SCRAMBLING FOR CASE: ACCUSATIVE IN MONGOLIAN*

Andrew Peters
University of Toronto

1. Introduction

In Modern Mongolian the accusative case has an exceptionally wide distribution, alternating with the unmarked nominative almost wherever it appears. Accusative marking is found on objects, and additionally on a variety of embedded subjects (Binnick 1979; Chinggeltei 1981; von Heusinger et al. 2011; Guntsetseg 2016; Bao et al. 2015; Fong 2019). The environments where accusative subjects appear include: the subjects of clausal complements (both finite and non-finite), the subjects of converbial clauses, and the subjects of clauses embedded under temporal subordinating postpositions like 'after'. In some respects the appearance of the accusative case can be described as differential case marking (Guntsetseg 2016), but in terms of subjects, Mongolian differs crucially from other differential-subject-marking languages by only permitting accusative case marking on embedded subjects.

Mongolian is generally considered to be a NOM-ACC-aligned language, although object marking in Mongolian alternates between overt accusative morphology, and null (usually called nominative) morphology. In this sense, Mongolian objects exhibit Differential Case Marking (DCM) – where case appears contingent on factors like referentiality / specificity, rather than structural / argument status (Comrie (1979, 1989); Aissen (2003); de Hoop and Malchukov (2008); Kornfilt (2008) among many others). A simple example of this alternation can be seen in example (1) below:

(1) Bayator $\operatorname{cai}\left\{ \begin{array}{l} -\varnothing \\ -\mathbf{y}\mathbf{g} \end{array} \right\}$ türgen uyu-ju bai-na Baatar $\operatorname{tea}\left\{ \begin{array}{l} -\mathbf{nom} \\ -\mathbf{acc} \end{array} \right\}$ quickly drink-CVB be-NPST 'Baatar is drinking (some / a specific) tea quickly.'

^{*}I owe a debt of gratitude to professors Tümenjirγal and Tuyaγa at the University of Inner Mongolia for their linguistic expertise and support in my study of Southern Mongolian. Many thanks as well to Rulema for linguistic consultations, judgements, and support. Thank you as well to Prof. Susana Bejar for supervising this graduate work. All mistakes, errors, and oversights are my own.

¹Unless otherwise indicated, all data is from my fieldwork with speakers of standard Southern Mongolian, spoken in the Inner Mongolia Autonomous Region of Northern China. Transcriptions of data from my fieldwork are based on the language as written in the traditional Mongolian script, while material from other papers often transliterate Cyrillic Khalkha Mongolian. These differences are superficial; glossing will remain consistent.

Additionally, accusative case appears frequently on a variety of embedded subjects. In one sense, this is similar to Exceptional Case Marking patterns as found in a variety of other languages, where the subjects of verbal complements may be marked by the objective case in the language. Examples of complement clauses with accusative subjects can be seen in (2)-(3) below:

- (2) Bolod [Has-i ebedcidei bayi-na gejü] barqira-na Bolod [Has-ACC sick be-NPST COMP] shout-NPST 'Bolod is shouting that Hasa is sick.'
- (3) Bolod [Has-i soγduγu bayi-qu]-i marda-γsan Bolod [Has-ACC drunk be-VRN.NPST]-ACC forget-VRN.PST 'Bolod forgot that Hasa was drunk'

Exceptional Case Marking similar to patterns observed in (2)-(3) above is usually explained either through "raising to object" analyses (Rosenbaum (1967) *i.a.*) or through analyses that argue that case is assigned across a clausal boundary (Chomsky (1973) *i.a.*). As far as Mongolian goes, Fong (2019) for one, has proposed that in clausal complements with overt complementisers (as in (2) above), accusative case may be assigned by the matrix verb across the clausal boundary, so long as the embedded subject has moved to a position that is sufficiently local to the matrix verb (i.e. Spec,CP). This sort of ECM analysis, however, might fail to account for the full distribution of embedded accusative subjects in Mongolian. In addition to appearing in clausal complements, accusative subjects appear as well in adjoined subordinate clauses, such as under converbs or adpositions. Examples of these environments can be seen in (4)-(5) below:

- (4) Tuyaγa [namayi oro-maγca] ene-ni congxo-yi negege-gsen Tuyaa [1sg.acc enter-CVB] this-FOC window-ACC open-VRN.PST 'As soon as I entered, Tuyaa opened this window.'
- (5) Bi **minü egci-i** yabu-γsan-aca höisi Höhhota-du amdura-ju bayi-γsan I my sister-ACC leave-VRN.PST-ABL since Hohhot-DAT live-CVB be-VRN.PST 'I've been living in Hohhot since my sister left.'

