nominative case is the default case in Mongolian as illustrated in (6).

(6) a. **Bi** ukhaantai. b. \***Namaig** ukhaantai. I.NOM intelligent 'Me intelligent.' intelligent.'

The configuration in (6) is the standard test for determining the default case in a language. As the contrast in (6) shows, nominative pronouns but not accusative ones show up in this configuration, which means that the default case in Mongolian is nominative. We then have to investigate what the source of the obligatory accusative case assigned to *wh*-remnants in Mongolian sluicing is. A similar construction to English matrix sluicing (cf. Lasnik 1999) is also observed in Mongolian, which seems to hint the solution.

(7) a. Bat-Ø **hen\_negen-d** ene nom-ig ug-sun. b. **Hen-d/\*Hen-ig** n' be?
Bat-NOM someone-DAT this book-ACC give-PERF
'Bat gave this book to someone.'

b. **Hen-d/\*Hen-ig** n' be?
who-DAT/who-ACC N' Q
'To whom?'

What is interesting here is that the case-matching effect does appear when a sluiced clause is not embedded as in (7b), from which we conclude that some element in the matrix clause is the source of the obligatory accusative case assigned to *wh*-remnants in Mongolian embedded sluicing such as (5b).

**Analysis:** Regarding embedded sluicing in Mongolian, we argue that the absence of the case-matching effect between wh-remnants and their correlates favors the LF-copy over PF-deletion approach, since the latter predicts that effect. Under the Phase Impenetrability Condition (cf. Chomsky 2000), elements in the edge of CP, i.e. [Spec, CP], are accessible to the higher probe, head v, which means that a wh-phrase in [Spec, CP] can be case-checked by v (see also Şener to appear). This analysis is straightforwardly implemented under the LF-copy approach, where TP is missing at the relevant point: the only provided source of case-licensing for the wh-phrase is the higher v. We argue that this is what happens in Mongolian embedded sluicing as in (8).

The configuration in (8) correctly predicts the obligatory accusative case marking of the wh-remnant in (5b) since it ensures that the wh-remnant base-generated in [Spec, CP] always receives its case from the matrix v; it does not receive case within the elided TP. Furthermore, the fact that the wh-remnant in matrix sluicing such as (7b) does not have to bear accusative case is naturally captured since there is no "higher" source of accusative case, i.e. v.

Selected References: Chung, S., W. Ladusaw & J. McCloskey. (1995) "Sluicing and Logical Form." *Natural Language Semantics* 3: 239-282. Janhunen, J. (2012) *Mongolian*. Amsterdam: John Benjamins Publishing Company. Merchant, J. (2001) *The Syntax of Silence: Sluicing, Islands, and the Theory of Ellipsis*. Oxford: Oxford University Press. Ross, J. R. (1969) "Guess who?" *Proceedings of the Chicago Linguistics Society* 5: 252-286. Şener, S. (to appear) "Non-canonical Case Marking is Canonical: Accusative Subjects in Turkish." *Natural Language and Linguistic Theory*.