# Proper movement through Spec-CP: an argument from hyperraising in Mongolian

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#### **Abstract**

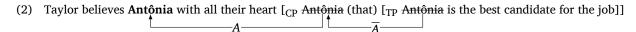
The subject of an embedded finite clause in Mongolian can be marked with accusative case, alternating with canonical nominative case. Following previous proposals, I analyze this option as the consequence of the presence of  $\phi$ -features in the complementizer of the embedded clause, which trigger the movement of the lower subject to Spec-CP. From that position, the embedded subject is accessible to the matrix  $\nu$ , which assigns case to it without violating the Phase Impenetrability Condition (PIC). A prediction that falls out from this analysis is that the accusative subject in Mongolian can move into the matrix clause, also without violating this locality condition. This type of construction is called 'hyperraising' and is indeed found in the language. Hyperraising in Mongolian displays some of the signature properties of A-movement, including the absence of weak crossover effects and of reconstruction for Condition C. A comparison with covert Wh-movement in Mongolian will show that this type of movement does induce a WCO violation and reconstructs for Condition C. If the proposal that hyperraising in Mongolian involves a stopover position at Spec-CP is on the right track, this position would have to be an A-position. If correct, this paper contributes to the view that syntactic positions should not be considered as being intrinsically A or  $\overline{A}$ , with Spec-CP, which is usually taken to be an  $\overline{A}$ -position, potentially being an A-position too, at least in hyperraising in Mongolian.

**Keywords:** hyperraising, Mongolian, ECM, raising to object, A vs.  $\overline{A}$  distinction, improper movement, phases

## 1 Introduction

Chomsky (1973, *et seq.*) characterizes the ungrammaticality of sentences like those in (1) as an instance of the ban on improper movement. Descriptively, this restriction prohibits A-movement that is preceded by  $\overline{A}$ -movement, as schematized in (2).

- (1) a. \* Taylor believes **Antônia** with all their heart (that) is the best candidate for the job.
  - b. \* Ricardo seems (that) left.
  - c. \* Which members of the staff are believed that Terry will give a prize to?



This explanation rides on the assumption that Spec-CP is inherently an  $\overline{A}$ -position. However, it has been recently proposed that syntactic positions should not be considered as being intrinsically A or  $\overline{A}$  (Obata & Epstein, 2011; Van Urk, 2015), with the consequence that Spec-CP can in principle be an A-position. Based on hyperraising in Mongolian, this paper will argue that this is indeed a possibility.

Subjects of embedded finite clauses in Khalkha Mongolian (henceforth Mongolian; Mongolic, see Binnick 1979; Janhunen 2012, i.a.) can surface with nominative case (morphologically unmarked), as expected, or

with accusative case (suffix -iig and its allomorphs). 1,2

- (3) a. Bat [ margaash **Dulmaa** nom unsh-n gej ] khel-sen.
  Bat [ tomorrow Dulmaa.NOM book read-N.PST COMP ] say-PST
  - b. Bat [ margaash **Dulmaa-g** nom unsh-n gej ] khel-sen. Bat [ tomorrow Dulmaa-ACC book read-N.PST COMP ] say-PST 'Bat said that Dulmaa will read a book tomorrow.

It can be shown that the source of the accusative case in the embedded subject is the matrix  $\nu$ , based on the unavailability of this option in subject clauses and in sentences where the matrix verb is passivized. A challenge posed by accusative embedded subjects like that in (3b) is how there can be a relationship established between the matrix  $\nu$  and the embedded subject across the embedded CP, a phase.

In order to solve this problem, following much previous work, I will propose that the complementizer (gej) of an embedded finite clause can be endowed with  $\varphi$ -features. They trigger the movement of the closest appropriate goal, namely, the embedded subject, to Spec-CP. From that position, the embedded subject can receive accusative case from the matrix  $\nu$  without incurring a locality violation.

(4) 
$$[_{CP} \dots \gamma \dots [_{CP} \overrightarrow{\mathbf{DP}} [_{C'} \text{COMP}_{\varphi} \dots \underline{t} \dots]]]$$

The proposal in (4) will allow us to model the possibility of accusative subjects moving into the matrix clause. This type of construction is dubbed 'hyperraising' and can be seen in (5b), where the embedded accusative subject precedes an unambiguously matrix adverb (*changaar* 'loudly'.

- (5) a. Bat chang-aar **nokhoi(-g)** gaikhal-tai gej khel-sen. Bat loud-INSTR dog(-ACC) wonder-with COMP say-PST
  - b. Bat **nokhoi-g** chang-aar [ *t* gaikhal-tai gej ] khel-sen. Bat dog-ACC loud-INSTR [ *t* wonder-with COMP ] say-PST 'Bat said loudly that dogs are wonderful.'

The main goal of this paper is to probe into the properties of Spec-CP by analyzing hyperraising sentences like (5b). A hyperraised subject can create new antecedents for binding if it moves to a position that precedes the matrix subject, as we see in (6b), which has a variable binding reading. If the embedded subject stays below the matrix subject, as in (6a), a variable binding reading does not obtain, regardless of case marking.

- (6) a. Öör-iin-kh  $n'_{i/j}$  bagsh **oyuutan bür(-iig)**<sub>i</sub> sain oyuutan gej khel-sen. self-GEN-EPTH POSS.3 teacher student every(-ACC) good student COMP say-PST 'His/Her teacher said that every student is a good student.'
  - b. **Oyutan bür-iig**<sub>i</sub> öör-iin-kh n'<sub>i</sub> bagsh [ t sain oyuutan gej ] khel-sen student every-ACC self-GEN-EPTH POSS.3 teacher [ t good student COMP ] say-PST 'Their<sub>i</sub> teacher said that every student<sub>i</sub> is a good student.' (For every student x, x's teacher said that x is a good student.)

<sup>&</sup>lt;sup>1</sup>Uncited Mongolian data are due to my consultants. Many thanks to M. Buyandelger, U. Byambadalai, N. Jinstkhuu, and T. Legden for their patience and helpfulness when teaching me their language. This work would not have been possible without them. The data reported here was collected during a field-methods class (MIT, 2017), during the Summer of 2017 (MIT), and independently (Boston, Spring and Summer, 2018).

<sup>&</sup>lt;sup>2</sup>Abbreviations: ACC: accusative, COMP: complementizer, COND: conditional, CONJ: conjunction, COP: copula, DAT: dative, EPTH: epenthentic, GEN: genitive, HAB: habitual, INF: infinitive, INSTR: instrumental, NEG: negation, NOM: nominative, N.PST: non-past, POSS: possessive, PST: past, REFL.POSS: reflexive possessive, Q: interrogative marker.

To avoid clutter, I only glossed nominative case in embedded subjects, since they are the object of interest in this paper. Additionally, as will be clear later, it is not always easy to determine where the left edge of an embedded clause is. When this is the case, I will not use brackets to delimit it.

The creation of new antecedents for binding is a signature property of A-movement, distinguishing it from A-movement. If hyperraising implicates a previous step of movement to Spec-CP and if this type of movement can feed the creation of new antecedents for binding, we would have to conclude that Spec-CP is also an A-position, otherwise the interpretive possibilities in (6b) would not be accounted for. This conclusion challenges the commonplace assumption that Spec-CP is inherently an  $\overline{A}$ -position.

This paper is structured as follows. §2 provides a description of the behavior of accusative subjects in Mongolian. First, I demonstrate that they are base-generated in the embedded clause, which also establishes that they are not proleptic. I then show that accusative subjects are nevertheless higher than canonical nominative subjects. In §3, I put forth the proposal that the accusative case that the embedded subject is assigned requires the movement of that DP to a higher position, Spec-CP. In the same section, I introduce the hyperraising version of accusative subjects, where a DP placed in the matrix clause is interpreted as the embedded subject. I will demonstrate that this variant of the construction examined is not an instance of prolepsis either and that it is consistent with the Spec-CP based analysis proposed. We then move on to §4, where the core observation of this paper is made. We will see data where hyperraising in Mongolian showcases characteristic properties of A-movement, including the lack of weak crossover effects and of reconstruction for Condition C. This section ends with a comparison with covert *Wh*-movement in Mongolian, which displays the opposite behavior. §5 summarizes the paper and briefly outlines its implications.

# 2 The distribution of accusative subjects

Mongolian is a head-final language with nominative–accusative case alignment, local scrambling (see some data in §4.1), and differential object marking (Guntsetseg, 2008). As mentioned in the introduction, this language allows for the subject of an embedded finite clause to be marked with either nominative or with accusative case. (7) further illustrates this alternation.

- (7) a. Bi **Bold(-iig)** ene deeremchn-ig bari-san gej khel-sen
  I Bold(-ACC) this thief-ACC catch-PST COMP say-PST
  'I said that Bold caught this thief.' (Von Heusinger et al., 2011, (10))
  - b. Dulmaa Nara(-g) sain khün gej med-n.
    Dulmaa Nara(-ACC) good person COMP know-N.PST
    'Dulmaa knows that Nara is a good person.'
  - c. Navchaa **Dulmaa(-g)** sain khün gej bod-son. Navchaa Dulmaa(-ACC) good person COMP think-PST 'Navchaa thinks that Dulmaa is a good person.'
  - d. Navchaa **Rex(-iig)** sain nokhoi gej Dorj-id khel-sen. Navchaa Rex(-ACC) good dog COMP Dorj-DAT say-PST 'Navchaa told Dorj that Rex is a good dog.'
  - e. Dulmaa **oyuutan bür(-iig)** daalgavar-aa khii-sen gej medee-güi. Dulmaa student every(-ACC) homework-REFL.POSS do-PST COMP know-NEG 'Dulmaa does not know that every student did their homework.'

In sentences like (7), the linear order does not inform us of the position of the accusative DP. They are reminiscent of prolepsis constructions (Davies, 2005; Salzmann, 2017), where a DP bearing a non-subject case is base-generated inside the matrix clause and resumed by a pronoun in the embedded clause. Prolepsis examples in English are in (8).

- (8) a. Haley believes about **Aubrey**; that they; are the best candidate for the job.
  - b. Ariel knows about **Jungmin**; that the principal will give her; an award.

The only superficial difference between the Mongolian sentences in (7) and the English prolepsis examples in (8) would be that in the former the embedded pronoun is null. This is consistent with the fact that Mongolian allows for subjects to be dropped:

- (9) a. *pro* sharlovan id-sen-güi. *pro* carrot eat-PST-NEG '(S)he/They didn't eat carrots.'
  - b. *pro* Dorj-id sharlovan baigaa ges-sen. *pro* Dorj-DAT carrot COP.PRES say-PST '(S)he/They said that Dorj has carrots.'
  - c. Bat Dorj-id *pro* Dulmaa-g zur-sen gej khel-sen. Bat Dorj-DAT *pro* Dulmaa-ACC draw-PST COMP say-PST 'Bat told Dorj that he (Dorj) drew Dulmaa.'
  - d. Bat $_i$   $pro_{i/j}$  muur-and durtai gej khel-sen. Bat pro cat-DAT like COMP say-PST 'Bat said that (s)he/they like(s) cats.'
  - e. Bat $_i$  Dorj-id pro öör-iig-öö $_i$  shüümjil-n gej amal-san. Bat Dorj-DAT pro self-ACC-REFL criticize-N.PST COMP promise-PST 'Bat promised Dorj to criticize himself.'

Under this view, the term "accusative subject" that I have been using so far would be misleading, the accusative DP actually being a matrix object. The alternative prolepsis analysis of the sentences in (7) can be schematized as follows:

```
(10) Prolepsis analysis of ACC subjects (to be discarded)
Bi Bold-iig<sub>i</sub> [ pro_i ene deeremchn-ig bari-san gej ] khel-sen. [= (7a)]
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In the next section, we will examine data that show that accusative DPs are indeed base-generated inside the embedded clause, showing that the prolepsis analysis (10) is inadequate for them.

## 2.1 Accusative subjects are embedded arguments

A straightforward argument that the accusative DP is an argument of the embedded clause is provided by idiom preservation. Accusative case does not disrupt the idiomatic reading of a *subject-verb* idiom in the embedded clause (more precisely, the fixed part of the *subject* in (11) is X's eyes). If the accusative DP in (11) were a matrix argument, as in the prolepsis analysis (10), the idiomatic reading of the embedded subject-verb idiom could not be accounted for. In contrast, if the accusative DP is the embedded subject, the preservation of the idiomatic reading can be readily accounted for.

(11) Dorj chang-aar **Bat-iin nüd(-iig)** oree deer-ee gar-san gej khel-sen.
Dorj loud-INSTR Bat-GEN eye(-ACC) top on-REFL.POSS climb-PST COMP say-PST
'Dorj said loudly that Bat was very surprised.'
(lit.: 'Dorj said loudly that Bat's eyes climbed on top of themselves.')

Furthermore, in (3), repeated here as (12), the accusative DP follows an unambiguously embedded adverb, suggesting that it is also inside the embedded clause.

```
(12) Bat [ margaash Dulmaa(-g) nom unsh-n gej ] khel-sen.
Bat [ tomorrow Dulmaa(-ACC) book read-N.PST COMP ] say-PST

'Bat said that Dulmaa will read a book tomorrow.'

