Scrambling and Reconstruction Asymmetries

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Abstract

This paper investigates a series of properties exhibited by different types of scrambling in Mongolian and their implications on the distinction between A- and Ā-movement. In Mongolian, short and intermediate scrambling behave like A-movement, whereas long-distance scrambling shows mixed A/Ā-properties. A close examination of scrambling in this language reveals that Condition C reconstruction effects, which appear to distinguish some instances of Ā-movement from A-movement, in fact do not track the A/Ā-distinction. I relate the phenomenon in Mongolian to a language-specific case assignment mechanism, under a late merger approach (Takahashi & Hulsey 2009).

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1 Introduction

This paper investigates a series of properties exhibited by different types of scrambling in Mongolian and their implications on the distinction between A- and Ā-movement. It is well-known that in languages such as Japanese and Hindi, short scrambling often behaves like A-movement; intermediate scrambling can be A- or Ā-movement; and long-distance scrambling is uniformly Ā (e.g., Mahajan 1990, 1994; Saito 1992). Mongolian contrasts with Japanese and Hindi in that its short and intermediate scrambling behave largely like A-movement, whereas its long-distance scrambling shows mixed A/Ā-properties. The nature of scrambling has been an ongoing topic of investigation in languages with flexible word orders (e.g., Saito 1985, 1992; Déprez 1989; Webelhuth 1989, 1992; Gurtu 1992; Tada 1993; Mahajan 1990, 1994; Müller and Sternefeld 1994; Dayal 1994; Kidwai 2000; Miyagawa 1997, 2001; Karimi 2005).

Generalizations about scrambling properties are often drawn based on a set of phenomena regarding which A- and Ā-movement typically differ. For example, A-movement (e.g., raising) in English is not subject to weak crossover effects (WCO), whereas Ā-movement (e.g., *wh*-movement) is (e.g., Postal 1971, Wasow 1972, Safir 2017). A-movement also feeds anaphor binding, whereas Ā-movement usually does not. In addition, A-movement typically does not exhibit obligatory Condition C reconstruction (connectivity) effects, whereas some instances of Ā-movement do (e.g., Chomsky 1993, Lebeaux 1988, 1998, Sauerland 1998, Fox 1999). With respect to a single diagnostic (e.g., whether movement is subject to WCO), scrambling targeting a certain position is expected to pattern either like A-movement (e.g., it is not subject to WCO) or Ā-movement (e.g., it is subject to WCO). Against this backdrop, in the first half of the paper I survey different types of scrambling in Mongolian and their behaviors regarding standard A/Ā-diagnostics such as WCO effects. In the second half of the paper, I document and examine a set of facts regarding Condition C connectivity in Mongolian, in which scrambling to the same position exhibits asymmetric connectivity effects. I suggest these facts support the view that unlike WCO, Condition C connectivity does not track the A/Ā-distinction (Bhatt and Keine 2019) and therefore cannot be used as a reliable cross-linguistic A/Ā-diagnostic. I propose an account in which the relevant Condition C facts in scrambling are tied to case assignment (Takahashi and Hulsey 2009).

2 Local Scrambling

2.1 Motivating Short A-Scrambling

This section motivates the existence of short A-scrambling in Mongolian. In languages where both the theme-goal and goal-theme surface orders are observed, such as Japanese, there has been much discussion regarding whether the orders between the two internal arguments are base-generated or are derived by movement. Some studies (e.g., Hoji 1985; Takano 1998; Saito 1985, 1992; Tada 1993; Yatsushiro 2003) propose that ditransitive constructions in Japanese involve one underlying structure in which goal-theme is the base order, and that theme-goal is derived via (A-)movement. In contrast, some studies (e.g., Miyagawa 1997, Miyagawa and Tsujioka 2004, Ito 2007) argue that both orders are base-generated. Under the latter account, the apparent evidence for short A-scrambling (such as suppressing WCO, feeding anaphor binding, etc.) is simply because both orders are base-generated. Here I use Mongolian data to show that the existence of short scrambling can be proven independent of the issue of whether the language in question has two base-generated ditransitive patterns.

