Hyperraising and Logical Form: evidence from Buryat*

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1 Introduction

- Hyperraising to object is movement of an argument of an embedded finite clause into the matrix clause.
- Languages differ in whether they allow such movement: cf. (1) and (2).

   ‘Bair thought that Badma will draw Sajana.’

(2) *Bair thought Badma₁ [CP that t₁ will draw Sajana]. English

- The Question: What determines whether a language allows hyperraising to object?
- Some existing answers that I am aware of: Please tell me others you know of!
  - features of the complementizer (A/A-bar properties) (Fong 2019, a.o.)
  - (proposed for hyperraising to subject): the featural status of clauses together with the nature of the EPP (Halpert 2016, 2019)

- My proposal:
  semantic type of the CP determines whether hyperraising to object is possible out of it.

  ★ CPs come in two kinds: some, like Buryat CPs, denote properties of events (<vt>-CPs), others, like English CPs, denote properties of individuals (<et>-CPs);
  ★ only <vt>-CPs can be hyperraised out of: due to the semantics of movement into a θ-position, hyperraising out of <et>-CPs creates a type mismatch.

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Outline:

1. There are cases of hyperraising that involve true raising.
2. The proposal: semantics for movement into a $\theta$-position and issues for <et> CPs
3. Syntactic manifestations of the semantic type: morphology & distribution
4. Some predictions: obligatoriness of $de\ re$ and impossibility of indexical shift
5. Conclusions

2 Hyperraising can be raising into a $\theta$-position

- There are reasons to think that hyperraising can involve raising: island effects, idiom tests, Proper Binding Condition (Fiengo 1974) violations, agreement that is different from control structures (Deal 2018, Fong 2019, Bondarenko 2017a-b, a.m.o.).

- Many properties that accusative subjects have can be explained by obligatory (A) movement to Spec,CP position with optional scrambling (A-bar movement) into the matrix clause (Takeuchi 2010, Bondarenko 2017a, Wurmbrand 2019 a.o.). E.g.:

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ability to linearly occur in the matrix clause</td>
<td>long-distance scrambling</td>
</tr>
<tr>
<td>ability to be bound by matrix clause arguments</td>
<td>TP as a binding domain</td>
</tr>
</tbody>
</table>

- But it is not easy to establish whether hyperraising involves raising to a $\theta$-position.

- The question: are there any properties that can only be explained if we are dealing with raising to a $\theta$-position?

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1My impression is that many languages (including Buryat (Bondarenko 2017b) and Nez Perce (Deal 2018), a.o.) that have hyperraising to object also have a prolepsis strategy with an argument of the matrix clause controlling into a finite embedded clause. As we will see, this is expected under my proposal.
2.1 Passivization

- Accusative subjects can be further promoted into the matrix subject position:

\[
\begin{align*}
(6) & \quad \text{bi}_1 \quad \text{badma-da t}\text{i} [CP \text{ PRO}_1/t_1 \text{sajan-i:j} \text{ zura-xa-(b) } \text{gə-žə}] \\
& \quad \text{1SG.NOM B.-DAT } \text{S.-ACC draw-FUT-(1SG) say-CONV} \\
& \quad \text{hana-gd-a:-b} \\
& \quad \text{think-PASS-PST-1} \\
& \quad \text{‘Badma thought that I will draw Sajana.’}
\end{align*}
\]

- Note that in (6) agreement on the embedded predicate is optional.

- In (Bondarenko 2017b) I argued that this optionality corresponds to two derivations: the one with agreement involves control, the one without agreement involves raising.

- Given that Buryat does not allow long-distance passivization,\(^2\) (6) suggests that accusative subjects can undergo raising into the object position of the matrix verb.