[= (3)]
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Similar data can be seen in (13), where either a nominative or an accusative subject can follow the adverb *magadgiii* 'maybe'. For completeness, (13) also shows different positions that this adverb can occupy.

```
a. Bold [ magadgiii Tuya(-g) dars uu-san baikh gej ] khel-sen. Bold [ maybe Tuya(-ACC) wine drink-PST BAIKH COMP ] say-PST
b. Bold [ Tuya(-g) magadgiii dars uu-san baikh gej ] khel-sen. Bold [ Tuya(-ACC) maybe wine drink-PST BAIKH COMP ] say-PST
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c. Bold [ **Tuya(-g)** dars *magadgiii* uu-san baikh gej ] khel-sen. Bold [ Tuya(-ACC) wine maybe drink-PST BAIKH COMP ] say-PST 'Bold said that Tuya maybe drank wine.'

There is an alternative derivation to obtain the same linear order as that in a sentence like (12). We could say that first *margaash* 'tomorrow' scrambles into the matrix clause (*i.e.* it long distance-scrambles), accompanied by a similar movement of the embedded subject *Dulmaa* to a matrix position below *margaash*. The resulting linear order would be the same.

(14) Bat margaash **Dulmaa-g** [CP margaash **Dulmaa** nom unsh-n gej ] khel-sen.

Independently, though, it appears that *margaash* cannot scramble into the matrix clause (15), regardless of the case of the embedded subject. (More generally, we will see in §3.1 that there is a general ban against long distance scrambling in Mongolian.) As such, it is likely that in a sentence like (12), the accusative subject is indeed inside the embedded clause.<sup>3,4</sup>

(15) \* *Margaash* Bat [ *t* **Dulmaa(-g)** buuz id-n gej ] khel-sen. tomorrow Bat [ *t* Dulmaa(-ACC) buuz eat-N.PST COMP ] say-PST Int.: 'Bat said that Dulmaa will eat buuz tomorrow.'

The claim that accusative DPs are embedded arguments can also be backed up by the fact that the whole embedded clause can be scrambled, while still containing an accusative subject.

- (16) a. Dulmaa chang-aar **sharlovan-g** Bat-id baigaa gej khel-sen.
  Dulmaa loud-INSTR carrot-ACC Bat-DAT COP.PRES COMP say-PST
  - b. [ **Sharlovan-g** Bat-id baigaa gej ] Dulmaa chang-aar *t* Dorj-id khel-sen. [ carrot-ACC Bat-DAT COP.PRES COMP ] Dulmaa loud-INSTR *t* Dorj-DAT say-PST 'Dulmaa said loudly (to Dorj) that Bat has a carrot.'
- (17) a. Bat [ margaash **Dulmaa** nom unsh-n gej ] khel-sen. Bat [ tomorrow Dulmaa.NOM book read-N.PST COMP ] say-PST
  - b. [ **Dulmaa-g** nom unsh-n gej ] Bat *t* khel-sen. [ Dulmaa-ACC book read-N.PST COMP ] Bat *t* say-PST 'Bat said that Dulmaa will read a book (tomorrow).'
- (18) a. [ Magadgüi **Tuya(-g)** dars uu-san baikh gej ] Bold *t* khel-sen. [ maybe Tuya(-ACC) wine drink-PST BAIKH COMP ] Bold *t* say-PST
  - b. [ Tuya(-g) magadgüi dars uu-san baikh gej ]  $Bold\ t$  khel-sen. [ Tuya(-ACC) maybe wine drink-PST  $BAIKH\ COMP$  ]  $Bold\ t$  say-PST
  - c. [ **Tuya(-g)** dars magadgüi uu-san baikh gej ] Bold t khel-sen. [ Tuya(-ACC) wine maybe drink-PST BAIKH COMP ] Bold t say-PST 'Bold said that Tuya maybe drank wine.'

Once again, we must rule out an alternative derivation for sentences like (16b). We could in principle interpret (16b) as involving movement of the possessum *sharlovan* 'carrot' into a matrix accusative case position, before the whole clause remnant-moves to the right of the matrix accusative case position, as schematized in (19). The superficial result is the same linear order as that seen in (16b).

<sup>&</sup>lt;sup>3</sup>A reviewer reasonably asks whether it is possible that (15) is ungrammatical not because *margaash* cannot long distance scramble, but because it is sitting in too high a position in the matrix clause. I regrettably do not have the appropriate data to evaluate this alternative. I note however that the same adverb can precede a clause-mate subject at least in a root clause, as we can see in (33b).

<sup>&</sup>lt;sup>4</sup>Another reviewer notes that, if adverbs like *margaash* or *magadgiii* really are at the edge of the embedded CP, then the accessibility of the accusative subject to a matrix probe would constitute a potential challenge to Bošković (2016)'s generalization that only the outermost element on the edge of a phase is visible to a higher probe (and that only the outermost phase-edge element counts as being at the edge of the phase more generally). I thank the reviewer for detailed comments and clarifications on this issue.

(19) **Sharlovan-g** [t Bat-id baigaa gej] Dulmaa chang-aar [sharlovan Bat-id baigaa gej] Dorj-id khel-sen

However, if these movements are effected in a non-string-vacuous way, the result is ungrammatical. In (20), *Dorj* moves to a position between the matrix subject (Bat) and the matrix adverb *changaar* 'loudly' and the remainder of the embedded clause scrambles to the beginning of the sentence. The result is ungrammatical. (We will see in §3.1 that an explanation based on the Proper Binding Condition can be given to (20).)<sup>5</sup>

(20) \* [ $t_{Dorj}$  sain seheetin gej ] Bat **Dorj-iig** chang-aar  $t_{CP}$  khel-sen. [t good noble COMP] Bat Dorj-ACC loud-INSTR t say-PST Int.: 'That Dorj is good and noble, Bat said loudly.'

A fourth argument for the embedded base-generation of accusative DPs is furnished by NPI licensing. (21) and (22) illustrate the basics of NPI licensing in Mongolian: negation is obligatory, regardless of whether the NPI is an object (21a) or a subject (22a).

- (21) a. Dulmaa khen-iig ch kharaa-güi. Dulmaa who-ACC CH see.PST-NEG 'Dulmaa did not see anyone.'
  - b. \* Dulmaa khen-iig ch khar-san.
    Dulmaa who-ACC CH see-PST
- (22) a. Khen ch Dulmaa-g kharaa-güi. who.NOM CH Dulmaa-ACC see.PST-NEG 'Nobody saw Dulmaa.'
  - b. \* Khen ch Dulmaa-g khar-san. who.NOM CH Dulmaa-ACC see-PST

In (23), a clause with an object NPI is embedded under the verb *khelekh* 'say'. The negation has to be clause-mate with the embedded NPI; matrix negation renders the sentence ungrammatical.

- (23) a. Nara [ Dulmaa(-g) khen-iig ch kharaa-güi gej ] khel-sen.
  Nara [ Dulmaa(-ACC) who-ACC CH see.PST-NEG COMP ] say-PST
  'Nara said that Dulmaa did not see anyone.'
  - b. \* Nara [ Dulmaa-g khen-iig ch khar-san gej ] khelee-güi.
    Nara [ Dulmaa-ACC who-ACC CH see-PST COMP ] say.PST-NEG

(24) is a similar paradigm, but now the NPI is in the embedded subject position. Once again, negation has to be clause-mate with respect to the NPI; placing negation in the matrix clause renders the sentence ungrammatical. Crucially, the NPI subject can bear nominative or accusative case, but the licensing conditions remain the same. While I cannot offer a theory of NPI licensing in Mongolian, it suffices here that nominative and accusative subjects behave in the same way.<sup>6</sup>

- (24) a. Nara **khen(-iig) ch** iree-güi gej khel-sen.
  Nara who(-ACC) CH come.PST-NEG COMP say-PST
  'Nara said that nobody came.'
  - b. \* Nara **khen(-iig) ch** ir-san gej khelee-güi. Nara who(-ACC) CH come-PST COMP say.PST-NEG

<sup>&</sup>lt;sup>5</sup>A reviewer observes that a prediction made by the alternative analysis in (19) is that there could be some phrase (*e.g.* an adverb) intervening between the hyperraised DP and the moved embedded clause. While I acknowledge the correctness of this remark, I unfortunatelly do not have the data to verify or falsify this prediction.

<sup>&</sup>lt;sup>6</sup>S. Iatridou, D. Pesetsky, and a reviewer note that it appears that NPI licensing in Mongolian must be satisfied early. If this were not true, the prediction made by the analysis proposed here is that an accusative subject NPI should be able to be licensed by matrix negation, since Spec-CP should suffice to make accusative subjects visible to matrix elements. I regrettably do not have anything else to say on this matter.

A final argument is provided by the interpretation of nonreferential DPs. Shklovsky & Sudo (2014) observe that, in Uyghur, the subject of an embedded finite clause can be a nonreferential DP that is interpreted under the scope of the matrix verb. This holds regardless of whether the subject bears nominative or accusative case. The same can be seen in Mongolian:

```
(25) Lusyn dagina bodit endalrach bai-deg-güi ch, Navchaa [ lusyn dagina(-iig) irch mermaid real in.life COP-HAB-NEG CH Navchaa [ mermaid(-ACC) come.FUT bai-n gej ] khel-sen.

AUX-N.PST COMP ] say-PST

'Although mermaids don't exist, Navchaa said that a mermaid is coming.'
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If the accusative DP were a matrix argument, we would not be able to account for the fact that (25) is not contradictory, irrespective of the case of the embedded subject.

We can conclude from the data above that accusative DPs are base-generated as the embedded subject. These data argue against the prolepsis analysis in (10). However, nothing was said about the position they occupy. It could well be the case that subjects receive accusative case from the matrix  $\nu$  while still occupying the canonical subject position, plausibly Spec-TP. This would be an ECM analysis of accusative subjects in Mongolian, schematized in (26), where the embedded subject receives accusative case without leaving its canonical position, Spec-TP.

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(26) ECM analysis of accusative subjects (to be discarded) [CP ... \gamma ... [CP (margaash) [TP DP [T' ... t ...]]]]
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This analysis would be consistent with the fact that both accusative and nominative subjects can follow an embedded adverb like *margaash* 'tomorrow', which could be a preposed phrase, occupying a position above TP.

In §2.3, I will show that accusative subjects occupy a higher position inside the embedded clause than nominative subjects, leading us to the conclusion that an ECM analysis is empirically incorrects. Before that, I lay out the theoretical problem that the assignment of accusative case across a clausal boundary poses.

### 2.2 Embedded accusative subjects receive accusative across a clausal boundary

What we have seen so far is that, in Mongolian, accusative DPs that are interpreted as the embedded subject are not proleptic arguments; they are interpreted as the embedded subject by virtue of being base-generated in that position.

Furthermore, the accusative case in the embedded subject has a matrix source. The most obvious argument in support for this claim is that accusative case is not available in root clauses. This is particularly clear in a type of possessive construction where the possessum surfaces without any overt case marking. When embedded however, accusative case becomes a possibility in the possessums.

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(27) a. Sharlovan(*-g) Bat-id baigaa. carrot(*-ACC) Bat-DAT COP.PRES 'Bat has a carrot.'
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b. Dulmaa chang-aar [ sharlovan-g Bat-id baigaa gej ] khel-sen. Dulmaa loud-INSTR [ carrot-ACC Bat-DAT COP.PRES COMP ] say-PST 'Dulmaa said loudly that Bat has a carrot.'

In view of the unavailability of accusative case in the possessive clause itself (27a), it seems reasonable to assume that this case is coming from the matrix clause in (27b).

Furthermore, accusative case ceases to be an option when the matrix verb is passivized, as in (28), and in subject clauses like those in (29).

```
(28) [ Dulmaa(*-g) sain seheetin gej ] khel-gd-sen. [ Dulmaa(*-ACC) good noble COMP ] say-PASS-PST 'It was said that Dulmaa is good and noble.'
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- (29) a. [ Bat(\*-iig) chikher id-sen gedge n' ] nama-ig gaikhsh-ruul-san. [ Bat(\*-ACC) candy eat-PST COMP POSS.3 ] 1SG-ACC surprise-CAUS-PST 'That Bat ate candy surprised me.'
  - b. [ **Dorj(\*-iig)** tsagtaa ir-sen (gedge) n' ] nama-ig gaikhsh-ruul-san. [ Dorj(\*-ACC) late come-PST (COMP) POSS.3 ] 1SG-ACC surprise-CAUS-PST 'That Dorj arrived late surprised me.'

The unavailability of accusative case in (28) can be explained if the source of this case is the matrix  $\nu$ , an ability that is taken away as a consequence of passivization. Similarly, in the subject clauses in (29), the subject of these clauses is outside of the c-command domain of the matrix  $\nu$ , hence why it cannot receive accusative case from it.

As emphasized by most literature on similar constructions in other languages, the assignment of accusative case to the subject of an embedded clause across a clausal boundary poses a challenge to common assumptions about locality. In minimalist terms, locality restrictions can be stated in terms of the Phase Impenetrability Condition in (30).<sup>7</sup>

(30) Phase Impenetrability Condition (PIC)
The domain of H [head of a strong phase] is not accessible to operations at ZP [the smallest strong phase dominating HP]; only H and its edge are accessible to such operations.

(Chomsky, 2001, p. 14)

In §3, I will put forward an analysis of accusative subjects in Mongolian that sidesteps the PIC problem by exploring the escape hatch that is hardwired into the definition of this restriction. This proposal is schematized below:

```
(31) Accusative subjects occupy a higher position [CP ... \gamma ... [CP (margaash) DP_i [TP t_i [T' ... t_i ...]]]]
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Although both are embedded arguments, accusative and nominative subjects are different in that the former seem to occupy a higher position than the latter. This claim will be based on binding.

