Theoretical approaches to hyperraising

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Overview of lecture #3

- Prediction made by featural view of syntactic positions: Spec-CP as an A-position in Mongolian.
- Summary of theoretical approaches to hyperraising.

1 Introduction

A. Recall: HR to object pattern in Mongolian (Mongolic)

(1) a. Bat chang-aar nokhoi gaikhal-tai gej khel-sen.
   Bat loud-INSTR dog wonder-with COMP say-PST
   ‘Bat said loudly that dogs are wonderful.’

   Bat dog-ACC loud-INSTR [ t wonder-with COMP ] say-PST
   ‘Bat said loudly that dogs are wonderful.’

B. Overview of argument to be made

- We will see that (1b) is derived by moving the embedded subject to Spec-CP prior to moving it into the matrix clause (i.e. prior to hyperraising it).
- We will then see that the hyperraised subject has A-properties (obviation of weak crossover violation, creation of new antecedents for binding).

C. Featural vs. positional view of syntactic positions

- This state-of-affairs is unexpected for the positional view of syntactic positions, according to which Spec-CP is inherently an A-position.
- It is expected, however, if we assume a featural view of syntactic positions (van Uruk, 2015).
- To make this case clearer, we start with the prototypical behavior of Spec-CP in Mongolian, which is showcased by covert question formation.

1.1 Brief background on Mongolian

A. Word order and case alignment

- Mongolian (Mongolic) is an SOV language, with nominative–accusative alignment.
- Nominative case is morphologically unmarked, while accusative case is exponed as -ig.

(2) Zagdaa ene deeremchn-ig bari-san.
   police this thief-ACC catch-PST
   ‘The police caught this thief.’

[Von Heusinger et al. 2011, (1a)]

B. It also has differential object marking, which is determined by referentiality (Von Heusinger et al., 2011).

(2′) Zagdaa ene deeremchn-ig bari-san.
     police this thief-ACC catch-PST
     ‘The police caught this thief.’

(3) Bold Tuya*(-g) har-san.
    Bold Tuya-ACC see-PST
    ‘Bold saw Tuya.’

[Von Heusinger et al. 2011, (3b, 2b)]

C. Finally, Mongolian also allows for local (i.e. clausal-internal) scrambling.

(4) a. Bat ene nom-iig unsh-san.
    Bat this book-ACC read-PST
    ‘Bat read this book.’

b. Ene nom-iig Bat t unsh-san.
   this book-ACC Bat t read-PST
   ‘Bat read this book.’
2 Covert A-movement to Spec-CP in Mongolian

A. Basics of question formation in Mongolian

- Morphology: constituent questions in Mongolian are formed by obligatorily suffixing -be to the verb.

(5) 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.

(6) Navchaa [ Odgerel khen-iig khar-san {*be} gej ]
    Khel-sen {be}?
    say-PST {Q}
    ‘Who did Navchaa say that Odgerel saw?’

- Mongolian is a Wh-in situ language.
  - In both (5) and (6) the Wh-phrases yu ‘what’ and khen-iig ‘who-ACC’ occur in the same position as their non-Wh counterparts.

B. Wh-phrases in Mongolian move covertly despite their surface realization.

- Argument #1: Wh-phrases in Mongolian obey islandhood.

(7) Conditional clause island
      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
      Odgerel who-ACC invite-COND {Q} Och happy-N.PST
      {be}?
      {Q}
      Lit.: ‘Who will, if Odgerel invites ec to the party, Och be happy?’

- Argument #2: binding of anaphors contained in the Wh-phrase.

(9) a. [ Bat öör-iin-kh-öö yamar zurg-iig shataa-san ]
    [ Bat self-GEN-EPPTH-REFL which picture-ACC burn-PST gej ]
    [ Nara Dulmaa khoyor khel-sen be? ]
    COMP ] Nara Dulmaa two 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 ]
      [ Bat self-PL-GEN-EPORTH-REFL which picture-ACC shataa-san gej ]
      [ Nara Dulmaa khoyor khel-sen be? ]
      burn-PST COMP ] Nara Dulmaa two say-PST Q
      ‘Which picture of themselves did Nara and Dulmaa say that Bat burned?’