One of the main arguments for the base-generation analysis is based on Rizzi's (1986) Chain Condition, stated in (1). Miyagawa (1997) notes that movement (e.g., intermediate scrambling, passivization, etc.) is subject to the Chain Condition. This is illustrated with Mongolian data. The ungrammatical sentence (2a) cannot be improved via intermediate scrambling (2b), because the chain

violates (1). The chain in (2) can be contrasted with that in (3), in which the reciprocal is the possessor inside the subject, rather than being directly on the chain. As a result, the reciprocal no longer counts as an intervening binder. Thus, movement in (3) does not violate the Chain Condition (1).

(1) C = (a_1 … a_n) is a chain iff, for $1 \leq i < n$, a_i is the local binder of a_{i+1}.   (Rizzi 1986)

(2) a.***Bey   beye ni**$_1$ **[ter khoyor-iig]**$_1$ khar-san.
         body body3S.POSS that two-ACC   see -PST
         Int. 'Each other$_1$ saw those two$_1$.'
     b.***[Ter khoyor -iig]**$_1$ **bey beye ni**$_1$ ___$_1$ khar-san.

(3) **[Ter khoyor-iig]**$_1$ **[bey beye-in   khni**$_1$ bagsh] ___$_1$ khar-san.
         that   two-ACC   body body-GEN 3S.POSS teacher   see-PST
         'Those two, each other's teacher saw. '

Given that movement obeys (1), Miyagawa observes that the Chain Condition effect is absent in Japanese VP-internal word order permutation, indicating that movement has in fact never occurred. This is illustrated with parallel data in Mongolian (4). If movement has occurred in (4), (4b) is expected to be ungrammatical due to the violation of (1), in a similar fashion as (2), contrary to fact. Miyagawa takes these facts to show that both orders in ditransitive constructions are base-generated.

(4) a. *Bi [GOAL **bey   beye-d   ni**]$_1$ [THEME **suragch-uud-iig**]$_1$ taniltsuul-san.
         I   body body-DAT 3S.POSS   student-PL-ACC   introduce-PST
         Int. 'I introduced the students$_1$ to each other$_1$. '
     b. Bi [THEME **suragch-uud-iig**]$_1$ [GOAL **bey beye-d   ni**]$_1$ taniltsuul-san.

Further development of the base-generation account (Miyagawa and Tsujioka 2004, Ito 2007) propose two base structures shown in (5). In particular, low goal (locative) can either occur above or below the theme, whereas high goal (possessive) must be above the theme and the low goal. Aside from these two orders, all other possible VP-internal word order permutations are treated as focus-driven Ā-movement.

(5) a. high goal (possessive) … low goal (locative) … theme
     b. high goal (possessive) … theme … low goal (locative)

In contrast to the above account, I suggest that the absence of Chain Condition effect does not necessarily indicate the absence of (A-)movement, and that the VP-internal word order permutation can also be derived via A-movement. Aside from goals, benefactives are usually taken to be introduced higher than themes (e.g., Marantz 1993, Pylkkänen 2008). If this is correct, the sentence in (6) in which the benefactive A-binds the theme represents the base order, and the alternative theme>benefactive order can only be derived via movement.

(6) Bi **[Saruul-d]**$_1$ **[öör-in bey-ii   ni]**$_1$ jiru-ju   ög-sön.   benefactive>theme
     I   S-DAT   self-GEN body-ACC 3S.POSS draw-CVB give-PST
     'I drew herself$_1$ for Saruul$_1$.'

If movement is always subject to (1), we expect moving theme over benefactive to exhibit Chain Condition effects. However, this prediction is not borne out. As shown in (7a), a reflexive in the higher benefactive position cannot be bound by the theme in the lower position. In (7b), the theme moves over and A-binds the benefactive, showing that A-movement must be an available derivation. This indicates that A-movement can take place without triggering the Chain Condition effect (see McGinnis 2004 for further arguments based on cross-linguistic data).