### 2.3 Accusative subjects are higher than nominative subjects

The first suggestion that accusative subjects move to a position that is higher than the position where nominative subjects surface is provided by embedded possessive constructions. (32a) shows that, if the possessum follows the dative possessor, it cannot bear accusative case. (32b) in turn shows that, if the possessum is to the left of the possessor, accusative case becomes a possibility. This is remiscent of Deal (2017)'s observation that a similar construction in Nez Perce may target embedded objects, as long as they are preverbal.

```
(32) a. Odgerel [ Dulmaa-d shine baishin(*-g) baigaa gej ] khel-sen.
Odgerel [ Dulmaa-DAT new house(*-ACC) COP.PRES COMP ] say-PST
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<sup>&</sup>lt;sup>7</sup>Another theoretical problem raised by accusative subjects is the fact that this DP should be able to be assigned nominative case in the embedded clause, rendering it inactive for further A-operations, including the assignment of accusative case. This is dictated by the Activity Condition (Chomsky 2001; see however Nevins 2005).

There are three main solutions to this problem. (i) We could loosen that Activity Condition and assume that accusative subjects are instances of multiple case assignment (Béjar & Massam, 1999; Yoon, 2004, 2007; Richards, 2013; Levin, 2017; Deal, 2017), (ii) that nominative case (or unmarked case more generally) is not a type of case at all (Kornfilt & Preminger 2015, who assume a configurational view of case, Marantz 2000; Baker & Vinokurova 2010; Baker 2015, i.a.), or (iii) disregard the Activity Condition as a factor that restricts the A-movement of nominals (Keine, to appear) (Keine also observes that it is not always easy to distinguish between the PIC and the case problem introduced by hyperraising).

This paper focuses on how the availability of accusative subjects in Mongolian may be informative of the nature of syntactic positions, so for convenience, I will treat the accusative case that appears in the embedded subject of the sentences of interest as if it is assigned by the matrix  $\nu$ . I will nevertheless suggest on §4.1 that Kornfilt & Preminger's theory is applicable to the Mongolian data examined in this paper.

b. Odgerel **shine baishin(-g)** Dulmaa-d *t* baigaa gej khel-sen. Odgerel new house(-ACC) Dulmaa-DAT *t* COP.PRES COMP say-PST 'Odgerel said that Dulmaa has a new house.'

This pattern can be accounted for if accusative case in embedded subjects requires the movement of that DP to a higher position. However, (32b) is still consistent with the ECM analysis in (31), since the accusative DP is just higher than the possessor, but nothing further is said about its position.

A more compelling argument that accusative subjects occupy a higher position than their nominative counterparts is supplied by binding. The reflexive possessive -AA (whose form is subject to vowel harmony) has to be locally bound. In (33a), -AA is attached to the only nominal in the sentence. The sentence is ungrammatical as a consequence of the lack of an antecedent. Indeed, if -AA is taken away, as in (33b), or if an antecedent is provided, as in (33c), 5the result is grammatical. (33d) shows that the presence of an antecedent is necessary, but not sufficient. In this sentence, -AA is interpreted as the subject of the most deeply embedded nominalized clause. The antecedent has to be the closest subject (*Nara*) and cannot be the highest subject (*Bat*).

- (33) a. \* Margaash egch-ee ir-ne. tomorrow sister.NOM-REFL.POSS come-N.PST Int.: 'My sister is coming tomorrow.'
  - b. Margaash egch (miin) ir-ne. tomorrow sister (POSS.1SG) come-N.PST 'My sister is coming tomorrow.'
  - c. John bagsh-aas-aa asuu-san.
    John teacher-ABL-REFL.POSS- ask-PST

    'John; asked his; teacher.' ((33c) adapted from Guntsetseg 2011, (1))
  - d. Bat $_i$  [ Nara $_j$  [ muur har-sn-iig- $\mathbf{aa}_{*i/j}$  ] khel-sen gej ] med-n. Bat [ Nara [ cat see-PST-ACC-REFL.POSS ] say-PST COMP ] know-N.PST 'Bat knows that Nara said that she saw a cat.' (Lit.: 'Bat $_i$  knows [that Nara $_i$  said [- $aa_{*i/i}$  seeing a cat]]'.)

With this background in place, consider now the behavior of reflexive possessive -AA in the subject of embedded finite clauses. If it is appended to the nominative subject of an embedded clause (34a), the sentence is ungrammatical. Given what we just saw about the licensing of the reflexive anaphor, we could perhaps explain the ungrammaticality of the sentences in (34) as violations of Condition A: the reflexive possessive cannot be bound by the matrix subject because the latter is outside the binding domain of the reflexive. This in turn implies that the embedded clause can be the binding domain of the reflexive possessive within the embedded subject.

- (34) a. \* Bat chang-aar [ egch-ee gaikhal-tai gej ] khel-sen.

  Bat loud-INSTR [ sister.NOM-REFL.POSS wonder-with COMP ] say-PST

  Int.: 'Bat said loudly that his (own) sister is wonderful.'

  b. \* Bat [ margasch egch-ee ir-ne gei ] khel-sen
  - b. \* Bat [ margaash **egch-ee** ir-ne gej ] khel-sen.
    Bat [ tomorrow sister.NOM-REFL.POSS come-N.PST COMP ] say-PST
    Int.: 'Bat said that his (own) sister is coming tomorrow.'

Conversely, if the subject is accusative, the result is grammatical. Alternatively put, even though in all the data we have seen so far nominative and accusative subjects can alternate with each other, accusative case becomes obligatory if the Condition A-obeying reflexive possessive is suffixed to the embedded subject. Importantly, in (35a), the accusative subject containing -AA follows the unambiguous embedded adverb margaash 'tomorrow', suggesting that the accusative subject is still inside the embedded clause. Likewise, in (35b), the embedded clause as a whole was scrambled, including the -AA-containing accusative subject. Nonetheless, even though the accusative subject remains inside the embedded clause, the reflexive possessive contained in it can be bound by the matrix subject.

- (35) a. Bat<sub>i</sub> [ margaash **egch-iig-ee**<sub>i/\*j</sub> ir-ne gej ] khel-sen. Bat [ tomorrow sister-ACC-REFL.POSS come-N.PST COMP ] say-PST
  - b. [ **Egch-iig-ee** $_{i/*j}$  ir-ne gej ] Bat $_i$  t khel-sen. [ sister-ACC-REFL.POSS come-N.PST COMP ] Bat t say-PST 'Bat said that his (own) sister is coming tomorrow.'

If the accusative subject in these sentences were occupying the same position as a nominative subject, (35a) and (35b) should be as ungrammatical as the sentences in (34), contrary to fact. How then can we account for the fact that the accusative subjects in (35a) and (35b) seem to stay inside the embedded clause, while also being bound by the matrix subject? The explanation of the ill-formedness of the sentences where the embedded subject bears nominative case is straightforward: we could take for granted that canonical, nominative subjects occupy a position like Spec-TP and that the binding domain of a DP in this position is restricted to the embedded clause, excluding the matrix subject. (34) would therefore be an instance of Condition A violation: the matrix subject cannot bind the reflexive possessive because it is outside of its binding domain. The question that we must ask now is which position an accusative subject could be occupying, so that it can be pronounced inside the embedded clause and at the same time allow the matrix subject to bind an anaphor suffixed to it. I will suggest in §3 that a left periphery position, higher than Spec-TP could be appropriate to capture these properties.

Before that, to drive the point home, we will examine similar data, but with the anaphor ööröö. Bondarenko (2017) observes that the distribution of a similar anaphor in Buryat, a Mongolic language that is closely related to Mongolian, argues is favor of a positional distinction between nominative and accusative subjects, the latter being higher than the former. The same data can be reproduced in Mongolian. Like -AA, ööröö needs to be bound by the closest subject. In (36), the embedded clause is a nominalized clause marked with dative case and the object anaphor there has to be bound by the local subject (*pro* or *Bat*). The matrix subject (*bi* '1sG') is not a viable antecedent.<sup>8</sup>

- (36) a. [ $pro_j$  öör-öö öör-t-öö $*_{i/j}$  durtai ]-d bi $_i$  bayartai bai-n. [pro self-REFL self-DAT-REFL like ]-DAT 1SG.NOM grateful COP-N.PST ' $I_i$  am grateful that (s)he $_j$  loves herself/himself $*_{i/j}$ .'
  - b. [  $Bat_j$  öör-öö öör-t-öö $*_{i/j}$  durtai ]-d bi $_i$  bayartai bai-n. [ Bat self-REFL self-DAT-REFL like ]-DAT 1SG.NOM grateful COP-N.PST ' $I_i$  am grateful that  $Bat_i$  loves himself $*_{i/i}$ .

If we use the genitive form of this anaphor, it can be used as the possessor in a subject. Mirroring the data in (35), if the subject is nominative, the result is ungrammatical. Again, the ill-formedness of the sentences in (37) can be analyzed as a consequence of a violation of Condition A: the matrix subject is too far away to bind the anaphor, so that it is left antecedent-less in the embedded clause.