   - In (9a), the Condition A-obeying anaphor ööriinkhöö is embedded inside a Wh-phrase and it can be bound by the local subject (Bat).
   - In (9b), the plural version of the anaphor is used. The only plural DP is the matrix subject (Nara Dulmaa ‘Nara and Dulmaa’).
   - The well-formedness of (9b) can be explained if the Wh-phrase moves covertly to a position that is adequately close to the matrix subject.

⇒ Conclusion: these data establish that in situ Wh-phrases in constituent questions in Mongolian move covertly.

C. The (expected) A-properties of covert Wh-movement in Mongolian

(10) | A-mvt | A-mvt | Covert Wh-mvt |
    |------|------|---------------|
    Can bypass intervening DPs | ✓ | * | ✓ |
    Activity Condition compliance | ✓ | * | ✓ |
    Induces a weakcrossover effect | * | ✓ | ✓ |
    Reconstructs for Condition C | * | ✓ | ✓ |
Bypassing of intervening DP

a. Tüünii₁/₂ eej [ Tuya khen-iig khar-san gej ] khel-sen
   3SG.GEN mother [ Tuya.NOM who-ACC see-PST COMP ] say-PST be?
   Q
   ‘Who does his mother said Tuya saw?’

b. Dorj [ Och khen-d ene nom-iig ög-sön gej ]
   Dorj [ Och.NOM who-DAT this book-ACC give-PST COMP ]
   khel-sen be?
   say-PST Q
   ‘To whom did Dorj say that Och gave a book?’

Weak crossover violation

a. Tüünii₁/₂ eej [ khen(-iig), geriin daalgavar-aa khii-sen gej ]
   3SG.GEN mother(-ACC) homework-REFL.POSS do-PST COMP khel-sen be?
   say-PST Q
   ‘Who did her/his mother say did her/his homework?’

b. Eej n’i [ margaash khen-iig/₁/₂ ir-ne gej ]
   mother POSS.3 [ tomorrow who-ACC come-N.PST COMP ]
   khel-sen be?
   say-PST Q
   ‘Who did her/his mother say is coming tomorrow?’

Obligatory reconstruction for Condition C

Ter₁/₂ [ Bold khen-iin, zurg-iig shataa-san gej ]
3SG.NOM [ Bold.NOM who-GEN picture-ACC burn-PST COMP ]
khel-sen be?
say-PST Q
‘Whose picture did (s)he say that Bold burned?’

Interim conclusion and looking forward

- The covert movement employed in Mongolian constituent question formation is a type of A-movement.
- Common assumption: question formation involves movement to Spec-CP.
- This is thus a case of A-movement to Spec-CP, as expected.
  (i) Positional view: can account for covert Wh-movement in Mongolian.
  (ii) Featural view: can account for covert Wh-movement in Mongolian.
- What can resolve the draw: hyperraising in Mongolian, which can be argued to be an instance of A-movement through the same position.
  (i) Positional view: cannot account for HR in Mongolian.
  (ii) Featural view: can account for HR in Mongolian.
- Next section: setting the stage; basics of HR in Mongolian.

3 Hyperraising in Mongolian

3.1 The accusative DP is an embedded argument

A. The positions occupied by an accusative subject in Mongolian.

- Besides being clearly positioned inside the matrix clause, as in (1b), the accusative DP can also stay inside the embedded clause, as in (14b).

  (1b) 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.’

  (14) a. Bat [ margaash Dulmaa nom unsh-n gej ]
       Bat [ tomorrow Dulmaa.NOM book read-N.PST COMP ]
       khel-sen.
       say-PST

   b. Bat [ margaash Dulmaa-g nom unsh-n gej ]
      Bat [ tomorrow Dulmaa-ACC book read-N.PST COMP ]
      khel-sen.
      say-PST
      ‘Bat said that Dulmaa will read a book tomorrow.

- In this section: arguments that the accusative subject is base-generated as an embedded subject, even when this is not clear from the linear order.

#1. Idiom preservation

- Accusative case does not disrupt the idiomatic reading of a subject–verb idiom in the embedded clause.