(7) a.*Bi **[öör-in   bey-d   ni]**$_1$ **[Saruul-ii]**$_1$ jiru-ju   ög-sön.   *benefactive>theme
         I   self-GEN body-DAT 3S.POSS S-ACC   draw-CVB give-PST
         Int. 'I drew Saruul$_1$ for herself$_1$.'
     b. Bi **[Saruul -ii]**$_1$ **[öör-in bey-d ni]**$_1$ __$_1$ jiru-ju ög-sön.   theme>benefactive

Further evidence from depictive stranding also supports the existence of short (A-)scrambling. Depictives in Mongolian can be stranded via A-movement such as passivization. In (8a), the depictive *nütsgeneer ni* ('naked.INST 3S.POSS') obligatorily modifies the DO *Dorj* (for detailed descriptions of Mongolian depictives see Shibagaki 2014). (8a) is ungrammatical because the reflexive pronoun is not bound, and the R-expression is locally bound. In (8b), the ACC phrase *Dorjiig* moves over the DAT phrase, stranding the depictive in the base position while binding the DAT reflexive pronoun in its surface position.

(8) a.*Emch **[öör-t in]₁** **[Dorj-iig]₁** nütsgen-eer ni üzüül-sen.IO DO <naked>
Doctor self-DAT 3S.POSS D-ACC naked-INST 3S.POSS show-PST
Lit.'(The) doctor showed himself₁ Dorj₁ naked.'
b. Emch **[Dorj-iig]₁ [öör-t in]₁** __₁ nütsgen-eer ni üzüül-sen. DO IO <naked>

The above facts suggest that a derivation involving short A-scrambling must be available for constructions such as (7) and (8). Further data also indicate that Mongolian short scrambling feeds variable binding (9) and is not subject to WCO (10), behaving consistently like A-movement.

(9) Baatar **[sorogchi bolgon-ii]₁** **[öör-in khni₁** bagsh-d] __₁ taniltsuul-san.
B student every-ACC self-GEN 3S.POSS teacher-DAT introduce-PST
'Baatar introduced every student₁ to his₁ teacher.'

(10) Baatar **[khen-ii]₁** **[öör-in khni₁** bagsh-d] __₁ taniltsuul-san be?
B who-ACC self-GEN 3S.POSS teacher-DAT introduce-PST Q
'Baatar introduced who₁ to his₁ teacher?'

2.2 Mongolian Intermediate Scrambling Behaves Like A-movement

Similar to short scrambling, Mongolian intermediate scrambling behaves like A-movement. It feeds anaphor binding (11), variable binding (12), and remedies underlying weak crossover violation (13).

(11) **[Ter khoyor-ig]₁** **[bey beye-u khni₁** bagsh] __₁ magta-san.
That two-ACC body body-GEN 3S.POSS teacher praise-PST
'Those two₁, each other₁'s teacher praised. '

(12) **[Oyutan bolgon-ii]₁** **[öör-in khni₁** bagsh] __₁ magta-san.
Student every-ACC self-GEN 3S.POSS teacher praise-PST
'Every student₁, his₁ teacher praised. '

(13) **Khen-ii₁** **[öör-in khni₁** bagsh ni] __₁ magta-san be?
Who-ACC self-GEN 3S.POSS teacher 3S.POSS praise-PST Q
'Who₁, his₁ teacher praised?'

2.3 Mongolian Cross-Clausal Scrambling Shows Mixed A/Ā-Properties

In contrast to local scrambling, cross-clausal scrambling in Mongolian shows mixed effects. I make a distinction between two types of cross-clausal scrambling: Scrambling of embedded subjects and that of embedded objects. First, subjects of embedded clauses in Mongolian can be marked with ACC (14). Fong (2019) shows that these ACC subjects indeed originate from the embedded CP. Specifically, she proposes that they are located at Spec CP, receiving ACC from the matrix *v*.

(14) Bi *v* [_CP_ [Bat-in eej **-iig**] [sain khun gej]] khel-sen.
I B-GEN mother-ACC good person C say-PST
'I said that Bat's mother is a good person.'

Fong demonstrates that the ACC subject can move (hyperraise) into the matrix clause, displaying characteristics of A-movement. For example, (15) shows such movement feeds variable binding.

(15) Okhin bür-iig₁ öö-iin-kh n'₁ eej [_CP_ __₁ ukhaan-tai gej] khel-sen.
Girl every-ACC self-GEN-EPTH POSS.3 mother intelligence-with COMP say-PST

'Her₁ mother said that every girl₁ is intelligent.'