```
(37) * Bat [CP (margaash) [DP öör-iin-kh-öö aav ] ir-ne gej ] khel-sen. Bat [ (tomorrow) [ self-GEN-EPTH-REFL father.NOM ] come-N.PST COMP ] say-PST Int.: 'Bat said loudly that his (own) father will come (tomorrow).'
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In contrast, if the embedded subject containing öör-iin-kh-öö is marked with accusative case, the result is grammatical.

```
(38) a. Bat<sub>i</sub> [ (margaash) [DP öör-iin-kh-öö<sub>i/*j</sub> aav-iig ] ir-ne gej ] khel-sen Bat [ (tomorrow) [ self-GEN-EPTH-REFL father-ACC ] come-N.PST COMP ] say-PST
b. [CP [DP Öör-iin-kh-öö<sub>i/*j</sub> aav-iig ] ir-ne gej ] Bat<sub>i</sub> t khel-sen. [ self-GEN-EPTH-REFL father-ACC ] come-N.PST COMP ] Bat t say-PST 'Bat said (loudly) that his (own) father will come (tomorrow).'
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As in (34), if the accusative subject in (38) were occupying exactly the same embedded position as the nominative subject in (37), the former should be as ungrammatical as the latter, contrary to fact. Conversely,

<sup>&</sup>lt;sup>8</sup>The parsing and glossing of öör anaphors and pronouns throughout this paper follow the conventions by Guntsetseg (2011).

if the accusative embedded subject is occupying an embedded position that is higher than the canonical subject position (here, assumed to be Spec-TP) and, concomitantly, accessible to a matrix antecedent, these can be correctly accounted for.

Similar conclusions can be drawn from the occurrence of an anaphor that is itself the subject of the embedded finite clause. In this configuration, the sentence is grammatical only if the anaphoric subject is marked with accusative case:

- (39) a. \* Tuya [ margaash öör-öö Mongol ruu yav-n gej ] khel-sen.
  Tuya [ tomorrow self.NOM-REFL Mongolia towards go-N.PST COMP ] say-PST
  - b. Tuya [ margaash **öör-iig-öö** Mongol ruu yav-n gej ] khel-sen. Tuya [ tomorrow self-ACC-REFL Mongolia towards go-N.PST COMP ] say-PST 'Tuya said that she is going to Mongolia tomorrow.'9

Again, this nominative *vs.* accusative contrast can be explained if subjects assigned accusative case occupy a higher position than subjects that are assigned nominative case.

Finally, a Condition B contrast offers another argument that accusative subjects occupy a higher position than nominative subjects. Baker & Vinokurova (2010, p. 616) show that, if pronominal, accusative subjects in Sakha may not be coindexed with the matrix subject. Nominative pronominal subjects, in contrast, can. Something along these lines hold of Mongolian too, except that Mongolian (unlike Sakha) allows for both nominative and accusative subjects to follow and embedded adverb like *margaash* 'tomorrow'. As mentioned above, this helps locate the accusative subject inside the embedded clause. <sup>10</sup>

- (40) a. Odgerel<sub>i</sub> [ margaash  $ter_{i/j}$  ir-ne gej ] khel-sen. Odgerel [ tomorrow 3SG.NOM come-N.PST COMP ] say-PST 'Odgerel said that (s)he (Odgerel or someone else) is coming tomorrow.'
  - b. Odgerel $_i$  [ margaash tüün-iig $_{^*i/j}$  ir-ne gej ] khel-sen. Odgerel [ tomorrow 3SG-ACC come-N.PST COMP ] say-PST 'Odgerel said that (s)he (only someone else, not Odgerel) is coming tomorrow.'

Yet again, this Condition B contrast can be explained if nominative subjects occupy a position like Spec-TP, which does not include the matrix subject in its binding domain. In this configuration, no Condition B violation is incurred. Accusative subjects, however, would occupy a higher embedded position that does include the matrix subject in its binding domain. As a consequence, Condition B is violated if the matrix subject and the embedded accusative pronominal subject are coindexed.

In sum, these Condition A and B effects could not be captured if nominative and accusative subjects occupied exactly the same position. The ECM analysis schematized in (26) is therefore inadequate to account for these data. In the next section, I lay out an analysis able to account for these binding effects that is based on a difference in height of nominative and accusative subjects in Mongolian.

# 3 Analysis: movement to Spec-CP

Mongolian is not alone in allowing for the subject of an embedded finite clause to receive case from a matrix assigner. Several, sometimes unrelated, languages display very similar phenomena. As mentioned in §2.2, the assignment of case to the subject of an embedded finite clause by a matrix assigner raises a problem to common assumptions about locality, which are currently stated in terms of phase theory. We can distinguish three main types of solutions to this problem. They are listed below, along with some of their exemplars:

<sup>&</sup>lt;sup>9</sup>(39a) is only grammatical with the parsing *Tuya said that she is going to Mongolia alone/without anyone's support*, which I assume could involve a dropped subject and the anaphor *öör-öö* in some adjunct position of sorts. (39b) has this reading as well.

<sup>&</sup>lt;sup>10</sup>One of the speakers consulted did not accept sentences like those in (40), where an embedded pronominal subject was precluded if it were coindexed with the matrix subject. While I do not have a full explanation for this fact, we could perhaps hypothesize, for this speaker, that sentences (40) are somehow blocked by sentences like those in (39), where the embedded subject, if coindexed with the matrix subject, is an accusative anaphor. The same speaker also accepts dropped subjects coindexed with the matrix subject, like (9d).

- (41) a. Non-phase solution: Ferreira (2009); Zeller (2006).
  - b. Phasehood deactivation solution: Nunes (2008); Halpert (2016, 2018); Deal (2017).
  - c. *Phase edge solution*: Alboiu & Hill (2011, et seq.); Tanaka (2002); Şener (2008); Takeuchi (2010); Bondarenko (2017); Zyman (2017, 2018); Wurmbrand (2017); Fong (2018).

According to the non-phase solutions (41a), the assignment of case across a CP boundary is not a problem at all because that CP does not count as a phase. This does not appear to be an adequate solution for the Mongolian data, because, as we will see in §3.1, embedded *gej* clauses are impervious to scrambling into the matrix clause (*i.e.* to long distance scrambling), which could be taken to suggest that these embedded clauses are phasal CPs.

The solutions of class (41b) assume that the embedded CP is indeed a phase, but either it ceases to be a phase during the derivation (Nunes, 2008; Halpert, 2016, 2018) or the embedded CP phasehood is not relevant at the moment of case assignment by the matrix  $\nu$  (Deal, 2017). Despite these differences, what the analyses in this class have in common is that the embedded subject can receive case from a matrix assigner while staying in a typical subject position, *e.g.* Spec-TP. This type of analysis is not applicable to Mongolian in view of the binding data discussed in §2.3, where it was argued, based on binding data, that accusative subjects in that language occupy a higher embedded position than nominative subjects.

Lastly, for the phase edge solutions (41c), the subject of embedded finite clauses move to Spec-CP. Because this is the phase edge, the embedded subject is now accessible to a matrix case assigner without incurring locality violations. This type of proposal seems to be appropriate to Mongolian accusative subjects, considering especially the binding contrasts just mentioned, so I follow them and apply a phase edge solution to Mongolian. For concreteness, in keeping with the assumption that syntactic operations are feature-driven (Chomsky, 1995,  $et\ seq$ .), I assume that movement to Spec-CP is triggered by some feature F in the complementizer. I assume furthermore that the embedded subject is the closest goal that can satisfy F. I will specify the identify of this feature in §4. The proposal is schematized in (42).

(42) 
$$[_{CP} \dots \nu \dots [_{CP} \stackrel{\bullet}{DP} [_{C'} COMP_F \dots \stackrel{\bullet}{t} \dots]]]$$
 (Version 1/2; see (92))

According to this analysis, despite the possible identical linear order, nominative and accusative embedded subjects in Mongolian occupy different positions inside the embedded clause. In (43a), repeated from (3a), for instance, the nominative subject occupies a canonical subject position, say Spec-TP. This subject receives nominative case from an embedded source, *e.g.* the finite T. The nominative subject can follow a preposed adverb simply as a consequence of Spec-TP being a position below the left periphery. The matrix subject cannot bind an anaphor in the embedded subject (cf. (34) and (37)) because it is outside of its binding domain.

In contrast in (44a), repeated from (3b), the accusative subject is placed in Spec-CP. Because this is the edge of the embedded CP phase, the embedded subject can receive accusative case from the matrix  $\nu$  without violating the PIC (30). In order to account for the position of accusative subjects vis-à-vis clause-initial embedded adverbs like *margaash*, I would have to assume that Mongolian has an articulated left periphery that can accommodate left dislocated adverbs.

<sup>&</sup>lt;sup>11</sup>A perennial problem in the analysis of hyperraising constructions is its optionality, specially when put side-by-side with standard raising (*i.e.* raising out of nonfinite clauses) – though see Nunes (2008)'s account for hyperraising to subject in Brazilian Portuguese, which is based on general properties of complement CPs, coupled with the lexical idiosyncrasies of the predicates that allow for hyperraising in this language. Regrettably, I have nothing to say about this problem. Ancillary proposals that could be made to the current analysis include: (*i*) saying that the *F*-feature is optional in the embedded complementizer; (*ii*) *F* is obligatory, but its satisfaction does not have to always involve movement of the embedded subject to Spec-CP; (*iii*) there is more than one complementizer in a hyperraising language like Mongolian, each associated with a hyperraising and a non-hyperraising sentence, but they are all exponed by one single lexical entry, *gej*. Needless to say, none of these options are particularly insightful.

(44) a. Bat [ margaash Dulmaa-g nom unsh-n gej ] khel-sen.

Bat [ tomorrow Dulmaa-ACC book read-N.PST COMP ] say-PST

'Bat said that Dulmaa will read a book tomorrow. [= (3b)]

b. [CP DP<sub>Subi</sub> ... v ... [CP margaash DP<sub>ACC</sub> [C' COMP [TP (...) t ...]]]]

Movement to Spec-CP also extends the binding domain of the accusative subject, in a way that is analogous to familiar English examples like (45).

(45) Which picture of herself/himself/themself(ves)<sub>i</sub> did Taylor<sub>i</sub> say [ $_{CP} t$  [ $_{C'}$  that Mary hates t]]?

Concretely, we can assume a phase-based definition of binding domain like that in (Bošković, 2016, and references therein):

(46) [A]n anaphor can be bound outside of its own minimal phase XP only if it is located at the edge of the phase (the anaphor then does not really 'belong' to phase XP; rather, it belongs to a higher phase).(Bošković, 2016, p. 14)

Before we proceed, I consider two alternative analyses of the data examined above that do not rely on movement of the accusative subject to an edge position like Spec-CP. First, one may ask whether the same proposal can be restated with the nominative subjects occupying Spec-vP, while accusative subjects occupy Spec-TP. The gist of the proposal that accusative subjects are higher than their nominative counterparts is maintained, but without any mention of the phase edge, Spec-CP.<sup>12</sup> Assuming the PIC (30), both Spec-TP and Spec-vP belong to a lower phase in the embedded clause. As such, the binding data above would be less straightforward to account for. But there is also empirical suggestion (regardless of specific assumptions about locality) provided by adverb placement that embedded subjects move out of the vP.

(47) Dorj [ {margaash} Dulmaa(-g) {margaash} ir-ne gej ] khel-sen.
Dorj [ {tomorrow} Dulmaa(-ACC) {tomorrow} come-N.PST COMP ] say-PST
'Dorj said loudly that Dulmaa will come tomorrow.'

We can see in (47) that the embedded subject can not only follow *margaash* 'tomorrow', but also precede it. The latter option would not be possible if the subject had stayed in Spec-vP. We can continue assuming then that nominative subjects in Mongolian occupy Spec-TP.

A clearer argument that the subject moves out of the *v*P comes from the position of low adverbs like *khurdan* 'quickly'. We can see in (48) that the embedded subject can precede *khurdan*, but not follow it. This holds irrespective of whether the subject is marked with nominative or accusative case. This contrast can be explained if a manner adverb like *khurdan* is adjoined to the *v*P and the subject moves out of it.

(48) Dorj [ {\*khurdan} Nara(-g) {khurdan} baishin {khurdan} bari-san gej ] khel-sen. Dorj [ {\*quickly} Nara(-ACC) {quickly} house {quickly} build-PST COMP ] say-PST 'Dorj said that Nara built a house quickly.'

Second, it could also be the case that the embedded clause in Mongolian is not always an impentrable phase, as implied in §2.2. It could be the case, for instance, that, when the embedded subject is marked with accusative case, the embedded CP is actually not a phase, being a defective or restructured (in the sense of Wurmbrand 1998  $et\ seq.$ ) domain instead. This would render unnecessary the claim that they need to move to the edge in order to be accessible to a matrix element like v or a bindig antecedent. This alternative analysis is perfectly consistent with the data and I do not have any strong arguments against it. It could nonetheless be worth comparing the gej clauses examined here with infinitival clauses, which are exemplified here with the control clauses in (49). This type of clause allows for one of its arguments to be scrambled into the matrix clause:

(49) {**Dulmaa-d**} Odgerel [ *PRO* {**Dulmaa-d**} nom ögö-kh ] durtai. {Dulmaa-DAT} Odgerel [ *PRO* {Dulmaa-DAT} book give-INF ] like 'Odgerel likes to give books to Dulmaa.'

 $<sup>^{12}</sup>$ Thank you to Y. Gowda for raising this question and Y. Gowda and N. Richards for useful suggestions.

*Gej* clauses, conversely, do not allow for long distance scrambling, irrespective of the case of the subject: <sup>13</sup>

- (50) a. Bat [ Dorj(-iig) **Dulmaa-d** nom-oo ög-sön gej ] chang-aar khel-sen. Bat [ Dorj(-ACC) Dulmaa-DAT book-REFL.POSS give-PST COMP ] loud-INSTR say-PST
  - b. \* **Dulmaa-d** Bat [ Dorj(-iig) t nom-oo ög-sön gej ] chang-aar khel-sen. Dulmaa-DAT Bat [ Dorj(-ACC) t book-REFL.POSS give-PST COMP ] loud-INSTR say-PST
- (51) a. Nara [ Dorj-iig vaar khagal-deg gej ] khel-sen. Nara [ Dorj-ACC vase break-HAB COMP ] say-PST 'Nara said that Dorj broke a vase.'
  - b. \* **Vaar** Nara [ Dorj-iig t khagal-deg gej ] khel-sen. vase Nara [ Dorj-ACC t break-HAB COMP ] say-PST

A perhaps reasonable way to account for the difference between (49) and (50b) would be to say that the *gej* clauses that have been labeled as CP here are indeed impenetrable, which can be modeled in terms of phase theory, while infinitival (control) clauses are not, hence why only the latter allows for (long distance) scrambling. While this is not the strongest argument that could be advanced, I take this contrast to at least suggest that the embedded clause of the constructions surveyed here is indeed a CP whose complement domain is invisible to probes outside it.

To summarize, in this section, I considered three classes of analyses of the construction where the subject of an embedded finite clause receives case from a matrix assigner across a clausal domain, which accusative subjects in Mongolian are instances of. I argued that of the existing options, the proposal that this type of construction requires the movement of the embedded subject to Spec-CP best suits the Mongolian pattern and the binding facts in §2.3.

## 3.1 Hyperraising through Spec-CP

Even though accusative subjects in Mongolian can remain inside the embedded clause, they can also be pronounced inside the matrix clause.<sup>14</sup>

- (52) a. Bat chang-aar [ **Dorj** sain seheetin gej ] khel-sen.
  Bat loud-INSTR [ Dorj.NOM good noble COMP ] say-PST
  - b. Bat **Dorj-iig** chang-aar [ *ec* sain seheetin gej ] khel-sen. Bat Dorj-ACC loud-INSTR [ *ec* good noble COMP ] say-PST 'Bat said loudly that Dorj is good and noble.'
- (53) a. Bat chang-aar [ **nokhoi** gaikhal-tai gej ] khel-sen. Bat loud-INSTR [ dog.NOM wonder-with COMP ] say-PST
  - b. Bat {nokhoi-g} chang-aar {nokhoi-g} gaikhal-tai gej khel-sen. Bat {dog-ACC} loud-INSTR {dog-ACC} wonder-with COMP say-PST 'Bat said loudly that dogs are wonderful.'
- (54) a. Bat [ margaash **egch-iig-ee** ir-ne gej ] khel-sen. Bat [ tomorrow sister-ACC-REFL.POSS come-N.PST COMP ] say-PST 'Bat<sub>i</sub> said that  $his_{i/*j}$  sister is coming tomorrow.' [= (35a)]
  - b. Bat  $\{$ egch-iig-ee $\}$  chang-aar  $\{$ egch-iig-ee $\}$  gaikhal-tai gej khel-sen. Bat  $\{$ sister-ACC-REFL.POSS $\}$  loud-INSTR  $\{$ sister-ACC-REFL.POSS $\}$  wonder-with COMP say-PST 'Bat $_i$  said loudly that his $_i/^*_i$  sister is wonderful.'

(55b) and (56b) show that the accusative subject can also be the leftmost DP in the sentence.

 $<sup>^{13}</sup>$ Thank you to D. Pesetsky, the first to point out this issue to me, for useful comments and insights. I also thank a reviewer and a number of participants of NELS 49 (Cornell University, 2018) for discussion.

<sup>&</sup>lt;sup>14</sup>This is an option available for only two of the four speakers consulted. Nevertheless, one of the consultants who did not accept the accusative subject in a position that immediately preceded a matrix adverb consistently accepted it as the leftmost DP in the sentence, as in (55b) and (56b) below.

- (55) a. Bat **Dulmaa(-g)** nom unsh-n gej khel-sen. Bat Dulmaa(-ACC) book read-N.PST COMP say-PST
  - b. **Dulmaa-g** Bat [ ec nom unsh-n gej ] khel-sen. Dulmaa-ACC Bat [ ec book read-N.PST COMP ] say-PST 'Bat said that Dulmaa will read a book.'
- (56) a. Odgerel **shine baishin(-g)** Dulmaa-d *t* baigaa gej khel-sen. Odgerel new house(-ACC) Dulmaa-DAT *t* COP.PRES COMP say-PST
  - b. **Shine baishin-g** Odgerel [ *ec* Dulmaa-d baigaa gej ] khel-sen new house-ACC Odgerel [ *ec* Dulmaa-DAT COP.PRES COMP ] say-PST 'Odgerel said that Dulmaa has a new house.'

This type of phenomenon was dubbed 'hyperraising' by Ura (1994). It can be found in several other, sometimes unrelated, languages: Buryat (Bondarenko, 2017), Korean (Yoon, 2004, 2007), Japanese (Bruening 2002; Tanaka 2002; Takeuchi 2010, *i.a.*), Nez Perce (Deal, 2017), Janitzio P'urhepecha (Zyman, 2017, 2018), Sakha (Baker & Vinokurova, 2010), Romanian (Alboiu & Hill, 2011, 2016), Turkish (Şener, 2008), Zulu (Halpert & Zeller, 2015), *i.a.*.

We have already discussed prolepsis in §2. This discussion is pertinent again, since the hyperraising variety of accusative subjects in Mongolian is linearly identical to prolepsis constructions (*cf.* (8)). There are a few argument that suggest that hyperraising in Mongolian is not prolepsis either.

First, if the *subject* part of a clausal idiom bears accusative case, it can, to a certain degree, be pronounced inside the matrix clause: <sup>15</sup>

- (57) a. Dorj chang-aar **Bat-iin nüd(-iig)** ore deer-ee gar-san gej khel-sen. Dorj loud-INSTR Bat-GEN eye(-ACC) top on-REFL.POSS climb-PST COMP say-PST
  - b. ? Dorj **Bat-iin nüd-iig** chang-aar [ *t* oree deer-ee gar-sen gej ] khel-sen.

    Dorj Bat-GEN eye-ACC loud-INSTR [ *t* top on-REFL.POSS climb-PST COMP ] say-PST

    'Dorj said loudly that Bat was very surprised.'

    (lit.: 'Dorj said loudly that Bat's eyes climbed on top of themselves.') [= (11)]

Second, while embedded proleptic pronouns can occupy different syntactic positions (*cf.* object position in (8b)), the accusative DP in the Mongolian construction of interest here is interpreted as the subject; it cannot be interpreted as the embedded object:

- (58) a. Navchaa chang-aar [ Odgerel deeremchn-iig bari-san gej ] khel-sen.
  Navchaa loud-INSTR [ Odgerel.NOM thief-ACC catch-PST COMP ] say-PST
  'Navchaa said loudly that Odgerel caught a thief.'

Third, accusative DPs cannot coexist with an overt pronoun in the embedded clause, as we can see in (59). If the accusative DP and the embedded subject were independent positions (albeit coindexed ones), it would not be clear why the embedded position could not be overtly filled.

(59) Dorj Nara-g chang-aar [ (\*ter) sain gej ] khel-sen. Dorj Nara-ACC loud-INSTR [ (\*3SG) good COMP ] say-PST 'Dorj said loudly that Nara will come tomorrow.'

Fourth, we already saw in (20), repeated here as (60), that if the accusative subject is pronounced inside the matrix clause, while the remainder of the embedded clause is leftwards scrambled, the result is ungrammatical.

(60) \* [ $_{CP}$   $t_{Dorj}$  sain seheetin gej ], Bat **Dorj-iig** chang-aar  $t_{CP}$  khel-sen. [ t good noble COMP ] Bat Dorj-ACC loud-INSTR t say-PST Int.: 'That Dorj is good and noble, Bat said loudly.' [= (20)]

<sup>&</sup>lt;sup>15</sup>We should ask why (57b) is not as well formed as (57a), but I do not have an explanation for this fact.