2.2 Impossibility of reconstruction

- Generally in languages with long-distance scrambling NPIs can get licensed in the embedded clause but then scramble into the matrix clause:

\[
\begin{align*}
(7) & \quad \text{Hindi (Lahiri 2018: 187, ex. 16)} \\
& \quad [\text{ek bhii pikcar}], \text{ siitaa kahtii hai ki } [\text{saritaa-ne t}_j \text{nahiiN li}] \\
& \quad \text{one even picture Sita says that Sarita-erg not take} \\
& \quad \text{‘Sarita says that Sarita didn’t take even a single photograph.’}
\end{align*}
\]

- However, in Buryat hyperraising if an accusative subject is an NPI, it must be licensed by the matrix negation and cannot be licensed by embedded negation:

\[
\begin{align*}
(8) & \quad \text{a. Badma } \text{xən-i:-šjə} / *\text{xən-šjə} \text{ tərgə ŋmdəl-ə: gə-žə} \\
& \quad \text{Badma.NOM who-ACC-PTCL / who.NOM-PTCL cart break-PST COMP} \\
& \quad \text{xar-a:-gũj} \\
& \quad \text{see-PST-NEG} \\
& \quad \text{‘Badma didn’t see of any individual x that x broke the cart.’}
\end{align*}
\]

\[
\begin{align*}
(8) & \quad \text{b. Badma } *\text{xən-i:-šjə} / \text{xən-šjə} \text{ tərgə ŋmdəl-ə:-gũj} \\
& \quad \text{Badma.NOM who-ACC-PTCL / who.NOM-PTCL cart break-PST-NEG} \\
& \quad \text{gə-žə xar-a:} \\
& \quad \text{COMP see-PST} \\
& \quad \text{‘Badma saw that no one broke the cart.’}
\end{align*}
\]

- This suggests that accusative subjects cannot reconstruct. \textbf{Why not?}

---

\(^2\)To be more precise, long-distance passivization is limited to restructuring verbs.
• A-movement can usually reconstructs either for binding and scope (like in English), or at least for scope (German, Japanese), A-bar movement reconstructs for both binding and scope (Wurmbrand 2010).

• Thus, whether movement that accusative subjects undergo is an A or an A-bar movement, we should expect them to be able to reconstruct, provided that scope relative to negation is the relevant property for NPI licensing.

• Idea:

  ★ reconstruction is impossible due to raising occurring into a $\theta$-position

  ★ not interpreting DP at the position where it $\theta$-raised to would amount to not saturating an argument of a function and a non-converging derivation

3 The proposal

Assumptions:

• Kratzer’s (2013) approach to semantics of attitude verbs (CPs describe the Content of an event/individual) modified with Elliott’s (2017) equality semantics:

  (9) a. $\text{think}^\text{w,g} = \lambda e \in D_v. \text{think}(e)$
  b. $\text{CP}_{vt}^\text{w,g} = \lambda e \in D_v. \text{cont}(e) = \text{Badma will draw Sajana}$
  c. $\text{CP}_{et}^\text{w,g} = \lambda x \in D_e. \text{cont}(x) = \text{Badma will draw Sajana}$

  o this implies that $D_v \neq D_e$;
  o semantics of $<v,t>$-CPs and $<e,t>$-CPs is identical but for their type.

• neo-Davidsonian representations for all arguments including Theme: all arguments are introduced by designated functional projections ($\theta_{Th}$ for Theme).

  (10) $[\theta_{Th}]^\text{w,g} = \lambda f_{vt}. \lambda y. \lambda e_v. f(e) \land \text{Theme}(e)=y.$

Proposal:

• hyperraising to object involves (potentially covert) raising into the object position;

• movement into a $\theta$-position leaves a trace and creates an abstractor, just like other kinds of movement (Heim & Kratzer 1998);

• it is different in that the abstractor is separated from the DP’s landing site by other material (see Deal 2018): it is separated by the verb that has combined with the object-introducing projection in (11).3

3While Buryat is an SOV language, I draw all LF’s as right-branching for simplification.
The type of the CP in (11) determines whether the LF will be interpretable or not: a derivation with a $<v,t>$-CP will converge, a derivation with a $<e,t>$-CP will not.