'Her[1] mother said that every girl[1] is intelligent.'

(For every girl *x*, *x*'s mother said that *x* is intelligent)   (Fong 2019: (82b))

The second type of movement across a clausal boundary is the more typical long-distance scrambling (LDS)[1] case where the object of the embedded clause scrambles into the main clause, exemplified in (16). Notice the gap in the base position cannot be filled with an overt pronoun.

(16) Ene em-iig₁   emch [CP namaig __₁/*üüniig₁ uu-san   gej] khel-sen.
       This medicine-ACC doctor   1S.ACC   it.ACC   drink-PST C   say-PST
       'This medicine, (the) doctor said that I took.'

LDS obeys subjacency in that it cannot take place out of a relative clause (17) or an adjunct (18).

(17) *Ter nom-ig₁   Bat[[RC öchigdor__₁ xudalda-j aw-san] khün-iig]   khai-j
        That book-ACC B   yesterday   deal-CVB buy-PST person-ACC search-CVB
        baina.
        COP.NPST
        Int. 'That book, Bat is looking for [the person [RC who bought e]] yesterday.'

(18) *Süütei tsai-g₁ Bat[bidn-iig __₁ uukh   gej baikh-ad] öröön-d   or-j
        Milk   tea-ACC B   1PL-ACC   drink.INF C COP-when room-DAT enter-CVB
        ir-sen.
        come-PST
        Int. 'Milk tea, Bat entered the room [while we were about to drink e].'

Further, LDS in Mongolian shows mixed A/Ā-properties. This contrasts with well-known cases in languages such as Hindi and Japanese, in which LDS is uniformly Ā-movement. In this regard, Mongolian patterns more closely with Korean (see Ko 2018 for an overview). On the one hand, LDS feeds anaphor binding (19) and variable binding, which is characteristic of A-movement.

(19) ?**[Ter khoyor-ig]₁** **[bey bey-nii   khni₁**   bagsh] [Bat-ig önöödör khural
       That two-ACC   body body-GEN 3S.POSS teacher Bat-ACC today   meeting
       deer __₁   shüümjil-sen gej] khel-sen.
       at   criticize-PST C   say-PST
       'Those two₁, each other's₁ teacher said that Bat criticized __₁ at the meeting today.'

On the other hand, LDS also behaves like Ā-movement in that scrambled phrases can reconstruct. In Mongolian, NPIs such as *khen ch* ('anyone') must be licensed by clause-mate negation. In (20a), the NPI is licensed by the embedded negation. In (20b), however, the NPI which is scrambled into the main clause can still be licensed by the embedded negation, suggesting that the NPI may be licensed after reconstruction.

(20) a. Bi [CP Bat-ig önöödör **khen-iig ch** khar-aa-**güi** gej] bodoj   baina.
          I   B-ACC today who-ACC FOC see-PST-NEG C   think.CVB COP.NPST
          'I am thinking that Bat did not see anyone today. '
      b. **Khen-iig ch₁** bi [CP Bat-ig önöödör __₁ khar-aa-**güi** gej] bodoj baina.

The data presented so far suggest that Mongolian short and intermediate scrambling behave like A-movement, in terms of anaphor binding, variable binding, and WCO amnesty. In addition, scrambling an embedded ACC subject into the main clause shows A-properties, but LDS of embedded objects displays mixed A/Ā-properties.

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[1] Fong (2019) looks at a different set of data and concludes that there does not seem to be LDS in Mongolian. In fact, there are cases such as the ones reported here that are LDS. The findings reported here align with Sakamoto (2012), who demonstrates the same type of LDS exists in Mongolian.

3 Reconstruction Asymmetries in Scrambling

In this section, I turn to the behavior of different types of scrambling in terms of Condition C connectivity, which departs from the generalizations in Section 2. Specifically, depending on how Condition C is violated at the base order, scrambling targeting the same landing site shows seemingly conflicting connectivity effects. I suggest that the full range of facts cannot be adequately accounted for based on the A/Ā-distinction, or by imposing specific conditions on binding which holds at different levels of representation (Frank, Lee, and Rambow 1996). Instead, I propose an analysis in which relates Condition C connectivity to the case requirement of noun phrases.