  (15) Dorj chang-aar Bat-iin núd(-iig) ore deer-ee
       Dorj loud-INSTR Bat-GEN eye(-ACC) top on-REFL.POSS
       gar-san gej khel-sen.
       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.’)
#2. Position of accusative with respect to embedded adverb.

    ‘Bat said that Dulmaa will read a book tomorrow.’

(17) a. Bold [ magadgüi Tuya(-g) dars uu-san baikh gej ]
    Bold [ maybe Tuya(-ACC) wine drink-PST BAIKH COMP ]
    khel-sen. say-PST
    ‘Bold said that Tuya maybe drank wine.’

b. Bold [ Tuya(-g) magadgüi dars uu-san baikh gej ]
    Bold [ Tuya(-ACC) maybe wine drink-PST BAIKH COMP ]
    khel-sen. say-PST
    ‘Bold said that Tuya maybe drank wine.’

c. Bold [ Tuya(-g) dars magadgüi uu-san baikh gej ]
    Bold [ Tuya(-ACC) wine maybe drink-PST BAIKH COMP ]
    khel-sen. say-PST
    ‘Bold said that Tuya maybe drank wine.’

#3. Clausal scrambling

- The whole embedded clause can be scrambled, while still containing an accusative subject.

(18) a. Dulmaa chang-aar sharlovan-g Bat-id baigaa Dulmaa loud-INST carrot-ACC Bat-DAT COP.PRES gej khel-sen. COMP say-PST
    ‘Dulmaa said loudly (to Dorj) that Bat has a carrot.’

    ‘Dulmaa said loudly (to Dorj) that Bat has a carrot.’

(19) a. Bat [ margaash Dulmaa nom unsh-n gej ]
    Bat [tomorrow Dulmaa.NOM book read-N.PST COMP ]
    khel-sen. say-PST
    ‘Bat said that Dulmaa will read a book (tomorrow).’

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).’

(20) [ Magadgüi Tuya(-g) dars uu-san baikh gej ] Bold t
    [ maybe Tuya(-ACC) wine drink-PST BAIKH COMP ] Bold t
    khel-sen. say-PST
    ‘Bold said that Tuya maybe drank wine.’

#4. NPI licensing

- 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 khelee-güi ‘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
    Nara [ Dulmaa(-ACC) who ACC CH see.PST-NEG COMP ]
    khel-sen. ]
    say-PST
    ‘Nara said that Dulmaa did not see anyone.’

b. * Nara [ Dulmaa-g khen-iig ch khar-san gej ]
    Nara [ Dulmaa-ACC who ACC CH see-PST COMP ]
    khelee-güi.
    say-PST-NEG
    Nara who(-ACC) CH come.PST-NEG COMP say-PST
    ‘Nara said that nobody came.’

b. * Nara khen(-iig) ch ir-san gej kelee-güi.
    Nara who(-ACC) CH come-PST COMP say.PST-NEG

- Once again, negation has to be clause-mate with respect to the NPI: placing negation in the matrix clause renders the sentence ungrammatical.
- Critically, this holds whether the embedded subject bears nominative or accusative case.

#5. Interpretation of nonreferential DPs.
- 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.

(25) Lusyn dagina bodit endalrach bai-deg-güi ch, Navchaa [
    mermaid real in.life COP-HAB-NEG CH Navchaa [
    lusyn dagina(-iig) ich bai-n gej ] khel-sen.
    mermaid(-ACC) come.FUT AUX-N.PST COMP ] say-PST
    ‘Although mermaids don’t exist, Navchaa said that a mermaid is coming.’

- 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.

B. Interim conclusion and looking forward
- We can conclude from the data above that accusative DPs are base-generated as the embedded subject.
- Next section: the source of this accusative case.
  - Spoiler alert: matrix source (i.e. v or equivalent in other case theories).

3.2 Embedded accusative subjects receive accusative across a clausal boundary

#1. Accusative case is not available in root clause subjects.
- This is particularly clear in a type of possessive construction where the possesee surfaces without any overt case marking.
- When embedded however, accusative case becomes a possibility in the possessum.