### 3.1 Languages with $vt$-type CPs

- In languages with $<vt>$-CPs (Buryat) CPs specify the Content of the eventuality described by the verb.
- Abstraction at the edge of a $vt$-type CP creates a function of the same type as the function created by combining the verb with the object-introducing $\theta_{Th} - <e,<vt>>$:

\[(12) \textbf{Hyperraising to object with a $vt$-type CP}\]

\[
\begin{array}{c}
\text{VoiceP} <vt> \\
\downarrow \\
\text{DP} e \\
\downarrow \\
\text{Bair} \\
\downarrow \\
\text{Voice} \\
\downarrow \\
\text{VP} <vt> \\
\downarrow \\
\text{DP} e \\
\downarrow \\
\text{Badma} \\
\downarrow \\
\theta_{Th} <vt,evt> \\
\downarrow \\
V <vt> \\
\downarrow \\
\lambda_1 \\
\downarrow \\
\text{CP} <vt> \\
\end{array}
\]

- that $t_1$ will draw Sajana

\[
\begin{array}{c}
\text{thought} \\
\downarrow \\
\text{that $t_1$ will draw Sajana} \\
\end{array}
\]

This allows to combine the verb and the embedded clause by Generalized Conjunction (Partee & Rooth 1983):
(14) **Generalized Conjunction:**  
Pointwise definition of $\sqcap$ (Partee & Rooth 1983: 364)  
\[ X \sqcap Y = \]
\( a. = X \land Y \) if \( X \) and \( Y \) are truth values  
\( b. = \{ <z, x \sqcap y>: <z, x> \in X \text{ and } <z, y> \in Y \} \) if \( X \) and \( Y \) are functions  
(which are represented as sets of ordered pairs)

- The result of that combination is in (15a).
- In the next step the hyperraised argument saturates the individual argument, specifying the Theme of *thinking* (= res argument (Heim 1994)) and the subject of *drawing* at the same time, (15b).
- The subject of the matrix verb is introduced, resulting in (15c)

(15) a. \[ \theta_{Th} V \lambda_1 \text{CP}_{vt}^{w,g} = \lambda x \in D_e. \lambda e \in D_v. \text{think}(e) \land \text{Theme}(e)=x \land \text{cont}(e) = x \text{ will draw Sajana} \]
b. \[ \text{VP}^{w,g} = \lambda e_v. \text{think}(e) \land \text{Theme}(e)=\text{Badma} \land \text{cont}(e) = \text{Badma will draw Sajana} \]
c. \[ \text{VoiceP}^{w,g} = \lambda e_v. \text{think}(e) \land \text{Theme}(e)=\text{Badma} \land \text{Exp}(e)=\text{Badma} \land \text{cont}(e) = \text{Badma will draw Sajana} \]

- **In the absence of hyperraising**, \(<\text{vt}>\)-CPs also combine with the verb by Generalized Conjunction: (16)-(18).

(16) **vt-type CPs without hyperraising**  
VoiceP \(<\text{vt}>\)  
\[
\begin{array}{c}
\text{DP } e \\
\triangle \\
\text{Bair} \\
\text{Voice} \\
\text{VP } <\text{vt}> \\
\end{array}
\]
\[
\begin{array}{c}
\text{V } <\text{vt}> \\
\text{CP } <\text{vt}> \\
\end{array}
\]
\[
\text{thought} \\
\text{that Badma will draw Sajana}
\]

(17) \[ \text{VP}^{w,g} = \lambda e \in D_v. \text{think}(e) \land \text{cont}(e) = \text{Badma will draw Sajana} \]

(18) \[ \text{VoiceP}^{w,g} = \lambda e_v. \text{think}(e) \land \text{Exp}(e)=\text{Bair} \land \text{cont}(e) = \text{Badma will draw Sajana} \]

- I leave the possibility of the $\theta_{Th}$ attaching to the VP and getting saturated by a null pronominal argument open.
3.2 Languages with et-type CPs