3.1 Reconstruction in Local Scrambling

As shown in (21), short scrambling in a ditransitive construction with the verb 'to give' does not exhibit Condition C connectivity. This is consistent with the observation in Section 2 that short scrambling behaves like A-movement. The same point can also be demonstrated with other DAT-marked arguments such as benefactives (22).

(21) a. *Bagsh **tüün-d₁** [**Chemeg₁**-in nom-ii]   ög-sön.
      Teacher 3S-DAT C-GEN   book-ACC give-PST
      Int. '(The) teacher gave her₁ Chemeg₁'s book.'
    b. Bagsh [**Chemeg₁**-in nom-ii]₂ **tüün-d₁** ___₂ ög-sön.
(22) a.*Bi **tüün-d₁** [**Dorj₁**-in daskhal-ii]   khii-j   ögö-be.
      I   3S-DAT D-GEN   homework-ACC do-CVB give-PST
      Int. 'I did Dorj's₁ homework for him₁.'
    b. Bi [**Dorj₁**-in daskhal-ii]₂ **tüün-d₁** __₂ khii-j ögö-be.

The facts in intermediate scrambling, however, depart from the observation in Section 2.2. Depending on how Condition C is violated at the base order, intermediate scrambling patterns like Ā-movement in some cases, but patterns like A-movement in others. First, when the underlying Condition C violation is induced by the pronoun in the IO position binding the R-expression (23a), intermediate scrambling does not exhibit obligatory reconstruction effect (23b). In this example, intermediate scrambling patterns like A-movement.

(23) a. *Bagsh **tüün-d₁** [**Chemeg₁**-in nom-ii]   ög-sön. | Binder:IO(non-SUBJ) |
      Teacher 3S-DAT C-GEN   book-ACC give-PST
      Int. '(The) teacher gave her₁ Chemeg's₁ book.'
    b. [**Chemeg₁**-in nom-ii]₂ bagsh **tüün-d₁** __₂ ög-sön.

In contrast, when the underlying Condition C violation is induced by the pronoun in the *subject* position, intermediate scrambling exhibits obligatory reconstruction effect, behaving like Ā-movement. This is the case regardless of the transitivity of the main verb. Example (24) illustrates the obligatory reconstruction effect using a transitive verb 'to tear;' example (25) demonstrates the same point using a ditransitive verb 'to give.'

(24) a. ***Ter₁** [**Chemeg₁**-in nom-ii]   ura-san. | Binder: SUBJ |
      3S.NOM C-GEN   book-ACC tear-PST
      Int. 'She₁ tore Chemeg's₁ book.'
    b. *[**Chemeg₁** -in nom -ii]₂ **ter₁** ___₂ ura-san
(25) a. ***Ter₁**   Bat-d [**Chemeg₁**-in nom-ii]   ög-sön. | Binder: SUBJ |
      3S.NOM B-DAT C-GEN   book-ACC give-PST
      Int.'She₁ gave Bat Chemeg's₁ book.'
    b. *[**Chemeg₁**-in nom-ii]₂ **ter₁** Bat-d __₂ ög-sön.

As observed in Section 2, intermediate scrambling behaves like A-movement in terms of anaphor binding, variable binding, and WCO amnesty. If the landing site of intermediate scrambling is an A-position, and if movement to an A-position does not reconstruct for Condition C, then we expect

to see absence of obligatory reconstruction effects in all cases of intermediate scrambling, regardless of the binding relationship in the base order. However, the DO scrambles to the same pre-subject position in (23-25), but only (23) shows no obligatory reconstruction effect.

At first blush, a plausible hypothesis seems to be that the short scrambling landing site below the subject in (21-22) is an A-position, but the landing site above the subject is uniformly an Ā-position. Therefore, scrambling to the Ā-position must reconstruct for Condition C. In (23b), due to the availability of the intermediate A-landing site (i.e., the landing site for short scrambling), the scrambled DP has the option to reconstruct only partially to that intermediate A-position, hence the grammaticality of (23b). In contrast, there is no such option in (24-25). However, this hypothesis fails to explain why the pre-subject position only behaves like an Ā-position for Condition C but not for any other diagnostics, as visualized in Table 1. In addition, as will become clear in the next section, it is difficult to extend this view to the cross-clausal scrambling cases.