(26) a. Sharlovan(*-g) Bat-id baigaa.
    carrot(*-ACC) Bat-DAT COP.PRES
    ‘Bat has a carrot.’

b. Dulmaa chang-aar [ sharlovan-g Bat-id baigaa gej
    Dulmaa loud-INSTR [ carrot-ACC Bat-DAT COP.PRES COMP
    ] khel-sen.
    ] say-PST
    ‘Dulmaa said loudly that Bat has a carrot.’

- How to explain these data?
  - The difference between the two sentences above lie in embedding and thus in the availability of a v above the clause.
  - It seems reasonable to attribute to availability of accusative case in (26b) to the presence of the matrix v.

#2. Accusative case ceases to be an option when the matrix verb is passivized (27), and in subject clauses (28).

(27) [ 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.’

(28) [ Dorj(*-iig) tsagtaa ir-sen (gedge) ] nama-ig
    [ Dorj(*-ACC) late come-PST (COMP POSS.3] 1SG-ACC
    gaikhsh-ruul-san.
    surprise-CAUS-PST
    ‘That Dorj arrived late surprised me.’

- How to explain these data? The accusative case come from the matrix clause.
  - Passivization: matrix passivization takes away the matrix v’s ability to assign accusative case to the embedded subject.
  - Subject clause: it is outside the domain of the matrix v, hence why accusative case to the subject of a clause in this position is unavailable.
3.2.1 Interim conclusion and looking forward

A. The source of accusative case and theoretical issue raised

- Conclusion from previous section: accusative case in the embedded subject has a matrix source (v).
- Problem: 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 (29).

(29) **Phase Impenetrability Condition (PIC)**

a. The domain of H [head of a phase] is not accessible to operations at ZP [the smallest phase dominating HP]; only H and its edge are accessible to such operations.  

b. ZP smallest phase dominating HP

[Chomsky 2001, p. 14]

- Recall the Phase puzzle that we are trying to solve in this course:

(30) **Phase problem**: how come a DP inside a finite embedded CP, a phase, can Agree with a probe (T or v) in the embedding clause?

B. Solution to be proposed

- 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.

(31) **Accusative subjects occupy a higher position**

\[\text{[CP} \ldots \gamma \ldots \text{[CP (margaash) DP}, \{\text{TP } t_1 \{\gamma \ldots t_1 \ldots \}}]]\]

- Although both are embedded arguments, accusative and nominative subjects are different in that the former seem to occupy a higher position than the latter.
- Next section: this claim will be based on binding.

3.3 Accusative subjects are higher than nominative subjects

#1. Condition A

- Background: reflexive possessive -ee obeys Condition A.
  - In (32a), -ee is attached to the only nominal in the sentence. The sentence is ungrammatical as a consequence of the lack of an antecedent.
  - Indeed, if -ee is taken away, as in (32b), or if an antecedent is provided, as in (32c), the result is grammatical.
  - (32d): the presence of an antecedent is necessary, but not sufficient. -ee 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).

  tomorrow sister.NOM-REFL.POSS come-N.PST  
  Int.: ‘My sister is coming tomorrow.’

b. Margaash egch (miin) ir-ne.  
  tomorrow sister (POS.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.’

d. Bat\(_i\) [Nara\(_i\) [muur has-n-ii-g-aa\(_i/j\) ] khel-sen
  Bat [Nara [cat see-PST-ACC-REFL.POSS] say-PST
  gej ] med-n.  
  COMP ] know-N.PST  
  ‘Bat knows that Nara said that she saw a cat.’ (Lit.: ‘Bat knows [that Nara said [-ee\(_i/j\) seeing a cat]]’.)
(32c) adapted from Guntsetseg 2011, (1)]

- Reflexive possessive -ee in the subject of embedded finite clauses: nominative case
  - If it is appended to the nominative subject of an embedded clause (33a), the sentence is ungrammatical.
    (33) a. * Bat chang-aar [ egch-ee gaikhal-tai ]
       Bat loud-INST [ sister.NOMREFL.POSS wonder-with ]
       COMP ] say-PST
       Int.: ‘Bat said loudly that his (own) sister is wonderful.’

  - Why: (33) is a violation of Condition A: the reflexive possessive cannot be bound by the matrix subject because the latter is outside the binding domain of the reflexive.
  - Implication: the embedded clause can be the binding domain of the reflexive possessive within the embedded subject.