This type of ill-formedness is usually attributed to a violation of the Proper Binding Condition (PBC): the trace that is left in the embedded clause after *Dorj-iig* 'Dorj-ACC' moves into the matrix clause can no longer be licensed after the remainder of the embedded clause itself moves to a higher position. This explanation only goes through if it is assumed that the embedded subject is base-generated inside the embedded clause and only later moved into the matrix clause.

The PBC is far from an uncontroversial issue, but it may be worth empirically comparing (60) with the linearly similar (61d). (61a) suggests that (61) is not a hyperraising paradigm. In the latter, barring independent restrictions, nominative and accusative case always alternate with each other. Nominative case is, in contrast, not available here (61a). Given the meaning of the matrix verb (*persuade*), it could be the case that the accusative in (61b) is a matrix argument. Consistent with this hypothesis is the possibility of filling the embedded subject position with an overt pronoun, as in (61c), which suggests that the empty category in the embedded subject position could be adequately analyzed as a dropped subject (*pro*). While this sentence is somewhat degraded, (61c) should be compared with (59), where we saw that a hyperraising accusative DP is not compatible with an embedded pronoun. Crucial for the purposes here, (61d), where the embedded clause is moved leftwards, is grammatical, even though the accusative DP is not moved along.

- (61) a. \* Bi **Bold** [ pro ene muur-iig zur gej ] yatga-san.

  1SG Bold.NOM [ pro this cat-ACC draw COMP ] persuade-PST
  - b. Bi **Bold-iig** [ *pro* ene muur-iig zur gej ] yatga-san. 1SG Bold-ACC [ *pro* this cat-ACC draw COMP ] persuade-PST
  - c. ? Bi **Bold-iig** [ ter / tüün-iig ene muur-iig zur gej ] yatga-san. 1SG Bold-ACC [ 3SG.NOM / 3SG.ACC this cat-ACC draw COMP ] persuade-PST
  - d. [ pro ene muur-iig zur gej ] bi **Bold-iig** t yatga-san. [ pro this cat-ACC draw COMP ] 1SG Bold-ACC t persuade-PST 'I persuaded Bold to draw this cat.'

As observed by Bruening (2001) regarding similar data in Japanese, this can be explained if there is no trace in the leftwards scrambled clause in (61d).

Fourth, hyperraising in Mongolian cannot take place out of islands. (62) contains examples of embedded coordinated clauses. The subjects of the coordinated clauses can be both nominative or both accusative. However, as (62c) shows, the accusative subject of one of the conjuncts cannot occupy a matrix position. This impossibility can be explained if hyperraising in Mongolian does involve raising and coordinated clauses are islands for movement.

- (62) a. Nara [ **muur** bömbög-öör toglo-dog baa **nokhoi** yas-aar toglo-dog gej ]
  Nara [ cat.NOM ball-INSTR play-HAB CONJ dog.NOM bone-INSTR play-HAB COMP ]
  khel-sen.
  say-PST
  - Nara muur-iig bömbög-öör toglo-dog baa nokhoi-g yas-aar toglo-dog gej Nara cat-ACC ball-INSTR play-HAB CONJ dog-ACC bone-INSTR play-HAB COMP khel-sen.
     say-PST
  - c. \* Nokhoi-g Nara muur-iig bömbög-öör toglo-dog baa t yas-aar toglo-dog gej dog-ACC Nara cat-ACC ball-INSTR play-HAB CONJ t bone-INSTR play-HAB COMP khel-sen. say-PST

'Nara said that the cat plays with a ball and the dog plays with a bone.'16

Conditional clauses are also islands for hyperraising.<sup>17</sup>

<sup>&</sup>lt;sup>16</sup>There should be a version of (62c) where the accusative subject of the highest conjunct is hyperraised. This is an unfortunate gap in the data I elicited. I thank a reviewer for drawing my attention to this issue.

<sup>&</sup>lt;sup>17</sup>It may be worth noting that the subject of the consequent clause cannot be accusative:

(63) a. Bat chang-aar **Odgerel(-iig)** üdeshiilich-d ilbechin ur-val, Och bayla-n gej
Bat loud-INSTR Odgerel(-ACC) party-DAT magician invite-COND Och happy-N.PST COMP
khel-sen.
say-PST

'Bat said loudly that, if Odgerel invites a magician to the party, Och will be happy.'

- b. \* Bat Odgerel-iig chang-aar [ t üdeshiilich-d ilbechin ur-val, Och bayla-n
  Bat Odgerel-ACC loud-INSTR [ t party-DAT magician invite-COND Och happy-N.PST
  gej ] khel-sen.
  COMP ] say-PST
- c. \* **Odgerel-iig** Bat chang-aar [ *t* üdeshiilich-d ilbechin ur-val, Och bayl-an Odgerel-ACC Bat loud-INSTR [ *t* party-DAT magician invite-COND Och happy-N.PST gej ] khel-sen.

  COMP ] say-PST

The upshot is that accusative subjects in Mongolian that are pronounced in the matrix clause move (more precisely, hyperraise) there. Just like case assignment across a clausal boundary, hyperraising poses a challenge to assumptions about locality (*i.e.* the PIC in (30)). The edge-based analysis (42) can circumvent this problem too: the embedded subject moves to Spec-CP and from there it can not only be assigned accusative without violating the PIC, but also move into the matrix clause without violating this condition.

This analysis also helps explain why only accusative subjects can hyperraise. First of all, we must take note that local scrambling is a possibility in Mongolian.

- (64) a. Bat **ene nom-iig** unsh-san.

  Bat this book-ACC read-PST
  - b. **Ene nom-iig** Bat *t* unsh-san. this book-ACC Bat *t* read-PST 'Bat read this book.'
- (65) a. Bat [ margaash Dulmaa-d **nom** bai-na gej ] khel-sen. Bat [ tomorrow Dulmaa-DAT book COP-N.PST COMP ] say-PST
  - b. Bat [ **nom** margaash Dulmaa-d *t* bai-na gej ] khel-sen. Bat [ book tomorrow Dulmaa-DAT *t* COP-N.PST COMP ] say-PST 'Bat said that Dulmaa will have a book tomorrow.

Against this backdrop, consider what happens if we try to scramble a non-accusative subject across a finite CP. (66) shows that, if the subject of an embedded finite clause moves into the matrix clause while maintaining nominative case, the result is ungrammatical.

- (66) a. Bold **Tuya\*(-g)** haramsaltai-gaar [ t teneg gej ] bod-son.

  Bold Tuya\*(-ACC) sadly-INST [ t stupid COMP ] think-PST

  'Bold thought with sadness that Tuya is stupid.' (Von Heusinger et al., 2011, (18))
  - b. \* Bat **Dorj** chang-aar [ *t* sain seheetin gej ] khel-sen.

    Bat Dorj.NOM loud-INSTR [ *t* good noble COMP ] say-PST

    Int.: 'Bat said loudly that Dorj is good and noble.'
  - c. \* **Dorj** Bat [ *t* Dulmaa-d nom-oo ög-sön gej ] chang-aar khel-sen. Dorj.NOM Bat [ *t* Dulmaa-DAT book-REFL.POSS give-PST COMP ] loud-INSTR say-PST 'Bat said loudly that Dorj gave his book to Dulmaa.'

<sup>(</sup>i) \* Bat chang-aar Odgerel üdeshiilich-d ilbechin ur-val, **Och-iig** bayla-n gej khel-sen.
Bat loud-INSTR Odgerel.NOM party-DAT magician invite-COND Och-ACC happy-N.PST COMP say-PST
Int.: 'Bat said loudly that, if Odgerel invites a magician to the party, Och will be happy.'

The same holds of objects, be they differentially marked (67) or not (68). 18,19

- (67) a. Navchaa chang-aar [ Odgerel deeremchn-iig bari-san gej ] khel-sen.
  Navchaa loud-INSTR [ Odgerel.NOM thief-ACC catch-PST COMP ] say-PST
  'Navchaa said loudly that Odgerel caught a (certain) thief.
  - b. \* Navchaa **deeremchn-iig** chang-aar [ Odgerel t bari-san gej ] khel-sen. Navchaa thief-ACC loud-INSTR [ Odgerel.NOM t catch-PST COMP ] say-PST
- (68) a. Nara [ Dorj vaar khagal-deg gej ] khel-sen.
  Nara [ Dorj.NOM vase break-HAB COMP ] say-PST
  'Nara said that Dorj broke a vase.'

  - c. \* **Vaar** Nara [ Dorj t khagal-deg gej ] khel-sen. vase Nara [ Dorj.NOM t break-HAB COMP ] say-PST

In (69), the accusative object is part of an embedded idiom, so that in (69b), the matrix accusative DP is clearly moved from the embedded clause. Similarly to what happens in (67) and (68), the result is also ungrammatical. (Brief remarks about case marking will be made in §4.1.)

- (69) a. Dulmaa chang-aar [ Bat hal uzej khaluun chuluu-g doloo-son gej ] khel-sen. Dulmaa loud-INSTR [ Bat.NOM fire UZEJ hot stone-ACC lick-PST COMP ] say-PST

Finally, dative objects in the embedded clause cannot be pronounced in the matrix clause either.

- (70) a. Bat [ Dorj(-iig) **Dulmaa-d** nom-oo ög-sön gej ] chang-aar khel-sen. Bat [ Dorj(-ACC) Dulmaa-DAT book-REFL.POSS give-PST COMP ] loud-INSTR say-PST
  - b. \* Bat **Dulmaa-d** [ Dorj(-iig) *t* nom-oo ög-sön gej ] chang-aar khel-sen. Bat Dulmaa-DAT [ Dorj(-ACC) *t* book-REFL.POSS give-PST COMP ] loud-INSTR say-PST
  - c. \* **Dulmaa-d** Bat [ Dorj(-iig) *t* nom-oo ög-sön gej ] chang-aar khel-sen. Dulmaa-DAT Bat [ Dorj(-ACC) *t* book-REFL.POSS give-PST COMP ] loud-INSTR say-PST 'Bat said loudly that Dorj gave his book to Dulmaa.'

One might ask at this point whether replacing or rewriting the case of an embedded argument after hyperraising or long distance-scrambling it would result in a grammatical sentence. In (71), an accusative DP placed in the matrix clause tries to be interpreted as the embedded goal argument, which would receive dative case in its base position (cf. (70)). The result is ungrammatical.<sup>20</sup>

- (i) a. Navchaa chang-aar [ deeremchn-iig Odgerel t bari-san gej ] khel-sen. Navchaa loud-INSTR [ t thief-ACC Odgerel.NOM t catch-PST COMP ] say-PST 'Navchaa said loudly that Odgerel caught a thief.
  - b. [ **Deeremchn-iig** Odgerel t bari-san gej ] Navchaa chang-aar khel-sen. [ thief-ACC Odgerel.NOM t catch-PST COMP ] Navchaa loud-INSTR say-PST 'That Odgerel caught a thief, Navchaa said loudly.'

<sup>&</sup>lt;sup>18</sup>The embedded object can scramble locally. This is particularly clear when the whole embedded clause is moved leftwards and the object occupies the leftmost position in that clause.

<sup>&</sup>lt;sup>19</sup>One of the speakers consulted sometimes accepted examples like (67)/(68) and sometimes rejected them. I do not know what to say about this variation.

<sup>&</sup>lt;sup>20</sup>I thank a reviewer for raising this question.

(71) \* Bat **Dulmaa-g** chang-aar [ Dorj *t* nom ög-sön gej ] khel-sen. Bat Dulmaa-ACC loud-INSTR [ Dorj.NOM *t* book give-PST COMP ] say-PST Int.: 'Bat said loudly that Dorj gave a book to Dulmaa.'

What (66)–(70) show is that Mongolian does not allow for long distance scrambling, that is to say, the movement of an embedded argument into the matrix clause. But why is it possible for accusative subjects to move into the matrix clause, as we saw in examples like (52)? Following Hiraiwa (2005) and Bondarenko (2017), the edge analysis in (42) can explain this possibility: moving the embedded subject to Spec-CP not only allows it to receive accusative case from the matrix  $\nu$ , but also allows it to *locally* move into the matrix clause, overriding a ban long distance scrambling.

(72) 
$$[_{CP} (...) \stackrel{\longleftarrow}{\mathbf{DP}} ... \stackrel{\longleftarrow}{\gamma} ... [_{CP} \stackrel{\longleftarrow}{\mathbf{t}} [_{C'} \operatorname{COMP}_F ... \stackrel{\longleftarrow}{\mathbf{t}} ...]]]$$

Two clarifications are in order. First, a reviewer asks whether the A-movement of the accusative subject to Spec-CP and into the matrix clause is a separate operation or just an instance of local scrambling, illustrated on p. 17. The behavior of local scrambling suggests that hyperraising in Mongolian can be reduced to local scrambling. (73) shows that local scrambling feeds the creation of new antecedents for variable binding; (74) shows that local scrambling does not induce a *WCO* violation. As seen above, these are some of the properties displayed by hyperraising.

- (73) a. Öör-iin-kh  $n'_i$  bagsh **oyuutan bür-iig** $_{i}$  zur-san. self-GEN-EPTH-REFL POSS.3 teacher student every-ACC draw-PST 'Her/His teacher drew every student.' (NOT: 'For every x, x's teacher drew x.')
  - b. **Oyuutan bür-iig** $_i$  öör-iin-kh n' $_i$  bagsh t zur-san. student every-ACC self-GEN-EPTH POSS.3 teacher t draw-PST 'For every x, x's teacher drew x.'
- (74) a. Aav n'<sub>i</sub> **Dulmaa-d**<sub>i</sub> nom ög-sön. father POSS.3 Dulmaa-DAT book give-PST
  - b. **Dulmaa-d** $_i$  aav  $n'_i$  t nom ög-sön. Dulmaa-DAT father POSS.3 t book give-PST 'Her/His father gave Dulmaa a book.'

Second, one may wonder at the nature of Spec-CP and the movement to that position. Spec-CP in the present analysis is not a designated escape hatch position; it is only created as a consequence of the valuation of the F-feature in COMP in (42). Assuming that case assignment is obligatory once the appropriate configuration is attained, the embedded subject that is moved to Spec-CP must be assigned accusative case, explaining why the retainment of nominative case is ruled out in (66). Furthermore, in keeping with locality conditions imposed on Agree, the closest DP that can satisfy the F-feature is the embedded subject. This blocks the movement of lower arguments like objects (67/68) and dative arguments (70).

In §2.3, we concluded that accusative subjects move to a higher position, analyzed here as Spec-CP. In the present section, we saw that the subject of an embedded finite clause in Mongolian can also hyperraise into the matrix clause. The edge analysis helped explain why this is a possibility. In §4, we examine the properties of the hyperraising landing site. We will see that this position dsplays some of the properties that are characteristic of A-movement, among them, the absence of weak crossover effects and of reconstruction for Condition C. If the analysis that hyperraising in Mongolian involves an intermediate Spec-CP position is correct, we would have to conclude that Spec-CP can be an A-position too. Before that though, I briefly comment on existing analyses of accusative subjects in Mongolian.

## 3.2 Comparison with previous analyses of accusative subjects in Mongolian

There are a few existing analyses of accusative subject DPs in embedded finite clauses in (some variety of) Mongolian. In this section, I briefly summarize and comment on the analyses by Guntsetseg (2010), Von Heusinger et al. (2011), and Bao et al. (2015).

Guntsetseg (2010) proposes that accusative subjects in Mongolian are instances of Differential Subject Marking (DSM). DSM is a type of differential case marking, which, in a rough definition, is the alternation between different types of case morphology in a nominal according to criteria like definiteness, animacy, specificity, etc. Guntsetseg argues that referentiality is one of the key components in regulating DSM in Mongolian and proposes that it has the particular function of signaling that the embedded subject is lower in referentiality than the matrix subject. Guntsetseg shows that speakers disprefer an accusative subject if it is higher in referentiality than the matrix subject, while showing no preference for an accusative form when the embedded subject is lower in referentiality.

A DSM analysis like Guntsetseg's and the analysis here have different goals. The question that Guntsetseg aims at answering is, given the possibility of an embedded subject to surface with either nominative or accusative case, which option is chosen and what are the criteria to make the choice? Conversely, what I am trying to do here is to provide an explanation as to why these are options to begin with.

Beyond this difference in perspective, a DSM analysis of this type would underdetermine some of the data examined here. We concluded in §2.3 that accusative subjects must occupy a higher position than their nominative counterparts. According to the DSM analysis by Guntsetseg, the occurrence of accusative case in the embedded subject is a consequence of a comparison with the semantic properties of the matrix subject, regardless of the position occupied by the subject.

In a similar vein, Von Heusinger et al. (2011) propose that the embedded subject of finite clauses is marked with accusative case because, Mongolian being a head-final language, the embedded subject may end up adjacent to the matrix subject. The embedded subject is marked with accusative case so that it can be dissimilated from the matrix subject. While this seems to be a reasonable way to view accusative DPs and the role of case in grammar, it is not readily compatible with some of the data inspected here, specially the binding data already mentioned above. Specifically, if accusative case only surfaced in the accusative subject in order for it to be distinguished from the matrix subject, the correlation between Condition A and Condition B effects discussed in §2.3 would not be accounted for straightforwardly.

Lastly, Bao et al. (2015) propose that accusative case in inner Mongolian is assigned by the embedded complementizer *gej*. A prediction that falls out from this kind of analysis is that the properties of the matrix clause should not matter to the availability of accusative case in the embedded clause, since the source of accusative case, the complementizer, belongs to the embedded clause itself. As we saw in the passive (28), accusative case in the embedded subject ceases to be a possibility in passives. The embedded complementizer though is unchanged in matrix passives, so that Bao et al. predict that the accusative variant in (28) should be grammatical, contrary to fact.

In the following section, we turn to the main goal of this paper, to inquire into the properties of a a syntactic position like Spec-CP as afforded by the examination of hyperraising in Mongolian. We will see, among other things, that hyperraising can create new antecedents for binding and that it does not induce a weak crossover violation. These are properties that characterize A-movement. If the edge-based analysis in (92) is correct, the implication is that Spec-CP can be an A-position, contrary to the common assumption that it is inherently an  $\overline{A}$ -position.

# 4 Proper movement through Spec-CP

I argued in §3 that a phase edge solution (41c) is appropriate to account for accusative subjects in Mongolian. We also saw that this analysis is consistent with the possibility of these subjects to hyperraise. In compliance with standard assumptions regarding how syntactic operations are triggered (i.e. by the presence of features in the target), I also assume that movement to Spec-CP is triggered by some feature F. An obvious question to ask is what type of feature F is.

Considering the two major types of features (A and  $\overline{A}$ ), we can also distinguish two subcategories of phase edge solutions, those where F is a type of A-feature and those where it is a type of  $\overline{A}$ -feature.

(75) Two types of phase edge solution (41c)

i. A-feature: Tanaka (2002);<sup>21</sup> Takeuchi (2010); Obata & Epstein (2011); Wurmbrand (2017).

<sup>&</sup>lt;sup>21</sup>Tanaka (2002) does not propose exactly that there is an A-type of feature in the complementizer. Tanaka does show nevertheless that hyperraising to object in Japanese feeds the creation of new antecedents for binding, proposing thus that it is a type of *A-movement* 

ii.  $\overline{A}$ -feature: Sener (2008); Alboiu & Hill (2011, et seq.).

In the next section, we examine hyperraising data from Mongolian with respect to some (though not all) of the properties that distinguish between A- and  $\overline{A}$ -movement. These data will suggest that hyperraising in Mongolian is a type of A-movement, allowing us to adjudicate between the two subtypes of edge analyses in (75). This will set the stage for the main claim made in this paper, namely that A-movement through Spec-CP does not have to be an instance of improper movement.

## 4.1 Hyperraising in Mongolian as a type of A-movement

The table in (76) lists some commonplace properties that are used to distinguish between A- and  $\overline{A}$ -movement. The table also anticipates the corresponding properties exhibited by hyperraising in Mongolian that will be examined in this section. As we can see, for the data available, this construction has the characteristic behavior of A-movement.

(76)		A-mvt	Ā-mvt	Hyperraising
	Strict locality	<b>√</b>	*	<b>√</b>
	Activity Condition compliance	$\checkmark$	*	(√)
	WCO effects induced	*	$\checkmark$	*
	Reconstruction for Condition C	*	$\checkmark$	*
	Creation of antecedents for anaphors	<b>√</b>	*	_
	Parasitic gap licensing	*	$\checkmark$	Ø

I should start with the properties regarding which I have no Mongolian data to offer. A-movement is well-known for creating new antecedents for anaphors. This property could not be surveyed here because the anaphors in Mongolian I am aware of seem to be subject-oriented. (77a) and (77b) show, by the means of a Condition C violation, that a dative goal can c-command into the theme argument. (77c) shows that, nevertheless, the goal argument cannot act as an antecedent to an anaphor contained in the theme. Interestingly, the fact that the anaphor is plural forces an interpretation where the subject denotes more than one person (despite the fact that this position is superficially occupied by a singular pronoun; this is informally represented with '+'). The goal argument, even though it is plural, is still not an appropriate antecedent.

- (77) a. Bi tüün- $d_{i/j}$  Dulmaa-g-iin $_i$  nom-iig ög-sön. 1SG.NOM 3SG-DAT Dulmaa-EPTH-GEN book-ACC give-PST 'I gave her/him Dulmaa's book.'
  - b. Bi ted-end $_{i/j}$  Dulmaa Navchaa khoyor-iin $_i$  nom-iig ög-sön. 1SG.NOM 3PL-DAT Dulmaa Navchaa two-GEN book-ACC give-PST 'I gave them Dulmaa's and Navchaa's book.'
  - c.  $Bi_{+i}$  ted-end<sub>j</sub> öör-sd-iin-kh-öö<sub>i/\*j</sub> nom-iig ög-sön. 1SG.NOM 3PL-DAT self-PL-GEN-EPTH-REFL book-ACC give-PST 'I (and other people) gave them our own book.'

If we try to embed an anaphor inside a matrix goal argument, the only valid antecedent is the matrix subject. Similarly to what we saw in (77c), the subject that is clause-mate with the anaphor in (78) must be plural; the fact that the accusative subject is also plural does not allow it to be an antecedent for the plural anaphor.