In (4), an accusative subject appears in a clause subordinated by a converbial mayca, while in (5), an accusative subject appears under the postposition $h\ddot{o}isi$ 'since'. A standard raising-to-object analysis would have difficulty explaining how these embedded subjects might raise out of a clause adjoined to the matrix VP and into the object position of said VP. Alternatively, an analysis that argues for case marking across a clausal boundary might have some success so long as these subordinated clauses can be shown to be properly 'transparent' to case marking, and so long as they are sufficiently local to the matrix verb. This latter analysis, however, faces a second difficulty: accusative case is available on embedded subjects even when the matrix verb is unable to assign accusative case. This can be seen for a passive matrix verb in example (6),

or when there are no transitive or unaccusative verbs, as in (7), where the matrix verb (and the embedded verb) is an unergative.

- (6) Surγaγuli-iin jahirul-du [**Tuyaγa-i** ire-gsen]-i mede-gd-egsen School-GEN director-DAT [Tuya-ACC come-VRN.PST]-ACC know-PASS-VRN.PST 'That Tuya had come was known by the chancellor.'
- (7) Tujaa [**Dorž-ijg** ir-megc] jav-san Tujaa Dorž-ACC come-CVB go-PST 'Tujaa went as soon as Dorž came.' (Guntsetseg 2016, 140)

Not only then is there little structurally in common between the arguments which receive accusative case in Mongolian, it seems to be independent of the classic structural accusative case assigner, v. This makes any variation of standard ECM analyses discussed above difficult to maintain for Mongolian.

In fact, ACC is only banned in three places: matrix subjects ((8a)), subjects of embedded clausal subjects ((8b)), and subjects of object-gap relative clauses ((8c)).

- (8) a. Hasa-(*yi) tosiyal-i ungsi-γsan. Hasa-(*ACC) edict-ACC read-VRN.PST. 'Hasa read an edict.'
 - b. Ayaγa-(*yi) haγara-γsan γayiγaltai bayi-γsan.
 Bowl-(*ACC) break-VRN.PST surprising be-VRN.PST.
 'The bowl breaking was surprising.'
 - c. Bolod Hasa-(*yi) garaya-ysan tosiyal-i ungsi-ysan. Bolod Hasa-(*ACC) release-VRN.PST edict-ACC read-VRN.PST. 'Bolod read the edict Hasa released.'

In this investigation I propose that both objects and embedded subjects may move to a position *outside* of the matrix VP, where they obligatorily receive accusative case. Accusative objects may scramble to this position either overtly or covertly, and the height of this movement may be diagnosed with adverbial tests. Accusative subjects on the other hand must scramble out of their embedded clauses into the same position. This movement is A-bar scrambling. Crucially, ACC-marking in Mongolian is independent from the matrix verb's ability to assign structural ACC, and rather requires movement into this functional projection above the edge of VP. I hypothesise that the mechanism for case assignment in this position is through a Baker (2015)-style Dependant-Case calculation, although the specifics of this are left unexplored in the present investigation. Instead, I focus on diagnosing the aforementioned movement, and covering the empirical syntactic facts of various embedded clause types.

This paper is structured as follows. Section (2) follows presently, and discusses the accusative case on objects in Mongolian. This section demonstrates that accusative-marked objects are structurally higher than their unmarked counterparts, and shows that this is the result of movement. Section (3) describes the distribution of accusative subjects in Mongolian, then demonstrates that this case marking does not result from

either raising-to-object, nor from the matrix verb at all. Nevertheless, embedded accusative subjects can be shown to behave as though they are in the matrix clause. Section (4) posits that this is due to movement, and specifically A-bar movement. Section (5) concludes.