- In languages with \(<et>-CPs (English), the hyperraising derivation will create a type mismatch: creating abstraction at the edge of this CP will make it \(<e,et>>\), and it will not be able to combine with the \(<e,vt>-type verb by Generalized Conjunction:

\[
\begin{align*}
\text{(19) } \text{*Hyperraising to object with a et-type CP} \\
&\text{VP} \\
&\text{DP } e \\
&\text{Badma} \\
&\text{\(\theta_{Th} <vt,evt>\) V \(<vt>\) \(\lambda_1\) CP \(<et>\)} \\
&\text{thought that t_1 will draw Sajana}
\end{align*}
\]

- Thus, \(<et>-CPs can’t be hyperraised out of due to uninterpretability.
- **Question**: How do \(<et>-CPs then ever combine with matrix verbs?

**Combining <et>-CPs**

- **Proposal**:
  - \(\star\) languages like English combine their CPs with attitude verbs through an argument-introducing functional head \(\theta_{Cont}\):

\[
\begin{align*}
\text{(20) } [\theta_{Cont}]^{w,g} = \lambda P_{vt}. \lambda Q_{et}. \lambda e_v. \ P(e) \land \text{Cont}(e) = i p \ [\forall x \in Q[\text{Cont}(x) = p]]
\end{align*}
\]
  - \(\star\) \(\theta_{Cont}\) takes a predicate \(P\), a property of individuals \(Q = CP\), and an event, and
  - \(\star\) returns true if the predicate is true of \(e\) and the content of \(e\) is the unique proposition such that it is the Content of all the individuals of which CP is true of.

- LF of a sentence with an et-type CP is in (21).

\[
\begin{align*}
\text{(21) et-type CPs without hyperraising} \\
&\text{VoiceP \(<vt>\)} \\
&\text{DP } e \\
&\text{\(\triangle\) Bair} \\
&\text{Voice} \\
&\text{\(<e,vt>>\) \text{VP \(<vt>\)}} \\
&\text{\(<et,vt>\) \text{CP \(<et>\)}} \\
&\text{\(\theta_{Cont} <vt,et,vt>\) V \(<vt>\) thought that Badma will draw Sajana}
\end{align*}
\]
• The result of \( \text{think} \) combining with CP through \( \theta_{\text{Cont}} \) is in (22); 

\[ \text{think} \theta_{\text{Cont}} \text{ CP} = \lambda e_v. \text{think}(e) \land \text{CONT}(e) = \text{iP} [\forall x \in \{y: \text{CONT}(y) = \text{Badma will draw Sajana}\} [\text{CONT}(x) = \text{p}]]. \]

(22) 

\[ [\text{VoiceP}]^{w,g} = \lambda e_v. \text{think}(e) \land \text{Exp}(e) = \text{Bair} \land \text{CONT}(e) = \text{iP} [\forall x \in \{y: \text{CONT}(y) = \text{Badma will draw Sajana}\} [\text{CONT}(x) = \text{p}]]. \]

(23) 

• This is equivalent to (24):

(24) 

\[ [\text{VoiceP}]^{w,g} = \lambda e_v. \text{think}(e) \land \text{Exp}(e) = \text{Bair} \land \text{CONT}(e) = \text{Badma will draw Sajana}. \]

• Note that combining CPs via \( \theta_{\text{Cont}} \) does not give rise to availability of hyperraising: abstracting at the edge of CP will still lead to a type mismatch.

(25) \textbf{abstracting at the edge of et-type CP} \rightarrow \textbf{type mismatch}

\[ \begin{array}{c}
\text{DP e} \\
\Delta \text{Bair} \\
\theta_{\text{Cont}} <v_t, <\text{et},v_t>> \\
V <v_t> \lambda_1 \text{ thought} \\
\text{CP} <\text{et}> \\
\text{that } t_1 \text{ will draw Sajana}
\end{array} \]

\textbf{Summary:}

• A functional head like \( \theta_{\text{Cont}} \) could be in principle available in all languages.