- If the subject is accusative, the result is grammatical.
  - The data so far: nominative and accusative subjects seem to simply alternate with each other.
  - Now: accusative case becomes obligatory if the Condition A-obeying reflexive possessive is suffixed to the embedded subject.
  - Even though the accusative subject may remain inside the embedded clause, the reflexive possessive contained in it can be bound by the matrix subject.
    (34) a. Bati [ margaash egch-iig-ee] ir-ne
       Bat [ tomorrow sister-ACC-REFL.POSS come-N.PST]
       COMP ] say-PST
       Int.: ‘Bat said that his (own) sister is coming tomorrow.’

- If the accusative subject were occupying the same position as a nominative subject, (34a) and (34b) should be ungrammatical as the sentences in (33), contrary to fact.
  - 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.
    - (33) would therefore be an instance of Condition A violation.
  - 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.
    - Analysis: a left periphery position, higher than Spec-TP could be appropriate to capture these properties.

#2. Condition B

(35) a. Odgerel [ margaash ter ] ir-ne gej ]
    Odgerel [ tomorrow 3SG.NOM come-N.PST COMP ] say-PST
    ‘Odgerel said that (s)he (Odgerel or someone else) is coming tomorrow.’

  - 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.

3.3.1 Upshot and looking forward

- These Condition A and B effects could not be captured if nominative and accusative subjects occupied exactly the same position.
- Next section: an analysis able to account for these binding effects that is based on a difference in height of nominative and accusative subjects.
4 Analysis: movement to Spec-CP

A. Proposal: in HR, 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 above.

B. Feature-driven operations
   - 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.
     - When a head [endowed] with a triggering feature $F$...
       1. **Agree**: the trigger $[F]$ finds the (closest) phrase bearing the same feature $[F]$.
       2. **Merge**: the trigger attracts the phrase.

   ![Diagram](image)

   [van Urk 2015, p. 16]

   - Also assume: the embedded subject is the closest goal that can satisfy $F$. The identity of this feature will be discussed in §6.1.
     - Spoiler alert: $F = \varphi$-features. The position created is thus an A-position (van Urk, 2015).

   (37) $[CP \ldots \gamma \ldots [CP \text{DP} [CP [C_\text{COMP} \ldots [t \ldots] ...]]]]$

C. Nominative and accusative subjects occupy different positions.
   - Nominative subject occupies a canonical subject position, Spec-TP.

   (38) a. $\text{Bat } [\text{margaash Dulmaa nom unsh-n gej }]$
       $\text{Bat } [\text{tomorrow Dulmaa.NOM book read-N.PST COMP }]$
       khel-sen.
       say-PST
       ‘Bat said that Dulmaa will read a book tomorrow.’
   b. $[CP \text{DP}_{subj} \ldots \gamma \ldots [CP \text{margaash } [C_\text{COMP} [TP (\ldots) \text{DP}_{\text{nom}} (\ldots)]]]]

   - This subject receives nominative case from an embedded source, 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 because it is outside of its binding domain.

   - Accusative subject: placed in Spec-CP.

   (39) a. $\text{Bat } [\text{margaash Dulmaa-\text{g nom unsh-n gej } } ]$
       $\text{Bat } [\text{tomorrow Dulmaa-ACC book read-N.PST COMP }]$
       khel-sen.
       say-PST
       ‘Bat said that Dulmaa will read a book tomorrow. [= (14b)]
   b. $[CP \text{DP}_{subj} \ldots \gamma \ldots [CP \text{margaash DP}_{\text{ACC}} [C_\text{COMP} [TP (\ldots) \text{DP}_{\text{nom}} (\ldots)]]]]

   - 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 (29).

D. Accounting for the binding facts
   - Movement to Spec-CP also extends the binding domain of the accusative subject, in a way that is analogous to familiar English examples like (40).

   (40) Which picture of herself/himself/themself(ves) did Taylor say $[CP t [CP [C_\text{that Mary hates } t]]]$

   - We can assume a phase-based definition of binding domain like that in Bošković (2016, and references therein):
A. In this section: evaluation of two alternative analyses of accusative subjects in Mongolian.