2. Accusative objects and a functional projection

As demonstrated above, direct objects in Mongolian may either appear with the accusative case, or be left unmarked. Consider examples from Guntsetseg (2016, 78):

- $(9) \quad (From (Guntsetseg 2016, 78))$
 - a. Bi neg $\operatorname{oxin} \left\{ \begin{array}{l} -\varnothing \\ -\mathbf{y} \mathbf{g} \end{array} \right\}$ xar-san I one/a $\operatorname{girl} \left\{ \begin{array}{l} -\mathbf{nom} \\ -\mathbf{acc} \end{array} \right\}$ see-PST 'I saw a girl .'
 - b. Bi ene $\operatorname{oxin} \begin{Bmatrix} *-\varnothing \\ -\mathbf{yg} \end{Bmatrix}$ xar-san

 I this $\operatorname{girl} \begin{Bmatrix} *-\mathbf{nom} \\ -\mathbf{acc} \end{Bmatrix}$ see-PST

 'I saw this girl .'
 - c. Bi $\operatorname{oxin} \begin{Bmatrix} -\varnothing \\ *-\mathbf{yg} \end{Bmatrix}$ xar-san I $\operatorname{girl} \begin{Bmatrix} -\mathbf{nom} \\ *-\mathbf{acc} \end{Bmatrix}$ see-PST 'I saw [a] girl .'

The examples in (9) above superficially seem to differ on the definiteness properties of the direct object in question, with a definite object obligatorily receiving ACC-marking (9b), a bare indefinite refusing ACC (9c), and a simple indefinite variably taking ACC-marking. Guntsetseg (2016) however points out that other factors such as DP-type, incorporation, modification, and specificity all impact the possibility of object marking. These factors are involved in the relative 'referentiality' of the objects in question.

Cross linguistically, it is a common feature of DOM that the marking is more common in highly-referential nouns (Aissen 2003). Some analyses of DOM argue that the referentiality scale is truly a scale of specificity, with more specific nominals more likely to receive object marking (von Heusinger and Kornfilt 2005; von Heusinger 2011). Since Diesing and Jelinek (1995), specific (indefinite) objects are seen to move to a higher position than the one in which they are base-merged. This movement is to escape the domain of Existential closure. It is also well known that the movement of objects, either through object shift or through scrambling (López 2012), is associated with differential marking (Karimi and Smith 2019; Baker and Vinokurova 2010). Given this theoretical background, the question at hand is: can Mongolian accusative objects be shown to have scrambled out of the vP?

2.1 Accusative objects are higher

I will presently demonstrate that the answer to the question of whether Mongolian ACC-marked objects have moved is affirmative. Evidence will come from ditransitives, causatives, and the relative scope of direct objects.

Mongolian ditransitive sentences may either be S>IO>DO>V or S>DO>IO>V. The former is the default order, the latter is marked ((Guntsetseg 2016, 24); Svantesson (2003)). Consider the example in (10) where the direct object of the ditransitive verb 'introduce' may appear either immediately pre-verbally, or otherwise linearly to the left of the indirect object.

(10) (From (Guntsetseg 2016, 24))
Tujaa (Sarnaj-g) Dorži-d (Sarnaj-g) tanilcuul-san
Tujaa Sarnaj-ACC Dorž-DAT Sarnaj-ACC introduce-PST
'Tujaa introduced Sarnaj to Dorž'

However, in the S>DO>IO>V order, the DO must be Accusative, and must interpreted as specific:

(11) Baγsi nom-*(i) suruγci-du öggö-gsen Teacher book-acc student-DAT give-VRN.PST 'The teacher gave a [specific] book to the student.'

This suggests that accusative case is directly correlated with structural height in one sense, as well as with specificity.

Next we consider causative sentences. Causatives may be formed with a voice suffix -yulu (among others). Causees receive instrumental case, and direct objects are marked in the usual way.

(12) Hasa hümün-iyer nige jiruγ-(i) jiru-γulu-γsan Hasa person-INST one painting-ACC paint-CAUS-VRN.PST 'Hasa made someone paint a picture.'

The DO of transitive causatives may scramble above the causee. Accusative marking is then obligatory even for indefinites:

- (13) a. Hasa **Bolod-*(i)** ene nohi-bar haja-γulu-γsan Hasa **Bolod-(acc)** this dog-INST bite-CAUS-VRN.PST 'Hasa made this dog bite Bolod.'
 - Hasa nige jiruγ-*(i) hümün-iyer jiru-γulu-γsan
 Hasa one painting-acc person-INST paint-CAUS-VRN.PST
 'Hasa made someone paint a picture.'

Again, this shows that there is a structurally higher position into which direct objects may scramble, in which accusative case is obligatory.