(78) Nara \*(Bat khoyor)<sub>i</sub> **tedn-iig**<sub>j</sub> bukh buuz-iig id-sen gej neg neg-n-ii-kh-ee<sub>i/\*j</sub>
Nara \*(Bat two) 3PL-ACC every buuz-ACC eat-PST COMP one.another-EPTH-GEN-EPTH-REFL
eej-id khel-sen.
mother-DAT say-PST

'Nara and Bat told each other's mothers that they ate all the buuz.'<sup>22</sup>

that passes through Spec-CP. This is why I categorize this analysis in the (75i) camp. I thank a reviewer for this clarification.

<sup>&</sup>lt;sup>22</sup>That the reciprocal *neg negendee* 'one another' obeys Condition A can be shown from the following data:

(79a) and (79b) provide analogous examples. (79b) shows additionally that being placed in the leftmost position still does not allow a hyperraised DP to bind a reflexive (here, the reflexive possessive -AA).

- (79) a. Nara<sub>i</sub> **bukh oyuutan(-iig)**<sub>j</sub> ir-ne gej öör-iin-kh-öö $_{i/*j}$  bagsh-id khel-sen. Nara every student(-ACC) come-N.PST COMP self-GEN-EP-REFL teacher-DAT say-PST 'Nara<sub>i</sub> told her<sub>j</sub> teacher that every student is coming.'

  (NOT: 'Nara told their<sub>i</sub> teacher that every student<sub>i</sub> is coming tomorrow.')
  - b. \* **Dulmaa-g**<sub>i</sub> aav-aa<sub>i</sub> [ *t* sain khun gej ] khel-sen. Dulmaa-ACC father-REFL.POSS [ *t* good person COMP ] say-PST Int.: 'Her (own) father said that Dulmaa is a good person.'

In sum, hyperraising does not create new antecedents for the binding of matrix anaphors, but there is likely to be an independent factor explaining this impossibility.<sup>23</sup>

As for parasitic gap-licensing, I have no data to offer. As we know, there are several alternative analyses that must be ruled out before a PG-licensing-looking configuration can effectively be so characterized. Relevantly, preliminary data suggests that Mongolian allows for object-dropping. I leave the intricacies of PG-licensing in Mongolian for future research.

On to the data available, a well-known condition that A-movement obeys is minimality, which states that this type of movement must target the closest nominal. A simple argument that hyperraising is a type of A-movement is thus supplied by the fact that only subjects can hyperraise. An object, for example, cannot, as we have already seen in (67), repeated below.

An indirect suggestion in favor of the claim that hyperraising in Mongolian patterns with other types of A-movement is provided by the compliance with the Activity Condition (Chomsky, 2001). This condition prohibits nominals from undergoing A-movement if they have already been assigned case. As mentioned in fn. 7, hyperraising in general poses of problem for the Activity Condition, since it departs from the subject position of a finite clause, where it can arguably be assigned case. As such, it should be ineligible to undergo further instances of A-movement.

As also mentioned in fn. 7, there are several ways to avoid this problem. Among them, Kornfilt & Preminger (2015)'s analysis, could be appropriate for the Mongolian data examined here. Their analysis deals with Sakha, another Altaic language, like Mongolian. As a matter of fact, Kornfilt & Preminger state the problem not in terms of the Activity Condition, but, assuming Marantz (2000)'s dependent case framework, as a violation of the requirement that a nominal no longer count for the disjunctive hierarchy

- (i) a. Ted neg neg-n-ii-kh-ee eej-iig khar-san. 3PL.NOM one.another-EPTH-GEN-EPTH-REFL mother-ACC see-PST 'They saw each other's mothers.'
  - b. Ted-nii bagsh neg neg-n-ii-kh-ee eej-iig khar-san. 3PL-GEN teacher one.another-EPTH-GEN-EPTH-REFL mother-ACC see-PST "Their $_i$  teachers $_i$  saw each other $_{i/*i}$ 's mothers."
  - c. \* Ted [Bat neg neg-n-ii-kh-ee eej-iig khar-san gej ] khel-sen. 3PL.NOM [Bat.NOM one.another-EPTH-GEN-EPTH-REFL mother-ACC see-PST COMP] say-PST Lit.: 'They said that Bat saw each other's mothers.'
  - d. Ted [Bat Dulmaa khoyor neg neg-n-ii-kh-ee eej-iig khar-san gej ] khel-sen. 3PL.NOM [Bat Dulmaa two.NOM one.another-EPTH-GEN-EPTH-REFL mother-ACC see-PST COMP] say-PST 'They $_i$  said that Bat and Dulmaa $_i$  saw each other $_{i/*i}$ 's mothers.'

<sup>&</sup>lt;sup>23</sup>This prevents us from reproducing the reflexive binding Japanese data from Tanaka (2002), who, to the best of my knowledge, was the first to suggest that Spec-CP can be an A-position. However, the claim is based on the theoretical assumption that hyperraising should necessarily imply a step of movement through Spec-CP because of the impenetrability of CPs. While, as just mentioned, Tanaka does provide empirical arguments that hyperraising in Japanese is a type of A-movement, there is no equivalent empirical counterpart to the edge analysis.

once it is assigned case. Based on Preminger (2014)'s formalization of a dependent case framework, Kornfilt & Preminger's main proposal is that unmarked case is the exponent of an unvalued case feature. The nominative case that a hyperraising subject in *e.g.* Mongolian is assigned would be a type of unmarked case in Marantz's hierarchy.

A prediction that falls out from this analysis is that subjects that are assigned some case other than unmarked case should be unable to undergo hyperraising. We have seen before possessive constructions in Mongolian (cf. (27) and (32)). In these constructions, the dative possessor induces a Condition C violation in an R-expression contained in the unmarked possessum:

- (81) a. Dulmaa-d shine baishin baigaa.

  Dulmaa-DAT new house COP.PRES

  'Dulmaa has a new house.'
  - b. Tüün-d\*<sub>i/j</sub> Dorj-iin<sub>i</sub> nom baigaa.
     3SG-DAT Dorj-GEN book COP.PRES 'He/She/They has(ve) Dorj's book.'

If we embed a possessive construction like that in (81) under the hyperraising verb *khelekh* 'say', the possessor cannot hyperraise, even though (81b) indicates that the dative possessor is higher than the unmarked possessum.

- (82) a. Odgerel [ **Dulmaa-d** shine baishin baigaa gej ] khel-sen.
  Odgerel [ Dulmaa-DAT new house COP.PRES COMP ] say-PST

  'Odgerel said that Dulmaa has a new house.' [= (32a)]
  - b. \* {**Dulmaa-g**} Odgerel {**Dulmaa-g**} shine baishin baigaa gej khel-sen. {Dulmaa-ACC} Odgerel {Dulmaa-ACC} new house COP.PRES COMP say-PST

In order to apply Kornfilt & Preminger's proposal to the data above, we could assume that dative case in a possessive construction is a type of lexical case. Accordingly, a possible explanation for (82b)'s ungrammaticality would be to say that a DP can hyperraise only if it is not marked for case. This is true of nominative subjects if nominative is type of 'no case at all', but not of dative case.

According to the assumptions made here, we could explain the correlation between case marking and the possibility of hyperraising in Mongolian as follows: it is possible to say that this type of construction obeys the particular version of the Activity Condition assume here, patterning with canonical instances of A-movement. This claim, of course, is only indirect, as mentioned in the outset, since it depends on very specific theoretical assumptions about case theory and the Activity Condition.

The absence of weak crossover effects yields a more compelling argument that hyperraising is a type of A-movement. In (83), the embedded subject is a universal quantifier and it can be marked with nominative or accusative case. The matrix subject contains an internally complex possessive pronoun (see Guntsetseg 2011 for details).<sup>24</sup> If the embedded subject surfaces below the matrix subject, as in (83a), the embedded subject universal quantifier cannot bind the pronoun in the matrix clause. However, if the accusative subject undergoes hyperraising and is pronounced in the leftmost position in the sentence, a variable binding reading obtains, (83b).<sup>25</sup>

(83) a. Öör-iin-kh n' eej **okhin bür(-iig)** ukhaan-tai gej khel-sen. self-GEN-EPTH POSS.3 mother girl every(-ACC) intelligence-with COMP say-PST 'Her/His (e.g. Dorj's) mother said that every girl is intelligent.'

 $<sup>^{24}</sup>$ Thank you to D. Privoznov for instructive suggestions regarding these possessive pronouns and the difference between them and simplex anaphors.

<sup>&</sup>lt;sup>25</sup>As expected from §3.1, if the embedded subject keeps nominative case after hyperraising into the matrix clause, the result is ungrammatical:

<sup>(</sup>i) \* **Okhin bür** öör-iin-kh n' eej [ t ukhaan-tai gej ] khel-sen. girl every.NOM self-GEN-EPTH POSS.3 mother [ t intelligence-with COMP ] say-PST Int.: 'Her/His (e.g. Dorj's) mother said that every girl is intelligent.'

b. **Okhin bür-iig** öör-iin-kh n' eej [ t ukhaan-tai gej ] khel-sen. girl every-ACC self-GEN-EPTH POSS.3 mother [ t intelligence-with COMP ] say-PST 'Her<sub>i</sub> mother said that every girl<sub>i</sub> is intelligent.'

(For every girl x, x's mother said that x is intelligent.)

The position the hyperraised subject moves to must be A-position. Otherwise, the variable binding reading in (83b) would be undergenerated.

The same point is illustrated by the fact that the embedded subject can be coindexed with a pronoun attached to the matrix subject, regardless of whether the pronoun is a complex possessive (84), a genitive pronoun (85)/(86), or a simple possessive (87).

- (84) a. Öör-sd-iin-kh n'<sub>i/\*j</sub> eej **Bat Dulmaa khoyor(-iig)**<sub>i</sub> sain khümüüs gej khel-sen self-PL-GEN-EPTH POSS.3 mother Bat Dulmaa two(-ACC) good people COMP say-PST 'Their mothers said that Bat and Dulmaa are good people.'
  - b. **Bat Dulmaa khoyor-iig** $_i$  öör-sd-iin-kh n' $_{i/^*j}$  eej [ t sain khümüüs gej ] Bat Dulmaa two-ACC self-PL-GEN-EPTH POSS.3 mother [ t good people COMP ] khel-sen. say-PST 'Their mothers said that Bat and Dulmaa are good people.'
- (85) a. Tüünii $_{i/j}$  eej [ margaash **Dorj(-iig)** $_i$  ir-ne gej ] khel-sen. 3SG.GEN mother [ tomorrow Dorj(-ACC) come-N.PST COMP ] say-PST 'His mother said that Dorj is coming tomorrow.'
  - b. **Dorj-iig**<sub>i</sub> tüünii $_{i/j}$  eej [margaash t ir-ne gej ] khel-sen. Dorj-ACC 3SG.GEN mother [tomorrow t come-N.PST COMP] say-PST 'His mother said that Dorj is coming tomorrow.'
- (86) a. Tüünii<sub>i/j</sub> eej **Dorj(-iig)**<sub>i</sub> geriin daalgavar-aa khii-sen gej khel-sen. 3SG.GEN mother Dorj(-ACC) homework-REFL.POSS do-PST COMP say-PST 'His mother said that Dorj did his homework.'
  - b. **Dorj-iig** $_i$  tüünii $_{i/j}$  eej [ t geriin daalgavar-aa khii-sen gej ] khel-sen. Dorj-ACC 3SG.GEN mother [ t homework-REFL.POSS do-PST COMP ] say-PST 'His mother said that Dorj did his homework.'
- (87) a. Eej  $n'_{i/*j}$  [ margaash **Dorj(-iig)** $_i$  ir-ne gej ] khel-sen. mother POSS.3 [ tomorrow Dorj(-ACC) come-N.PST COMP ] say-PST 'His mother said that Dorj is coming tomorrow.'
  - b. **Dorj-iig**<sub>i</sub> eej  $n'_{i/*j}$  [ margaash t ir-ne gej ] khel-sen. Dorj-ACC mother POSS.3 [ tomorrow t come-N.PST COMP ] say-PST 'His mother said that Dorj is coming tomorrow.'

To summarize, hyperraising of the embedded subject to the leftmost position in the sentence does not disrupt the binding possibilities of the embedded subject that is below the matrix subject. In other words, hyperraising does not induce a weak crossover (WCO) violation, a defining property of A-movement. The overall conclusion then is that hyperraising in Mongolian is a type of A-movement.

Another property that hyperraising in Mongolian shares with canonical A-movement is the ability to fix an underlying Condition C violation. (88) shows that a matrix goal argument (*tüün-d* '3sg-dat') induces a Condition C violation on the embedded subject, irrespective of its case. (89) in turn shows that a Condition C violation can be repaired by hyperraising the embedded subject to the leftmost pronounced position in the sentence. The absence of reconstruction for Condition C is another characteristic property of A-movement.

<sup>&</sup>lt;sup>26</sup> In (84), the complex possessive seems to be obligatorily coindexed with a DP in the same sentence where it occurs. I do not have an explanation for this fact. What is relevant for the purposes of this paper is that the coindexation is not affected by hyperraising.

- (88) Bi  $Bat(-iig)_i$  sain khün gej tüün- $d_{*i/j}$  khel-sen. 1SG.NOM Bat(-ACC) good person COMP 3SG-DAT say-PST 'I told her/him that Bat is a good person.'
- (89) **Bat-iin** $_i$  **eej-iig** bi [ t sain khün gej ] tüün-d $_i$  khel-sen. Bat-GEN mother-ACC 1SG.NOM [ t good person COMP ] 3SG-DAT say-PST 'I told her/him that Bat's mother is a good person.'

Taken together, these data support the claim that hyperraising in Mongolian is a type of A-movement. If the edge analysis argued for here is correct, the implication is that Spec-CP can be an A-position too, challenging the commonly held assumption that is intrinsically an  $\overline{A}$ -position. This conclusion also allows us to identify what the F-feature assumed in (42) is. This is what we turn to in the section.

## 4.2 The *F*-feature as an A-type of feature

The data in the previous section help settle the question as to what type of feature the F proposed in (42) is. If F were a type of  $\overline{A}$ -feature as in the analyses of subcategory (75ii), the interpretive properties and/or grammaticality of the data above could not be accounted for. The reason is that  $\overline{A}$ -features in a complementizer would engender a Spec-CP of the canonical  $\overline{A}$ -type. Hyperraising in Mongolian was proposed here to pass through Spec-CP and, additionally, it was just shown to feed A-type of phenomena. If we applied analyses like those in (75ii) to Mongolian, the prediction is that the data above should be instances of improper movement (schematized in (2) above) and therefore ungrammatical, contrary to fact.

The A-movement-based edge analyses in (75i) fare better: according to these analyses, Spec-CP is a type of A-position. Assuming that the edge analysis pursued here is correct, hyperraising through Spec-CP in Mongolian is correctly predicted to not incur any violation of the ban on improper movement.

But what does it mean to say that Spec-CP can be an A-position? Implied or explicitly stated in the analyses in (75i) (Tanaka 2002; Takeuchi 2010; Obata & Epstein 2011; Wurmbrand 2017) is that syntactic positions are defined in terms of the features that create them (Obata & Epstein, 2011; Van Urk, 2015). Spec-CP can be an A-position if the features in the complementizer that create it are a type of A-feature. Takeuchi and Wurmbrand specifically propose that the features in the complementizer are  $\varphi$ -features. Takeuchi, based on Chomsky (2008), assumes that a complementizer can bear  $\varphi$ -features as a consequence of the failure of T to inherit these features from the complementizer (cf. Legate 2011's underinheritance). Wurmbrand, follow Van Urk (2015) and proposes that  $\varphi$ -features are a possible specification of a complementizer.

Van Urk argues at length against the assumption that syntactic positions in general should be classified as being inherently A or  $\overline{A}$ . Rather, Van Urk proposes that they should be defined by the features that create them. For instance, Spec-CP is an  $\overline{A}$ -position not because this is its intrinsic property, but because filling it was triggered by *e.g.* a *Wh*-feature. Similarly, Spec-TP does not have to be an  $\overline{A}$ -position inherently either; it is defined as such because it is created by  $\varphi$ -features in  $\overline{A}$ . Van Urk's main thesis is stated as follows:

(90) Featural view of the A/A-distinction
 All differences between A- and A-movement derive from the features involved in Agree.
 (Van Urk, 2015, p. 26)

Van Urk's proposal finds precedents in Bruening (2002), Chomsky (2007), and Obata & Epstein (2011). Bruening proposes that a variant of a hyperraising construction in Japanese and in Passamaquoddy that is similar to the Mongolian data examined here can be analyzed by base-generating a DP in an embedded Spec-CP and then moving it to the matrix clause. Bruening shows that this type of movement also feeds the creation of new antecedents for binding, leading us to assume that Spec-CP can be an A-position.

Obata & Epstein, following Chomsky (2007), also claim that syntactic positions should be defined by the features that create them. Specifically, Obata & Epstein define A- and A-positions as follows:

(91) An A-position is a category bearing  $\varphi$ -features, whereas an  $\overline{A}$ -position is a category lacking  $\varphi$ -features (Obata & Epstein, 2011, (12))

(91) is particularly useful for the present analysis because it allows us to further specify what the *F*-feature posited here is. Assuming Obata & Epstein's formalization in (91), I propose that the subject of embedded finite clauses in Mongolian moves to Spec-CP in order to value  $\varphi$ -features in the complementizer gei:<sup>27</sup>

(92) 
$$[CP ... v ... [CP DP [C' COMP_{\phi} ... t ...]]]$$
 (Version 2/2, see (42))

As hinted at above, the proposal that hyperraising can be triggered by  $\varphi$ -features in the complementizer is by no means novel, Bruening (2002), Tanaka (2002), Obata & Epstein (2011), and Wurmbrand (2017) having spearheaded this type of approach (see also Zyman 2017, 2018). Outside of hyperraising, this proposal has been put forward too. For instance, Shlonsky (1992, 2002) observes that a resumptive pronoun (boldfaced) in Palestinian Arabic constituent questions are obligatory if the gap is in the object position (93), but forbidden (94) if it is the highest subject position (see more details in Shlonsky 1992, 2002). In the latter, a gap (represented with e) is required.

- (93) a. miin ?illi 1-?asad ?akal -ha mbaariḥ? who that the-lion ate -her yesterday
  - b. \* miin ?illi l-?asad ?akal *e* mbaariḥ? who that the-lion ate *e* yesterday 'Who did the lion eat yesterday?'

(Shlonsky, 2002, (23))

- (94) a. \* miin ?illi **hi** ?aklat l-?asad mbaariḥ? who that she ate the-lion yesterday
  - b. miin ?illi *e* ?aklat l-?asad mbaariḥ? who that *e* ate the-lion yesterday 'Who ate the lion yesterday?'

(Shlonsky, 2002, (24))

In order to account for this contrast, Shlonsky; ?'s main proposal is that resumptive pronouns only occur as last resort strategies when Wh-movement is impeded. To motivate the impossibility of Wh-movement in (93), Shlonsky proposes further that the complementizer ?illi is lexically specified in such a way that its Spec position is defined as an A-position, as opposed to an  $\overline{A}$ -position. Movement from the subject position (Spec-TP) to Spec-CP is expected under these assumptions, which is why a last resort resumptive pronoun is not called for in (94). However, movement of the object to the same landing site incurs a minimality violation, hence why a resumptive pronoun is required in (93). Ultimately, Shlonsky proposes that Spec-CP in Palestinian Arabic is an A-position because it is created by  $\varphi$ -features in ?illi.

Going back to Mongolian, because the creation of Spec-CP in variety of hyperraising found in this language (see §4.1) is triggered by  $\phi$ -features, this is defined as an A-position too. If the subject that moves there subsequently hyperraises into the matrix clause, this target position being one that has properties that characterize A-positions, the ban on improper movement is not violated. A sentence like (85b) above can be represented as in (95), where A-movement to the final landing site is preceded by movement to Spec-CP, a type of A-movement itself.

(95) Dorj-iig tüünii eej [
$$_{CP}$$
 margaash  $_{Orj-iig}$  [ $_{TP}$   $_{Dorj}$  ir-ne gej]] khel-sen (compare: (2))

(95) schematizes the main claim I make in this paper, namely, the claim that movement through Spec-CP can feed A-movement without violating the ban on improper movement. Alternatively said, (95) illustrates the proposal that movement through Spec-CP can be an instance of **proper movement**. This conclusion has also been reached by Zyman (2018)'s analysis of hyperraising to object in Janitzio P'urhepecha.

In the next section, I will draw a comparison between hyperraising and covert Wh-movement in Mongolian, in order to highlight that the former is a type of A-movement through Spec-CP, while the latter is a canonical example of  $\overline{A}$ -movement.

 $<sup>^{27}</sup>$ A reviewer reasonably remarks that the complementizer that bears  $\phi$ -features should have diagnosable nominal properties. I however do not have data to verify this prediction.

## 4.3 A vs. $\overline{A}$ : a comparison between hyperraising and Wh-movement

In the preceding section, hyperraising in Mongolian was shown to display several properties that are attributed to canonical instances of A-movement, like the creation of new antecedents for binding and the absence of reconstruction for Condition C. In this section, we examine *Wh*-movement, which displays the opposite behavior. First, though, it is necessary to show that *Wh*-phrases do indeed involve covert movement, this being a *Wh*-in situ language.<sup>28</sup>

#### 4.3.1 Wh-phrases move covertly

A thorough analysis of interrogative clauses in Mongolian is outside of the scope of this paper, so here I will just outline some basic properties that are relevant to the discussion at hand. Constituent questions in Mongolian are formed by obligatorily adding *be* (or its allomorphs) after the verb.