- There is a height distinction between nominative and accusative subjects, but it is one level lower (Spec-TP vs. Spec-vP).

- There is no Phase puzzle because the embedded clause is actually not a phase.

B. There is a height distinction between nominative and accusative subjects, but it is one level lower.

- In this alternative, 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.

\[ 37' \quad [\text{CP} \ldots \text{v} \ldots ] [\text{CP} \left[ C' \text{COMP}_F \left[ \text{TP} \left[ \text{DP}_{\text{ACC}} \right] \left[ T \left[ \text{vP} \left[ \text{DP}_{\text{Nom}} \right] \left[ \ldots \right] \right] \right] \right] \right] \]

- Problems with this alternative
  - 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.

C. The embedded clause is actually not a phase.

- It could be the case 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 binding antecedent.

- It could be worth comparing the gej clauses with infinitival control clauses in (44).

- This type of clause allows for one of its arguments to be scrambled into the matrix clause:

\[ 44 \quad \{\text{Dulmaa-d}\} \quad \text{Odgerel} \quad [\text{PRO} \{\text{Dulmaa-d}\} \quad \text{nom} \quad \text{ögö-kh} \}
\{\text{Dulmaa-DAT}\} \quad \text{Odgerel} \quad [\text{PRO} \{\text{Dulmaa-DAT}\} \quad \text{book} \quad \text{give-INF} \}
\quad \text{durtai.}
\quad \text{like}
\quad \text{‘Odgerel likes to give books to Dulmaa.’}

- Gej clauses, conversely, do not allow for long distance scrambling, irrespective of the case of the subject:

\[ 45 \quad a. \quad \text{Bat} \quad [\text{Dorj(-iig)} \quad \text{Dulmaa-d} \quad \text{nom-oo} \quad \text{ög-sön} \quad \text{Bat} \quad [\text{Dorj(-ACC)} \quad \text{Dulmaa-DAT} \quad \text{book-REFL.POSS} \quad \text{give-PST} \quad \text{gej} \quad \text{chang-aar} \quad \text{khel-sen.}
\quad \text{COMP} \quad \text{loud-INST} \quad \text{say-PST} \]
5 Hyperraising through Spec-CP

A. The position of accusative subjects

• Even though accusative subjects in Mongolian can remain inside the embedded clause, they can also be pronounced inside the matrix clause.

    Bat loud-INSTR [ dog.NOM wonder-with COMP ] say-PST

• This type of phenomenon was dubbed ‘hyperraising’ by Ura (1994).

B. HR vs. prolepsis, again

• We have already discussed prolepsis.

(49) I believe about Kate [**CP** that she won the Daughter-of-the-Year award].

[David 2005]

• This discussion is pertinent again, since the HR variety of accusative subjects in Mongolian is linearly identical to prolepsis constructions.

• Straightforward argument that HR in Mongolian is not prolepsis: island-sensitivity.

(50) a. Nara [ muur bömbög-öör toglo-dog baa **nokhoi**
    Nara [ cat.NOM ball-INSTR play-HAB CONJ dog.NOM
    yas-aar toglo-dog gej ] khel-sen.
    bone-INSTR play-HAB COMP ] say-PST

b. Nara muur-iig bömbög-öör toglo-dog baa **nokhoi**
    Nara cat-ACC ball-INSTR play-HAB CONJ dog-ACC
    yas-aar toglo-dog gej khel-sen.
    bone-INSTR play-HAB COMP say-PST

c. *Nokhoi-g** Nara muur-iig bömbög-öör toglo-dog baa t
    dog-ACC Nara cat-ACC ball-INSTR play-HAB CONJ t
    yas-aar toglo-dog gej khel-sen.
    bone-INSTR play-HAB COMP say-PST

‘Nara said that the cat plays with a ball and the dog plays with a bone.’

• Island-sensitivity is a rather clear indication of movement.

C. Upshot: accusative subjects in Mongolian that are pronounced in the matrix clause move (i.e. hyperraise) there.

• Theoretical issue raised: just like case assignment across a clausal boundary, hyperraising poses a challenge to assumptions about locality (i.e. the PIC in (29)).