The third piece of evidence that accusative-marked objects are structurally higher than their unmarked counterparts comes from the relative scope. Mongolian is generally a rigid surface-scope language, however, accusative-marked objects are interpreted higher than their linear position.

- (14) (Adapted from (Guntsetseg 2016, 96))
 - a. Ojuutan bür gurvan udaa neg professor šüümžle-ne Student each three time a professor criticize-NPST 'Each student will criticize a professor three times.'
 - b. Ojuutan bür gurvan udaa neg professor-yg šüümžle-ne Student each three time a professor-acc criticize-NPST 'Each student will criticize one professor three times.'

In (14a): 'a professor' only has narrow scope relative to both the subject quantifier and the adverbial 'three times': the only available reading is "there are three professors and each student criticises them one-by-one" (i.e. surface scope only). In (14b) however, the object is interpreted *above* the adverbial 'three times', and the only available reading is: "for each student, there is one professor who is criticised thrice."

This example also makes clear that the movement I propose need not be overt to result in both ACC-marking: ACC-marked objects are always interpreted above adverbials as in (14b), even if they appear on the surface below this position. Thus far we have seen that ACC-marked objects are interpreted higher, regardless of their surface position and that scrambled objects *must* be ACC-marked.

2.2 How high are they?

Adverbs of different semantic types occupy different heights in the syntax (Potstdam (1999); Cinque (1999)). We can use this to diagnose the height of the proposed movement.

The default location of bare object nominals in a sentence with adverbials can be found in those sentences where the entire vP is in focus. In (15) we see that these direct objects appear immediately pre-verbally.

- (15) a. Situation: Baatar is drinking tea quickly.

 Someone asks you: "What is he doing?"

 You respond:
 - Tere türgen cai uγu-ju bai-na
 3sG quickly tea drink-CVB be-NPST
 'He's drinking tea quickly.'

In (16) we see that ACC-marked objects that appear below manner adverbials are only available with strong focus readings:

(16) Baγator türgen cai-#(yi) uγu-ju bai-na
Baatar quickly tea-ACC drink-CVB be-NPST

'Baatar is drinking tea quickly (and not e.g. milk).' (ACC w/ contrastive focus only)

However, moving these objects above manner adverbials still allows "optionality" in ACC marking that we have seen in other environments:

(17) Baγator cai-(yi) türgen uγu-ju bai-na Baatar tea-(ACC) quickly drink-CVB be-NPST 'Baatar is drinking tea quickly.'

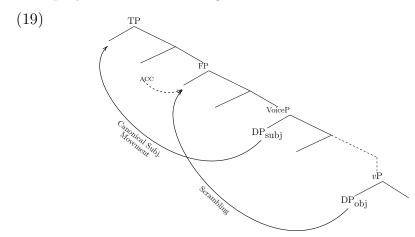
This shows that object nominals in their 'low' or base position must be unmarked unless they are exceptionally in a focus position. However, the 'optional' accusative marking in sentences like (17) suggest that there are two different structural positions the direct object may appear in above a manner adverbial resulting in the same linear order. To determine the height of the position in which direct objects become marked, we must try a higher adverbial. Consider (18), with an agent-oriented adverbial:

(18) Baγator miha-*(yi) hinamaγai cabci-ju bai-na Baatar meat-ACC diligently chop-CVB be-NPST 'Baatar is diligently chopping meat

In (18), ACC-marking is obligatory when the object scrambles above agent oriented adverbs, which should be as high as VoiceP. The position where objects are marked must be at least as high as the upper edge of the vP/VoiceP.

2.3 The proposal so far

The figure in (19) details the proposal so far, where direct objects must move into a functional projection above the edge of the vP in order to be accusative-marked.



3. Accusative subjects

Recall that ACC subjects appear in four embedded environments:

- Subjects of participial complement clauses
- Subjects of embedded clauses with overt complementisers
- Subjects of converbial clauses
- Subjects of PP-subordinated adverbial clauses

We can divide the four embedded environments into two main types of structure: complement and adjoined clauses. Temporal adverbial subordinators are unambiguously adjoined, and converbs are also argued to adjoin at different heights in VP (Haspelmath 1995).