```
(96) Bat yu id-sen *(be)?
Bat what eat-PST *(Q)
'What did Bat eat?'
```

In biclausal sentences where an embedded Wh-phrase takes matrix scope, be must occur in the matrix clause.

```
(97) Navchaa [ Odgerel khen-iig khar-san {*be} gej ] khel-sen {be}?
Navchaa [ Odgerel.NOM who-ACC see-PST {*Q} COMP ] say-PST {Q}
'Who did Navchaa say that Odgerel saw?'
```

In both (96) and (97) the *Wh*-phrases *yu* 'what' and *khen-iig* 'who-ACC' occur in the same position as their non-*Wh* counterparts. In other words, Mongolian is a *Wh*-in situ language. That *Wh*-phrases in Mongolian move covertly despite their surface realization, can be argued on several grounds.

First, *Wh*-phrases in Mongolian obey islandhood. We saw in §3.1 that hyperraising cannot proceed from islands like conditional clauses. *Wh*-phrases cannot appear in these constructions either.

- (98) a. Odgerel üdeshiilich-d ilbechin ur-val, Och bayrla-na.

  Odgerel party-DAT magician invite-COND Och happy-N.PST

  'If Odgerel invites a magician to the party, Och will be happy.'
  - b. \* Odgerel khen-iig ur-val {be}, Och bayrla-na {be}?
     Odgerel who-ACC invite-COND {Q} Och happy-N.PST {Q}
     Lit.: 'Who will, if Odgerel invites ec to the party, Och be happy?'

Another environment where Wh-phrases cannot appear in Mongolian is interrogative clauses.<sup>29</sup>