	Short scrambling	Intermediate scrambling
Feed variable binding?	✓→A	✓→A
Feed anaphor binding?	✓→A	✓→A
Fix underlying WCO?	✓→A	✓→A
Reconstruct for Cond C?	✓→A	Depends→ A/Ā

Table 1: Local scrambling based on A/Ā-diagnostics.

Frank, Lee, and Rambow (1996) (henceforth FLR) report similar patterns in Korean and German local scrambling. They suggest that the factor which determines the reconstruction possibilities is not related to the A/Ā-distinction, but is instead tied to specific conditions on binding which holds at different levels of representation. Specifically, FLR propose that these phenomena are caused by the special status of subject binders. Obligatory reconstruction effects are absent in (21-23), because the pronoun binder in the base order is not a subject. In contrast, in (24-25), the Condition C violation at the base order is induced by a subject pronoun binder. Thus, reconstruction is obligatory.

	binder	reconstruction
(21)/(22)	IO (non-subject)	✗
(23)	IO (non-subject)	✗
(24)	Subject	✓
(25)	Subject	✓

Table 2: Reconstruction and binders.

FLR formulate their proposal in terms of β-marking (26), which states that if a subject X binds Y at some point in the derivation, then X binds Y at all levels of representation.

(26)   a. X binds Y iff X and Y are co-indexed and X β-marks Y at some level of representation.
       b. X β-marks Y iff
          i. (At D-structure or NP-structure) X c-commands Y and X is a subject; or
          ii. (At NP-structure) X c-commands Y.   (FLR 1996)

Under the β-marking account, (24-25) violate Condition C, because the pronoun in a subject position β-marks and therefore binds the R-expression at all levels of representation. This binding relationship obtains even after the phrase containing the R-expression is moved away from its base position. In contrast, since binding in (21-23) do not involve subjects, the β-marking restriction does not apply. While FLR's proposal captures the reconstruction asymmetries in local scrambling, I show that it is nevertheless difficult to extend the β-marking mechanism to Mongolian cross-clausal scrambling.

3.2 Reconstruction in Cross-Clausal Scrambling

First, cross-clausal scrambling the embedded ACC subject does not reconstruct for Condition C, if

the binder in the original order is not the subject. In (28a), the matrix DAT pronoun induces Condition C violation on the R-expression contained within the embedded subject. In the derived order (27b), the embedded subject *Batin eejiig* ('Bat's mother'-ACC) is scrambled to the matrix leftmost position, and there is no Condition C reconstruction effect.

(27) a. *Bi **tüün-d₁** [CP[**Bat₁**-in eej-iig] sain khun gej] khel-sen.
I 3S-DAT B-GEN mother-ACC good person C say -PST
Int. 'I said to him₁ that Bat₁'s mother is a good person. '
b. [**Bat₁**-ineej-iig]₂ bi **tüün-d₁** [CP ___₂ sain khun gej] khel-sen.

Second, long-distance scrambling (LDS) of embedded objects shows similar pattern. In the base order (28a), the matrix DAT pronoun induces Condition C violation on the R-expression *Bat* inside the embedded object. In (28b), the embedded object undergoes LDS to the matrix leftmost position, and the sentence becomes acceptable under the reading where *Bat* and *tüünd* coindex.

(28) a. *Zaya **tüün-d₁** [CP bagsh-iig [**Bat₁**-in esee-g] unsh-san gej] khel-sen.
Z 3S-DAT teacher-ACC B-GEN essay-ACC read-PST C say -PST
Int. 'Zaya said to him₁ that the teacher read Bat's₁ essay.'
b. ?[**Bat₁**-in esee-g]₂ Zaya **tüün-d₁** [CP bagsh-iig ___₂ unsh-san gej] khel-sen.

In contrast, in both types of cross-clausal scrambling, if the underlying binder is instead the matrix subject, scrambling exhibits obligatory reconstruction effects. An example is given in (29).