• But only languages that have \( <v_t>-\text{CPs} \) have the privilege of being able to combine them with the verb via Generalized Conjunction, which is a necessary requirement for the hyperraising derivation.

\section{How to know the type of your CP}

• \textbf{Question:} can we independently test what semantic type a given CP has?

• \textbf{Tentative answer:}

  yes, the semantic type of a CP can be inferred based on its morphosyntactic properties: morphological form of the complementizer and syntactic distribution of CPs.

• Here’s a table based on a very small sample of languages:
Morphology of the Complementizer

- CPs with complementizers that are morphologically based on nominal elements like demonstratives (English ‘that’), relativizers, wh-words (Russian čto ‘what’) seem to not be hyperraisable out of.

- CPs with complementizers that look like adverbial forms of verbs like ‘say’ (Buryat’s g9- ż9 ‘say-CONV’\textsuperscript{4}, Tatar’s di-p ‘say-CONV’) seem to be hyperraisable out of.

- For Buryat, the morphology goes hand in hand with proform substitution:
  - Buryat has a root \(ti:\) ‘do.so’, which produces different proforms by attaching different kinds of morphology.
  - In (26) we see that the CP can be substituted by a proform that consists of the root \(ti:\) ‘do.so’ + converbial suffix -ż9, and cannot be substituted by adverbial and nominal proforms (pronoun).

\begin{equation}
\text{(26)} \quad \text{Buryat CPs and their proforms}
\end{equation}

\begin{align*}
\text{badma } & \text{ sajana } & \text{ bulj-a: } & \text{ g9- ż9 } & \text{ han-a:; } & \text{ ojuna} \\
\text{Badma.NOM } & \text{ Sajana.NOM } & \text{ win-PST } & \text{ say-CNV } & \text{ think-PST } & \text{ Ojuna.NOM} \\
\text{baha } & \text{ ti:- ż9 } & / & \text{ *ti:-m9 } & / & \text{ *təɾən-i:j9 } & \text{ han-a:; } \\
\text{also } & \text{ do.so-CNV } & / & \text{ do.so-ADJ } & / & \text{ that-ACC } & \text{ think-PST}
\end{align*}

‘Badma thought that Sajana won, Ojuna also thought so.’

- Given that adverbial clauses that are marked by the -ż9 suffix are also substituted by \(ti:- ż9\), we can hypothesize that \(ti:- ż9\) is a proform for event modifiers.

Syntactic Distribution

- I do not know of a finite CP that can be hyperraised out of that would be able to occur in the subject position as it is (i.e., without changing the complementizer considerably).\textsuperscript{5}

\begin{equation}
\text{(27) a. } & \*_{\text{[CP]} } \text{ badma } & \text{ təɾg9 } & \text{ omət-hən } & \text{ g9- ż9 } & \text{ sajan-i:j9 } & \text{ ga:ru:l-a:} \\
\text{Badma.NOM } & \text{ cart } & \text{ break-PFCT } & \text{ say-CNV } & \text{ Sajana-ACC } & \text{ angry-PST}
\end{equation}

Intended: ‘That Badma broke the cart angered Sajana.’

\textsuperscript{4} ‘CONV’ stands for ‘converb’: a marking found on adverbial clauses of different kind, on complements of restructuring verbs and on lexical verbs of analytical constructions.

\textsuperscript{5} Not all CPs that do not do hyperraising though are able to occur in the subject position: ex., Russian requires an overt demonstrative on top of CPs in subject positions. But one thing to note is that Buryat’s (27a) cannot be saved by adding a demonstrative or other nominal modifier. The form of the complementizer needs to change from having adverbial morphology to having a participial one.
b. That Badma broke the cart angried Sajana.