(20) Bi minü egci-i yabu-γsan-aca höisi Höhhota-du amdura-ju bayi-γsan I my sister-ACC leave-VRN.PST-ABL hence Hohhot-DAT live-CVB be-VRN.PST 'I've been living in Hohhot since my sister left.'

The clausal complements of temporal subordinators are nominalised and receive case (ABL in (20)). Converbs however take bare verb roots and arguably combine with VP's (Bary and Haug 2011). Nevertheless, they both adjoin to the matrix VP.

(21) Tuyaγa [namayi oro-maγca] ene-ni congxo-yi negege-gsen Tuyaa [1sg.acc enter-CVB] this-FOC window-ACC open-VRN.PST 'As soon as I entered, Tuyaa opened this window.'

Participial complements must be verbal complements, and are nominalised – they appear with non-finite verbal noun suffixes and takes case on the entire clause:

(22) Bolod [Has-i soγduγu bayi-qu]-i marda-γsan Bolod [Has-ACC drunk be-VRN.NPST]-ACC forget-VRN.PST 'Bolod forgot that Hasa was drunk'

Verbal complements with $gej\ddot{u}$ are often described as being CP's (Guntsetseg 2016), although the "complementiser" $gej\ddot{u}$ is formed from a verb of saying and the imperfective converb suffix. For now we'll stick with tradition and call this a CP complement. Therefore, both are considered verbal complements.

(23) Bolod [Has-i ebedcidei bayi-na gejü] barqira-na Bolod [Has-ACC sick be-NPST COMP] shout-NPST 'Bolod is shouting that Hasa is sick.'

3.1 Accusative subjects do not raise to object

We must reject a Raising to Object analysis. Firstly, this would fail to explain ACC on the subjects of adjoined clauses, as it is implausable that the subject of these clauses could move into the object position of the vP they are adjoined too. Secondly, it is possible to have ACC subjects even when the matrix vP already contains an accusative object:

(24) Baγator **Sudu-yi** saγu-maγca tegü-dü **xoyer lii-yi** öggö-gsen Baator Sudu-ACC sit-CVB 3SG-DAT two pear-ACC give-VRN.PST 'As soon as Sudu sat down, Baator gave them two pears.'

Next, whereas subjects which have moved to the matrix object position can become derived subjects of passives, as in the English examples:

- (25) a. I believe Rostropovich to be one of the greatest cellists of all time.
 - b. Rostropovich is believed to be one of the greatest cellists of all time.

This is not possible with Mongolian ACC subjects:

- (26) a. Surγaγuli-iin jahirul Tuyaγa-i ire-gsen-i mede-gd-egsen School-GEN director-DAT Tuya-ACC come-VRN.PST-ACC know-PASS-VRN.PST 'The chancellor knew that Tuya came.'
 - b. *Tuyaγa-yi ire-gsen mede-gd-egsen
 Tuya-ACC come-VRN.PST know-PASS-VRN.PST
 (Intended: 'Tuya was known to have come.')

Having shown that embedded accusative subjects cannot have moved to the object position of the matrix verb, we must determine whether it is possible that the matrix verb could assign accusative to them through another mechanism.

3.2 Accusative subjects do not get their Case from matrix V

Fong (2019) for one posits that all embedded accusative subjects do in fact receive case from the matrix verb. However, she specifically analyses clauses headed by the complementiser $gej\ddot{u}$. She posits that the C head in Mongolian may bear ϕ -features attracting the embedded subject to Spec,CP, where the matrix V may assign ACC across the clause boundary.

However, this only handles 1/4th of the embedded environments where ACC subjects appear. This also would require the subjects to be in a local (enough) location to matrix V, ruling out ACC subjects in adjuncts, and crucially, this would require that the matrix V be able to assign ACC in all instances where we observed marked embedded subjects.

I argue, contra Fong (2019), that ACC assignment must be independent from matrix V. First, ACC is still available when the matrix verb is a passive:

(27) Surγaγuli-iin jahirul-du [Tuyaγa-i ire-gsen]-i mede-gd-egsen School-GEN director-DAT [Tuya-acc come-vrn.pst]-*(acc) know-PASS-VRN.PST 'That Tuya had come was known by the chancellor.'