(29) *[**Baatar₁**-in daskhal-ii]₂ **ter₁** [CP bagsh-iig ___₂ unsh-san gej] khel-sen.
B-GEN homework-ACC 3S.NOM teacher-ACC read-PST C say-PST
'Baatar's₁ homework, he₁ said that the teacher read.'

Therefore, even LDS, which is at least partially Ā-movement, bleeds Condition C in certain contexts. Under FLR's analysis, this is because unlike (29), the pronoun binders in (27-28) are not subjects, hence the absence of Condition C violation after scrambling.

Surprisingly, in Mongolian, LDS of an embedded object can escape Condition C violation even when the binder is a subject. In (30a), the embedded subject induces Condition C violation on the R-expression inside the embedded object. In (30b), the embedded object undergoes LDS to the matrix-initial position, and the sentence becomes acceptable under the reading that *Bat* and the pronoun *tüüniig* in the embedded subject coindex. This is unexpected under FLR's proposal, because the binder involved in the original order is indeed a subject – it is the embedded subject. The β-marking account would predict that (30) must exhibit obligatory reconstruction effects, contrary to fact.

(30) a. *Emch [CP**tüün-iig₁** önöödör [**Bat₁**-in em-iig] uu-gaa-gui gej] bod-son.
Doctor 3SG-ACC today B-GEN medicine-ACC drink-PST-NEG C think-PST
Int. 'The doctor thought that he₁ did not drink Bat₁'s medicine today.'
b. ?[**Bat₁**-in em-iig]₂ emch [CP **tüün-iig₁** önöödör ___₂ uu-gaa-gui gej] bod-son.

The cross-clausal scrambling facts, in addition to the local scrambling facts, not only poses challenges to FLR's β-marking account, but also make it difficult to characterize scrambling purely based on the A/Ā-distinction. The fact that (30) is acceptable under a coindexed reading is especially surprising given that local scrambling over a subject binder obligatorily reconstructs for Condition C, as shown in (24-25).

3.3 Case in Scrambling: Towards an Analysis

The above puzzle suggests that Condition C needs to be evaluated somewhat independent of the A/Ā-distinction, in consistent with FLR's insight. However, the full range of Mongolian facts cannot be adequately accounted for by imposing specific conditions on binding which holds at different levels of representation (i.e., β-marking). I suggest that the relevant facts can be accounted for under the view that Condition C is related to case assignment (Takahashi and Hulsey 2009).

Takahashi & Hulsey (2009) suggest that both A and Ā-movements leave copies. If the movement landing site is a case position, restrictors of a determiner (NP restrictors in the current context) can be late merged there. This point is illustrated with the English raising construction in (31). [2] At the beginning of the derivation (31a), the (covert) determiner is introduced alone without its NP restrictor. Then, the determiner undergoes successive cyclic movement (31b), leaving copies along the way. Crucially, in (31c), late merger of the restrictor [NP John₁'s mother] may take place at the matrix VP-adjoined position, thereby introducing the first copy of the R-expression *John* into the derivation. This is possible because the late-merged NP is within the domain of T, which assigns to it NOM case. In the representation of (31c), no copy of the R-expression is c-commanded by the coreferential pronoun *him*, thus Condition C violation is circumvented.

(31)   [**John₁'s** mother] seems to him₁ [**t** to be intelligent].
      a. (covert) determiner is base-generated without its restrictor
      [AP [THE] intelligent]
      b. determiner undergoes successive cyclic movement, leaving copies
      [VP[THE] [VP seems to him₁ [TP [THE] to be [[THE] intelligent]]]]
      c. WLM of the NP restrictor at matrix VP-adjoined position
      T [VP [THE [NP **John₁'s** mother]] [VP seems to **him₁** [TP [THE] to be [[THE] intelligent]]]]

I suggest that the late merger mechanism can be used to account for the facts in section 3.1-3.2, under the view that some instance of scrambling in Mongolian can target potential case positions. Specifically, there is evidence indicating that ACC can be assigned as a dependent case.[3] For example, ACC on the embedded subject is present even when there is no functional head in the matrix clause that could be the source of ACC. In Mongolian the predicate *uurlax* 'to become angry' is unable to assign ACC (32a). In (32b), *uurlax* is used as a matrix predicate taking an embedded clause. Importantly, the embedded subject can be marked with ACC case. This is unexpected under the view that ACC on the embedded subject is assigned by matrix *v* (Fong 2019), but it would naturally follow if ACC can be assigned as a dependent case.