• Solution: the edge-based analysis (37) 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.
6 Hyperraising in Mongolian as a type of A-movement

A. Preview of the data

<table>
<thead>
<tr>
<th>A-mvt</th>
<th>Á-mvt</th>
<th>Hyperraising</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can by pass intervening DPs</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>Induces a weak crossover effect</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>Reconstructs for Condition C</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>Creates new antecedents for binding</td>
<td>✓</td>
<td>*</td>
</tr>
</tbody>
</table>

B. No bypassing of intervening DPs


C. Absence of weak crossover effects

(54) a. Tüünii/i j eej [margaash Dorj-iig] ir-ne gej ] 3SG.GEN mother [tomorrow Dorj(-ACC) come-N.PST COMP] khel-sen. say-PST ‘His mother said that Dorj is coming tomorrow.’

b. Dorj-iig tüünii/i j eej [margaash t ir-ne gej ] Dorj-ACC 3SG.GEN mother [tomorrow t come-N.PST COMP] khel-sen. say-PST ‘His mother said that Dorj is coming tomorrow.’

(55) a. Tüünii/i j eej Dorj(-iig) geriin daalgavar-aa khii-sen gej 3SG.GEN mother Dorj(-ACC) homeork-REFL.POSS do-PST COMP khel-sen. say-PST ‘His mother said that Dorj did his homework.’

b. Dorj-iig tüünii/i j eej [t geriin daalgavar-aa khii-sen Dorj-ACC 3SG.GEN mother [t homework-REFL.POSS do-PST gej ] khel-sen. COMP] say-PST ‘His mother said that Dorj did his homework.’

(56) a. Eej n'u/'i j [margaash Dorj(-iig), ir-ne gej ] mother POSS.3 [tomorrow Dorj(-ACC) come-N.PST COMP] khel-sen. say-PST ‘His mother said that Dorj is coming tomorrow.’

b. Dorj-iig eej n'u/'i j [margaash t ir-ne gej ] Dorj-ACC mother POSS.3 [tomorrow t come-N.PST COMP] khel-sen. say-PST ‘His mother said that Dorj is coming tomorrow.’

D. No obligatory reconstruction for Condition C

(57) Bi Bat-iig, say-sun 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.’

(58) Bat-iin, eej-iig bi [t say-sun gej ] tüün-d, Bat-GEN mother-ACC 1SG.NOM [t good person COMP] 3SG-DAT khel-sen. say-PST ‘I told her/him that Bat’s mother is a good person.’

E. Creation of new antecedents for binding

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

b. Okhin bür-iig öör-iin-kh n' eej [t girl every-ACC self-GEN-EPHT POSS.3 mother [t ukhaan-tai gej ] khel-sen. intelligence-with COMP] say-PST ‘Her, mother said that every girl is intelligent.’ (For every girl x, x’s mother said that x is intelligent.)
F. Upshot and looking forward

- 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.
- Next section: this conclusion also allows us to identify what the \( F \)-feature assumed in (37) is.

6.1 The \( F \)-feature as a \( \varphi \)-type of feature

A. So what type of feature the \( F \) proposed in (37) is?

- Positional view: Spec-CP is inherently an \( \overline{A} \)-position and, as such \( F = \overline{A} \)-feature.
  - If \( F \) were a type of \( \overline{A} \)-feature, 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. The prediction is that the data above should be instances of improper movement and therefore ungrammatical, contrary to fact.

B. Upshot

Proper Movement through Spec-CP

(64) \[
\begin{array}{c}
\text{TP} \\
\text{[TP}_T \ldots \text{[CP}_A \ldots\text{[CP}(\text{that}) \text{[TP}_T \ldots\text{[TP}_T \ldots\text{[TP}_T \ldots\text{[TP}_T \ldots\text{[TP}_T \ldots\text{[TP}_T \ldots\text{[TP}_T \ldots\text{[TP}_T \ldots\text{[TP}_T \ldots\text{[TP}_T \ldots\text{[TP}_T \ldots\text{[TP}_T \ldots]}]}]}]}]}]}]
\end{array}
\]

- (63) illustrates the main claim made in Fong (2019): movement through Spec-CP can feed A-movement without violating the ban on improper movement.
- This claim can be made under a featural view of syntactic positions, but not under the positional view.