It is also still available when there are no transitive or unaccusative verbs present:

- (28) Tujaa [**Dorž-ijg** ir-megc] jav-san Tujaa Dorž-ACC come-CVB go-PST 'Tujaa went as soon as Dorž came.' (Guntsetseg 2016, 140)
- (29) Bi [minü egci**-yi** yabu-γsan-aca höisi] Höhhota-du amdura-ju bayi-γsan I [my sister-acc leave-VRN.PST-ABL since] Hohhot-DAT live-CVB be-VRN.PST 'I've been living in Hohhot since my sister left.'

If the matrix verb cannot assign accusative to the embedded subjects, then there must be some other mechanism involved. I propose that these embedded subjects in fact move into the same position proposed for accusative-marked objects.

3.3 Accusative subjects still scramble into the matrix clause

In Mongolian, the subjects of embedded clauses may be shown to scramble outside of their containing clause, and into the matrix clause. This can be observed in (30) below:

- (30) (From (Fong 2019, 17))
 - 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.'

Like the scrambled accusative objects discussed above, these scrambled subjects are obligatorily ACC-marked. I argue that all embedded ACC subjects scramble into the matrix clause, into the FP proposed above (either overtly or covertly).

3.4 Accusative subjects behave for binding purposes as though they are in the matrix

Mongolian has an anaphoric suffix called the reflexive-possessive marker. This anaphoric marker is strictly subject-oriented: when suffixed to a noun, this noun must be possessed by a subject in its local domain:

(31) a. Sudu nadadu nom-iyan öggö-gsen Sudu 1sg.dat book-reflposs give-vrn.pst 'Sudu gave me her own book.' b. Tuya γa_i [Sudu $_j$ nadadu nom-iya $n_{*i/j}$ öggö-gsen gejü] marda- γ san Tuya a_i [Sudu $_j$ 1sg.dat book-reflposs $_{*i/j}$ give-VRN.PST COMP] forget-VRN.PST 'Tuyaa forgot that Sudu gave me her own book.'

In (31a), thereflexive-possessive marker must be bound by the subject of the clause, Sudu, and not for example the indirect object. Example (31b) further shows that it is the *local* subject which must bind the possessive marker. Consider then the examples in (32) from Fong (2019, 11):

(32) (From (Fong 2019, 11))

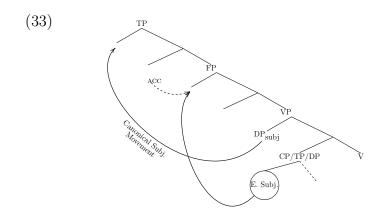
- a. *Bat [margaash egch-ee ir-ne gej] khel-sen
 Bat [tomorrow sister.nom-refl.poss come-NPST COMP] say-VRN.PST

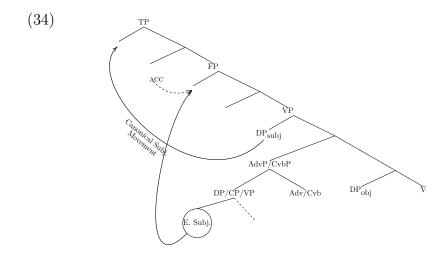
 (Int.: 'Bat said that his (own) sister is coming tomorrow.')
- b. Bat_i [margaash **egch-iig-ee**_{i/*j} ir-ne gej] khel-sen Bat [tomorrow **sister-acc-refl.poss** come-NPST COMP] say-VRN.PST 'Bat said that his (own) sister is coming tomorrow.'

Example (32a) demonstrates that, the anaphoric suffix must be bound by a subject in its local domain, and the matrix subject may not bind an anaphor within the embedded clause. In (32b) however, we see that the addition of the accusative case to the embedded subject allows the embedded subject to be bound as though it is within the matrix clause itself.

3.5 The proposal for subjects

The figure in (33) shows the current proposal for ACC-marking on the subjects of complement clauses, while (34) shows the same for adjoined clauses. In both instances, the embedded subject must scramble into the matrix clause, into the functional projection proposed in section (2) concerning marked objects.





4. A-bar Scrambling for Case

I propose that the movement discussed in the previous sections is A-bar scrambling. As such, it should have certain features in common with other types of A-bar movement, such as being banned in places where other A-bar movement is illicit, as well as failing to create new binding possibilities (as A-movement may), and to exhibit reconstruction for binding purposes. We see in fact that there is symmetry between those constructions which are islands to other A-bar movement (e.g. WH-movement) and those constructions which ban ACC subjects.