(32)   a. Tuya   tüün-d/*tüün-iig   uurla-san.
         T.NOM   3S-DAT/3S-ACC   become.angry-PST
         'Tuya became angry at him/her.'
      b. Emch [CP Bat-ig em-ee   uu-gaa-güi   gej] uurla-san.
         Doctor   B-ACC medicine-REFL.POSS drink-PST-NEG   C   become.angry-PST
         'The doctor became angry that Bat did not drink his medicine.'

In addition to ACC being a dependent case, I also assume that NOM is assigned by T, similar to the mechanism proposed by Baker and Vinokurova (2010). Once this case mechanism is adopted, the Condition C reconstruction effects in scrambling follows. First, recall that short scrambling (21-22) and one case of intermediate scrambling (23) do not show connectivity effects. The derivation under the current proposal can be schematized in (33) – late merger of [NP Chemeg-in nom] is possible at the indicated position, because the resulting DP can receive dependent ACC case via competition with the subject. Thus, short scrambling targeting this case position does not reconstruct for Condition C. In addition, the full copy of DP can move further to the pre-subject landing site, giving rise to the surface order in (23).

(33)   (=21)Bagsh [THE [NP **Chemeg₁-in   nom -ii**]]₂ **tüün-d₁** [VP [THE]   ög-sön]
         Teacher   C-GEN   book-**ACC** 3S-DAT   give-PST

In contrast, if the pronoun binder in the base order is instead the subject, scrambling undergoes

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obligatory reconstruction (24-25). This is because in these cases late merger cannot apply at a point higher than the pronoun subject, because case cannot be assigned to the resulting DP (34). This essentially derives FLR's generalization that reconstruction is obligatory, whenever (local) scrambling takes place across a subject binder.

(34) (=(24)) [THE [$_{NP}$ **Chemeg$_1$-in nom*-ii**]]$_2$ **ter$_1$** [$_{VP}$ [THE] ura-san]

This mechanism also derives the cross-clausal scrambling facts. I use the LDS sentence (28) as an example, represented as (35). In this case LDS does not obligatorily reconstruct for Condition C, because dependent ACC case can be assigned at an intermediate position between the matrix subject and the matrix DAT pronoun inside the matrix clause, enabling late merger at this position. The underlined NP restrictor can get ACC case, because the resulting DP is within the local domain of a higher argument *Zaya*, which counts as its case competitor. Crucially, at this position the late-merged R-expression is not within the domain of the matrix DAT pronoun binder. Thus, Condition C violation is circumvented. The availability of the intermediate case position inside the matrix clause also accounts for the fact in (30) that even when the underlying Condition C violation is induced by a subject pronoun binder (i.e., the embedded subject), LDS of the embedded object makes the sentence acceptable. This is schematized in (36).

(35) (=(28)) ?[THE[$_{NP}$**Bat$_1$-in esee-g**] Zaya [THE[$_{NP}$ **Bat$_1$-in esee-g**]] **tüün-d$_1$** [$_{CP}$ bagsh-iig [$_{VP}$ [THE] unsh-san] gej] khel-sen.

(36) (=(30)) ?[THE[$_{NP}$**Bat$_1$-in em-iig**]] emch [THE [$_{NP}$ **Bat$_1$-in em-iig**]] [$_{CP}$ **tüün-iig$_1$** [THE] uu-gaa-gui gej] bod-son.

4 Conclusions

In this paper, I examined the properties of different types of scrambling in Mongolian, focusing on a set of data which potentially helps further elucidate the nature of Condition C reconstruction effects. While the ability to bleed Condition C is often used as an A/Ā-diagnostic for movement, same types of scrambling in Mongolian sometimes show conflicting reconstruction properties that fail to align with the A/Ā-distinction. This provides further evidence for the recent view that Condition C connectivity needs to be evaluated independent of the A/Ā-distinction (Takahashi and Hulsey 2009, Bhatt and Keine 2019).

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