```
(i) a. Dorj [ Och khen-d ene nom-iig ög-sön gej ] khel-sen be? Dorj [ Och.NOM who-DAT this book-ACC give-PST COMP ] say-PST Q
```

```
(i) Buuts-iig bol bi [ Bat / Bat-iin / *Bat-iig t avčer-ex ]-iig harsen.
dumplings-ACC TOP I [ Bat.NOM / Bat-GEN / *Bat-ACC t bring-INF ]-ACC saw

'As for the dumplings, I saw Bat bringing them.'

(Aravind, 2018, (20))
```

(99b)'s ill-formedness cannot therefore be attributed to an independent ban on movement from nominalized clauses.

Regarding topicalization, a reviewer asks what happens in a sentence with both topicalization and hyperraising departing from the embedded clause. As the reviewer notes, one might expect these movements to interact, since they should both exit the embedded

<sup>&</sup>lt;sup>28</sup>The *Wh*-phrase may nevertheless undergo some movement inside its own clause; see data in Onea & Guntsetseg (2011). Long distance scrambling is however banned, in keeping with the restriction discussed in §3.1.

b. \* Khen-d Dorj [ Och t ene nom-iig ög-sön gej ] khel-sen be? who-DAT Dorj [ Och.NOM t this book-ACC give-PST COMP ] say-PST Q 'To whom did Dorj say that Och gave a book?'

<sup>&</sup>lt;sup>29</sup>One could be concerned that (99b)'s ungrammaticality has to do with the fact that the complement clause is nominalized. Aravind (2018) shows that overt topicalization is licit out of nominalized clauses, as long as the subject does not bear accusative case.

- (99) a. Och(-iig) buuz id-sen eseh-iig Bold assu-san.
  Och(-ACC) buuz eat-PST whether-ACC Bold ask-PST
  'Bold asked whether Och ate buuz.'
  - b. \* Och(-iig) **yu** id-sen eseh-iig Bold assu-san be? Och(-ACC) what eat-PST whether-ACC Bold ask-PST Q Lit.: 'What did Bold ask whether Och ate?'

A further argument in favor of covert movement is furnished by the binding of anaphors contained in the *Wh*-phrase. In (36) above, we saw that an anaphor like *ööriinkhöö* obeys Condition A. In (100a), this anaphor is embedded inside a *Wh*-phrase and it can be bound by the local subject (*Bat*), as expected. In (100b), the plural version of the anaphor is used. The only plural DP is the matrix subject (*Nara Dulmaa khoyor* 'Nara and Dulmaa') and the sentence is grammatical. In view of the locality conditions imposed on the licensing of *öörsdiinkhöö*, the well-formedness of (100b) can be explained if the *Wh*-phrase moves covertly to a position that is adequately close to the matrix subject.

- (100) a. [Bat öör-iin-kh-öö yamar zurg-iig shataa-san gej ] Nara Dulmaa khoyor [Bat self-GEN-EPTH-REFL which picture-ACC burn-PST COMP] Nara Dulmaa two khel-sen be?

  say-PST Q
  - 'Which picture of himself did Nara and Dulmaa say that Bat burned?'
  - b. [ Bat öör-sd-iin-kh-öö yamar zurg-iig shataa-san gej ] Nara Dulmaa khoyor
     [ Bat self-PL-GEN-EPENTH-REFL which picture-ACC burn-PST COMP ] Nara Dulmaa two khel-sen be?
     say-PST Q

'Which picture of themselves did Nara and Dulmaa say that Bat burned?'

These data thus establish that in situ *Wh*-phrases in constituent questions in Mongolian move covertly. As such, we expect it to showcase properties of  $\overline{A}$ -movement and, provided that the analysis put forward here for hyperrasing in Mongolian is correct, we also predict it to have the opposite behavior regarding the properties surveyed in §4.1.

#### 4.3.2 The $\overline{A}$ -properties of covert Wh-movement in Mongolian

Table (101) repeats the A- vs.  $\overline{A}$ -properties considered in §4.1, as well as the hyperraising properties summarized in table (76); added are the corresponding properties of covert *Wh*-movement in Mongolian to be discussed in this section. As we can already see, for the diagnostics available, this type of movement displays the expected behavior of  $\overline{A}$ -movement and contrasts with hyperraising.

(101)

clause via Spec-CP. As a matter of fact, Zyman (2018, p. 113ff) demonstrates that hyperraising in Janitzio P'urhepecha block *Wh*-extraction. We could expect that a similar effect would appear in Mongolian, that is to say, hyperraising of the Mongolian (and Janitzio P'urhepecha) type would fill up Spec-CP, preempting further instances of extraction from the embedded clause.

The fact, however, is that topicalization from the embedded clause and hyperraising can occur in the same sentence in Mongolian:

- (ii) a. Nara [ Dorj(-iig) **buuz-iig** id-sen gej ] khel-sen.
  Nara [ Dorj(-ACC) buuz-ACC eat-PST COMP ] say-PST
  'Nara said that Dorj ate the buuz.'
  - b. Buuz-iig bol Nara [ Dorj(-iig) t id-sen gej ] hel-sen. buuz-ACC TOP Nara.NOM [ Dorj(-ACC) t eat-PST COMP ] say-PST 'The buuz, Nara said that Dorj ate.'

This is not immediately consistent with the Spec-CP-based analysis proposed here, specially in light of Aravind's analysis of nominalized clauses in Mongolian, where accusative case subjects also move to an edge position, thereby blocking topicalization (*cf.* the impossibility of accusative case in (i) above). We could perhaps entertain the possibility that a finite clause has a more articulated left periphery than nominalized clauses, including different positions where a topicalized and a hyperraised phrase could move through. Except for this comment, I do not have anything else to add to the issue, but needless to say I agree with the reviewer that the interaction between hyperraising and (other) edge movements is an important issue to elucidate.

	A-mvt	Ā-mvt	Hyperraising	Covert Wh-mvt
Strict locality	<b>√</b>	*	✓	*
Activity Condition compliance	$\checkmark$	*	(√)	*
WCO effects induced	*	$\checkmark$	*	$\checkmark$
Reconstruction for Condition C	*	$\checkmark$	*	✓
Creation of antecedents for anaphors	<b>√</b>	*	_	_
Parasitic gap licensing	*	$\checkmark$	Ø	Ø

We saw above that only subjects can hyperraise (*cf.* the ill-formedness of (82b), where hyperraising of an object across the subject is attempted). There is no comparable restriction imposed on *Wh*-phrases. (103) contains some examples where the *Wh*-phrase is a lower dative argument. Finally, (104) is a paradigm with an embedded possessive construction where the dative possessor is the *Wh*-phrase (*cf.* the hyperraising example (82)).

- (102) Tüünii $_{i/j}$  eej [ Tuya **khen-iig** $_i$  khar-san gej ] khel-sen be? 3SG.GEN mother [ Tuya.NOM who-ACC see-PST COMP ] say-PST Q 'Who does his mother said Tuya saw?'
- (103) a. Dorj [ Och **khen-d** ene nom-iig ög-sön gej ] khel-sen be?

  Dorj [ Och.NOM who-DAT this book-ACC give-PST COMP ] say-PST Q

  'To whom did Dorj say that Och gave a book?'

  [= (ia), fn. 28]
  - b. Öör-sd-iin-kh n' $_i$  eej [Odgerel(-iig) **khen-d** $_{^*i/j}$  ene nom-iig ög-sön gej ] self-PL-GEN-EPTH POSS.3 mother [Odgerel(-ACC) who-DAT this book-ACC give-PST COMP] khel-sen? say-PST

'Who their his mother say that Odgerel gave a book to?'

The same data can also be used to argue that covert *Wh*-movement in Mongolian does not obey the Activity Condition, since the *Wh*-phrases in these sentences are clearly case-marked. (*cf.* the indirect argument based on the hyperraising data in (82)). Along with (102) and (103), we can add example (104), where the *Wh*-phrase is a dative possessor. This example is to be contrasted with (82), which, to recall, showed that dative possessors are not candidates for hyperraising.

(104) Nara [ **khen-d** shine baishin baigaa gej ] khel-sen be? Nara [ who-DAT new house COP.PRES COMP ] say-PST Q 'Who did Nara say has a new house?'

Because Wh-movement is a type of  $\overline{A}$ -movement, we expect it to induce a WCO violation. This expectation is borne out by facts. (Compare the hyperraising examples (83)–(86)). In (105a)–(105d), a pronoun of different types in embedded in the matrix subject and a Wh-phrase in the embedded clause cannot be coindexed with it. The latter also occupies different syntactic positions and, correspondingly, is marked with different cases.

- (105) a. Tüünii\*<sub>i/j</sub> eej **khen(-iig)**<sub>i</sub> geriin daalgavar-aa khii-sen gej khel-sen be? 3SG.GEN mother who(-ACC) homework-REFL.POSS do-PST COMP say-PST Q 'Who did her/his mother say did her/his homework?'
  - b. Eej n'<sub>i</sub> [ margaash **khen-iig**\*<sub>i/j</sub> ir-ne gej ] khel-sen be? mother POSS.3 [ tomorrow who-ACC come-N.PST COMP ] say-PST Q 'Who did her/his mother say is coming tomorrow?'<sup>30</sup>

 $<sup>^{30}</sup>$ At least one speaker found the nominative counterpart of this sentence grammatical, but I regrettably did not take note of the coindexation possibilities.

<sup>(</sup>i) % Eej n' [ margaash khen ir-ne gej ] khel-sen be? mother POSS.3 [ tomorrow who.NOM come-N.PST COMP ] say-PST Q 'Who did his mother say is coming tomorrow?'

```
c. T\ddot{u}\ddot{u}nii_{i/j} eej [ Tuya khen-iig<sub>i</sub> khar-san gej ] khel-sen be? 3SG.GEN mother [ Tuya.NOM who-ACC see-PST COMP ] say-PST Q 'Who did his mother say Tuya saw?' [= (102)]
```

d. Öör-sd-iin-kh n' $_i$  eej [Odgerel(-iig) **khen-d** $_{^*i/j}$  ene nom-iig ög-sön gej ] self-PL-GEN-EPTH POSS.3 mother [Odgerel(-ACC) who-DAT this book-ACC give-PST COMP] khel-sen? say-PST

'Who did their mother say that Odgerel gave this book to?' [= (103b)]

Finally, (106) shows that covert *Wh*-movement obligatorily reconstructs for Condition C, unlike what we saw for hyperraising in (89).

```
(106) Ter_{i/j} [ Bold khen-iin_i zurg-iig shataa-san gej ] khel-sen be? 3SG.NOM [ Bold.NOM who-GEN picture-ACC burn-PST COMP ] say-PST Q 'Whose picture did (s)he say that Bold burned?'
```

The  $\overline{A}$ -properties of the *Wh*-movement data discussed in this section provide a counterpart to the hyperraising data in §4.1. *Wh*-movement is usually taken to target Spec-CP, the same type of position proposed here to be involved in the derivation of hyperraising in Mongolian. The former displays several of the characteristic properties of  $\overline{A}$ -mmovement, while the latter showcases the behavior of A-movement. To reiterate, if the edge analysis put forth here is correct, the implication is that Spec-CP can be an A-position too, instead of being an  $\overline{A}$ -position intrinsically.

## 5 Concluding remarks

This paper provided an analysis of accusative subjects in Mongolian that is based on the movement of that DP to the Spec-CP of the embedded clause. This proposal was an attempt to account for how the matrix  $\nu$  can assign accusative case to the embedded subject and why accusative subjects can be hyperraised without violating the PIC. I then tried to show that hyperraising in Mongolian is a type of A-movement. If hyperraising in Mongolian does require an intermediate step of movement through Spec-CP, the conclusion is that this position can be an A-position too, hence why it can feed phenomena of the A-type. This conclusion was reinforced by the contrast with covert *Wh*-movement, which exhibits expected properties of  $\overline{A}$ -movement.

If correct, the possibility of Spec-CP being an A-position rounds out the typology of syntactic positions that is latent in Van Urk (2015). Van Urk demonstrates convincingly that Spec-CP can be a composite  $A/\overline{A}$  position in Dinka. One of the arguments offered is based on the fact that the phrase that occupies the first position triggers  $\phi$ -agreement in the verb in V2 position. The phrase moved to Spec-CP can be an object that moves across the higher subject.

```
(107) a. Y<u>î</u>in Ø-c<u>í</u> môc t<u>î</u>iŋ. you 2-PRF.OV man.GEN see.NF 'You, the man has seen.'
```

- b. Mìir à-càa tịiŋ.
   giraffe 3SG-PRF.1SG see.NF
   'A giraffe, I have seen.'
- c. Mièer áa-càa ké tậiŋ. giraffes 3PL-PRF.1SG 3PL see.NF 'Giraffes, I have seen.'

(Van Urk, 2015, p. 103)

While the triggering of agreement is a property characteristic of A-movement, the skipping over of higher potential goals ia property of Ā-movement.

Likewise, in (108), *mòc ébén* 'every man' moves from the embedded clause into the left periphery of the matrix clause.

(108) Mòc ébén<sub>i</sub> à-yíi tiéeŋ-dè<sub>i</sub> luêeel [ $_{CP}$  è \_thɛt ]. man every 3S-HAB.OV woman-SG.3SG say.NF [ C \_cook.SV ] 

'Every man, his wife says is cooking.' 
(Van Urk, 2015, p. 110)

Cross clausal movement is usually taken to be a property of  $\overline{A}$ -movement. However, the moved quantifier phrase can bind a pronoun that it moves across. This an obviation of a weak crossover effect, a signature property of A-movement.

This mixed behavior can be accounted for in a unified way by the proposal that the movement of  $m \delta c$   $\acute{e} b \acute{e} n$  is triggered by a composite  $A/\overline{A}$ -probe. The consequence is that Spec-CP in a language like Dinka is a position that displays hybrid  $A/\overline{A}$  behavior.

The Mongolian data examined here suggest that Spec-CP can also be a position that displays A-properties. The typology of possibilities for Spec-CP can then be summarized as follows:

- (109) a. Spec-CP as an  $\overline{A}$ -position: canonical instances of  $\overline{A}$ -movement, like Wh-movement.
  - b. Spec-CP as a hybrid,  $A/\overline{A}$ -position: first position in Dinka, a V2 language.
  - c. Spec-CP as an A-position: hyperraising in Mongolian.

This paper supplied further empirical arguments against the assumption that syntactic positions should be defined as being inherently A or  $\overline{A}$ . Featural definitions as proposed in Chomsky (2007); Obata & Epstein (2011); Van Urk (2015) present themselves as apt alternatives.

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