C. Comparison with covert \( Wh \)-movement

(65) | Can by pass intervening DPs | \( \overline{A} \)-mvt | \( Wh \)-mvt | HR |
<table>
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<td>( \checkmark )</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

D. Precedents of Spec-CP as an A-position

- Shlonsky (1992, 2002): a resumptive pronoun (boldfaced) in Palestinian Arabic constituent questions are obligatory if the gap is in the object position (66).
- However, it is forbidden (67) if it is the highest subject position. In the latter, a gap (represented with \( e \)) is required.
a. \[ \text{miin ?illi l-ʔasad} \ \text{ʔakal} \ -\text{ha} \ \text{mbaarih?} \]
who that the-lion ate her yesterday

b. \[ \text{* miin ?illi l-ʔasad} \ \text{ʔakal e} \ \text{mbaarih?} \]
who that the-lion ate e yesterday

‘Who did the lion eat yesterday?’

[Shlonsky 2002, (23)]

a. \[ \text{* miin ?illi hi} \ \text{ʔaklat} \ \text{mbaarih?} \]
who that she ate l-ʔasad mbaarih?

b. \[ \text{miin ?illi e} \ \text{ʔaklat} \ l-ʔasad \ \text{mbaarih?} \]
who that e ate the-lion l-ʔasad mbaarih?

‘Who ate the lion yesterday?’

[Shlonsky 2002, (24)]

Shlonsky’s main proposal: resumptive pronouns only occur as last resort strategies when Wh-movement is impeded.

To motivate the impossibility of Wh-movement in (66), 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 Ā-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 (67).

However, movement of the object to the same landing site incurs a minimality violation, hence why a resumptive pronoun is required in (66).

Ultimately, Shlonsky proposes that Spec-CP in Palestinian Arabic is an A-position because it is created by \( \varphi \)-features in ?illi.

7 Overall summary

A. Different theoretical approaches we reviewed

(i) A-over-A approach (Halpert, 2018)

(ii) Probe horizons approach (Keine, 2019)

(iii) Approach based on featural view of syntactic positions (Fong, 2019)

B. Summary of how each approach derived HR and ancillary tools

(i) A-over-A approach

- CPs in Zulu have \( \varphi \)-features (e.g. they can trigger object agreement), but they cannot satisfy the EPP (they cannot occur in subject position).
- \( \varphi \)-probe in the matrix T can interact with the \( \varphi \)-features of the CP, but it is not satisfied by it (Deal, 2015).
- But Agree with the CP suffices to unlock this phase (Rackowski & Richards, 2005; van Urk & Richards, 2015).
- \( \varphi \)-probe and the EPP in the matrix T can now both be satisfied by the embedded subject. The latter is the hyperraised into the matrix clause.

(ii) Probe horizons approach

- Different probes have different horizons, i.e. there are different syntactic nodes that cause each probe to halt its search.
- In a language like English, CP is a horizon for a \( \varphi \)-probe/an A-probe.
- In languages like Zulu or Mongolian, where HR is possible, CP is not a horizon for this type of probe.

(iii) Approach based on featural view of syntactic positions (Fong, 2019).

- In Mongolian, embedded accusative subjects move to Spec-CP. This movement can then further feed A-movement (i.e. HR) into the matrix clause.
- Syntactic positions are nor inherently A or Ā. This depends on the type of feature that created them (van Urk, 2015).
• HR in Mongolian is not an instance of improper movement. This claim can only be made comfortably under a featural view, not a positional view.

C. Potential relevance of each approach (i.e. possibly new things we learned while trying to provide an analysis for HR phenomena)

(i) A-over-A approach
- More fine-grained view of the operation Agree: Interaction vs. Satisfaction (Deal, 2015).

(ii) Probe horizons approach
- More fine-grained view of how syntactic domains may allow or block a given operation Agree.
- Compare phases, which always block or always allow some operation.

(iii) Approach based on featural view of syntactic positions
- The A vs. Ā distinction has often been taken from granted. However, there are recent approaches to derive it (van Urk, 2015; Safir, 2019)
- Further empirical support for a featural definition of syntactic positions.

References