4.1 Comparison with WH-islands

Firstly, complement clauses are not expected to be islands to A-bar movement. Indeed, they are not:

(35) Ci xen-i ire-gsen gejü xele-gsen bui? 2SG.NOM who-ACC come-VRN.PST COMP say-VRN.PST QP.WH 'Who did you say came?'

Importantly, neither are adjuncts in Mongolian:

- (36) a. Xen ire-gsen-ni daraγa ci yabu-γsan bui?
 Who come-VRN.PST-3SG.REFPOSS after you go-VRN.PST QP.WH
 'You left after who came?'
 - b. Xen yabu-γsan-ni höisi ci Höhhota-du amdura-ju bayi-γsan Who go-VRN.PST-3SG.REFPOSS hence you Hohhot-DAT live-CVB be-VRN.PST bui?

 QP.WH

'Since who left have you lived in Hohhot?'

Now we return to the two embedded environments where ACC subjects are banned: the subjects of embedded clausal subjects, and the subjects of object-gap relative clauses. Unsurprisingly, clausal subjects are islands to movement:

(37) *Xen ire-gsen-ügei asaγudal bayi-na bui?
Who come-VRN.PST-NEG problem be-NPST QP.WH
(Intended: 'Who not coming is a problem?')

Now, consider three different types of object-gap relative clauses – all islands to WH-movement:

- (38) a. *Bolod xen garaγa-γsan tosiyal-i ungsi-γsan bui?
 Bolod who release-VRN.PST edict-ACC read-VRN.PST QP.WH

 (Intended: 'Bolod read the edict who released?')
 - b. *Xen abu-γsan mori saiina tabxi-daγ bui?
 Who buy-VRN.PST horse well gallop-HABIT QP.WH
 (Intended: 'The horse who bought runs fast?')
 - c. *Ci xen abu-ysan ger-tu Has-tai ayulja-ysan bui?
 You who buy-VRN.PST house-DAT Hasa-COM meet-VRN.PST QP.WH
 (Intended: 'In the house that who bought did you see Hasa?')

There is a direct symmetry between clauses which permit WH (A-bar) movement, and which permit ACC subjects vs. those which don't and are also islands.

4.2 No New Antecedents

A-bar movement (as opposed to A-movement) does not create new binding possibilities. Consider the contrast in (39):

- (39) a. Baγator öber-ün eci-dü [oxin büri uxaγan-tai gejü] xele-gsen Baator self-GEN mother-DAT [girl every intelligence-COM COMP] say-VRN.PST 'Baator said to his own mother that every girl was intelligent.'
 - b. Bayator $_i$ oxin büri-yi $_j$ öber-ün $_{i/*j}$ eci-dü [t $_j$ uxayan-tai gejü] Baator girl every-ACC self-GEN mother-DAT [t intelligence-COM COMP] xele-gsen say-VRN.PST

'Baator said to his own mother that every girl was intelligent.'

In example (39b) the reflexive pronoun *öber* must be obligatorily bound by 'Baator', and crucially *not* the scrambled embedded subject 'every girl'. Thus, we see that scrambled ACC-subjects do not create new binding possibilities.

4.3 Reconstruction

Wurmbrand (2010) notes that an important distinction between A- and A-bar-scrambling is that only A-bar, and not A- (short / VP) scrambling may reconstruct for anaphor binding purposes. Consider then the example in (40):

In example (40) above, the scrambled subject may still bind the reflexive possessive marker that appears on *geriin daalgavar* 'homework' in the embedded clause. We have already seen that these REFL.POSS must be bound within their local clause, so the only way such a binding situation may arise is if the scrambled accusative-marked subject 'Dorj' reconstructs into the embedded clause to bind the reflexive-possessive marker 'aa' there. These facts taken together suggest that scrambling for ACC is in fact A-bar movement.

5. Conclusions

I have proposed that ACC objects and subjects in Mongolian both move to an FP above the matrix vP. ACC-objects scramble to this position (overtly or covertly) and I have diagnosed its height above VoiceP. Scrambled objects are obligatorily ACC-marked, and they scope above adverbs of frequency, regardless of surface position. ACC-subjects scramble out of their embedded clauses into the same position, as evidenced by their binding behaviour. What's more, this ACC-marking is independent from the matrix verb's ability to assign structural ACC. I also argue that this movement is A-bar scrambling: where ACC subjects are banned, these structures are also islands to other A-bar movement; scrambled ACC subjects do not provide new binding possibilities; ACC-subjects reconstruct to bind anaphors in the embedded clause. Although not discussed in this study, I hypothesise that the mechanism for case assignment in the proposed functional projection is through a Baker (2015)-style Dependant-Case calculation. The exact details of this mechanism are an open question for further investigation.

References

Aissen, Judith. 2003. Differential object marking: Iconicity vs. economy. Natural Language & Linguistic Theory 21(3): 435–483.

Baker, Mark. 2015. Case: Its Principles and its Parameters. Cambridge University Press.

Baker, Mark and Nadya Vinokurova. 2010. Two modalities of case assignment: case in Sakha. *Natural Language and Linguistic Theory* 28: 593–642.

Bao, Lina, Megumi Hasebe, Wurigumula Bao, and Hideki Maki. 2015. Accusative subject licensing

in modern inner mongolian. In Essays on mongolian syntax, ed. Hideki Maki, Lina Bao, and Megumi Hasebe. Kaitakusha, 143–162.

Bary, Corien and Dag Haug. 2011. Temporal anaphora across and inside sentences: The function of participles 4: 1–56. URL http://dx.doi.org/10.3765/sp.4.

Binnick, Robert. 1979. Modern Mongolian: A transformational syntax. University of Toronto Press.

Chinggeltei. 1981. *Odo üye-yin mong ol kelen-ü jüi [modern mongolian grammar]*. Kökeqota: Mong olun arad-un keblel-ün qoriya.

Chomsky, Noam. 1973. Conditions on transformations. In *A festschrift for Morris Halle*, ed. S. Anderson and P. Kiparsky. Holt, Rinehart and Winston, New York, 232–286.

Cinque, Guglielmo. 1999. Adverbs and functional heads: A cross-linguistic perspective. Oxford University Press.

Comrie, Bernard. 1979. Definite and animate direct objects: A natural class 3: 13–21.

Comrie, Bernard. 1989. Language universals and linguistic typology. Oxford: Blackwell.

de Hoop, H. and A. Malchukov. 2008. Case marking strategies 39: 565–587.

Diesing, Molly and Eloise Jelinek. 1995. Distributing arguments. Natural Language Semantics 3(1): 123-176.

Fong, Suzana. 2019. Proper movement through Spec-CP: An argument from hyperraising in Mongolian. Glossa: A Journal of General Linguistics 4(1): 1–42.

Guntsetseg, Dolgor. 2016. Differential case marking in Mongolian. Tunguso Siberica 39. Harrassowitz Verlag.

Haspelmath, Martin. 1995. The converb as a cross-linguistically valid category. In *Converbs in cross-linguistic perspective*, ed. Martin Haspelmath and Ekkehard König. De Gruyter, 1–56.

von Heusinger, Klaus, Udo Klein, and Dolgor Guntsetseg. 2011. The case of accusative embedded subjects in Mongolian 1: 48–59.

Karimi, Simin and Ryan Walter Smith. 2019. Another look at Persian râ: A single formal analysis of a multi-functional morpheme.

Kornfilt, Jaklin. 2008. DOM and two types of DSM in Turkish. In *Differential subject marking*, ed. H. de Hoop and P. de Swart, vol. 72 of *Natural Language and Linguistic Theory*. 79–111.

López, Luis. 2012. Indefinite objects: Scrambling, choice functions, and differential marking. Linguistic Inquiry Monographs. The MIT Press.

Potstdam, Eric. 1999. A syntax for adverbs. In *Proceedings of the 27th Western Conference onLinguistics*, ed. E. van Gelderen and V. Samiian. Fresno, CA: Department of Linguistics, California State University, 397–411.

Rosenbaum, Peter. 1967. The grammar of english predicate complement constructions. Cambridge, MA: MIT Press.

Svantesson, Jan-Olaf. 2003. Khalkha. In *The Mongolic languages*, ed. Juha Janhunen, no. 5 in Routledge Language Family Series. Routledge, 154–176.

von Heusinger, Klaus. 2011. Specificity. 1024-1057.

von Heusinger, Klaus and Jaklin Kornfilt. 2005. The case of the direct object in Turkish: Semantics, syntax and morphology 9: 3–44.

Wurmbrand, Susi. 2010. Reconstructing the A/\bar{A} -distinction in reconstruction : 245–254.