- Buryat CPs have the same syntactic distribution as adverbs: except for the post-verbal position, they can occur freely in the sentence.\(^6\)

- E.g., both can be in between the subject and the verb or precede the subject:

(28) a. \[Sajana.NOM \begin{array}{l} CP \text{badma} \end{array} \text{ jr-ğ: gê-žô] hana-na\} \text{ say-CNV think-PRS} \text{'Sajana thinks that Badma came.'} \]

b. \[Badma.NOM \begin{array}{l} CP \text{badma} \end{array} \text{ jr-ğ: gê-žô] sajana \text{ hana-na} \} \text{ say-CNV Sajana.NOM think-PRS} \text{'Sajana think that Badma came.'} \]

(29) a. \[Zhargalma za:bol mûri:sö:n-dô ila-xa \text{ Zhargalma certainly competition-DAT win-FUT} \text{'Zhargalma will certainly win the competition.'} \]

b. za:bol rinčin ajaga uga:-xa \begin{center} \textbf{certainly} Rinchin dishes wash-FUT \text{'Rinchin will certainly wash the dishes.'} \end{center}

- In languages like English, it seems that the distribution of CPs is different from distribution of adverbs. E.g., cf. (30) and (31).

(30) a. Mary will think that John came.

b. *Mary will that John came think.

c. *Mary that John came will think.

d. */?That John came Mary will think.

(31) a. */? John will win the competition \textbf{certainly}.

b. John will \textbf{certainly} win the competition.

c. John \textbf{certainly} will win the competition.

d. \textbf{Certainly} John will win the competition.

- Knyazev (2016) has argued for Russian CPs that they need case, suggesting that they have a nominal-like syntactic behavior too.

Summary:

1. **Ideally**: learning the basic facts about CP’s morphosyntax (morphological form, syntactic distribution) should make one be able to infer its semantic type, and, consequently, infer whether it’s OK to hyperraise from this CP or not.

2. **In reality**: we need much more information about morphosyntactic properties of CPs in different languages to make typological generalizations.

\(^6\)There is a difference in acceptability between post-verbal adverbs and post-verbal CPs: while adverbs are completely grammatical in the post-verbal position, CPs are acceptable in some circumstances (tentatively: when there are no modals or auxiliaries present). I leave the issue of post-verbal CPs for further research.
5 Some predictions

- Under my proposal hyperraising to object is hyperraising into a $\theta$-position.

- In order for this configuration to be interpreted, the hyperraised DP needs to be interpreted in its final position, (32): only this way it will be able to saturate both the Theme of thinking and the Agent of drawing at the same time.

\[(32) \text{ Hyperraising to object (repeated)}\]

\[
\begin{array}{c}
\text{VP} <\text{vt}> \\
\text{DP e} \\
\text{Badma} \\
\theta_{Th} <\text{vt,evt}> \\
\text{V} <\text{vt}> \lambda_1 \\
\text{CP} <\text{vt}> \\
\text{that t}_1 \text{ will draw Sajana}
\end{array}
\]

- This automatically predicts the following three properties of hyperraised arguments:
  1. impossibility of reconstruction
  2. obligatoriness of de re
  3. unavailability of indexical shifting

5.1 Impossibility of reconstruction

- The ACC subject cannot make the position of the Theme argument of the attitude verb be of a higher type (the derivation will not converge).

- This correctly predicts that a hyperraised NPI argument will not be able to reconstruct to a position below embedded negation:

\[(33) \text{ *Badma } xən-i-şjə tərəgə qmdəl-ə-ğuj gə-žə xar-a:}\]

Badma.NOM who-ACC-PTCL cart break-PST-NEG COMP see-PST

‘Badma saw that no one broke the cart.’

5.2 Obligatoriness of de re

- Deal (2018): hyperraising to object is one of the paths to getting de re interpretations.

- Buryat: hyperraised arguments are also obligatorily interpreted de re, even if they are linearly preceeding some material of the embedded clause.
• 1 When the embedded clause requires an interpretation such that part of it is interpreted *de re* and the other part *de dicto* in order not to be a contradiction, the *de re* part is highly preferred to be expressed as an accusative subject:

(34) Context: Badma was walking yesterday and he saw some animals on a mountain. These were goats, but Badma mistook them for sheep.

\[
\begin{align*}
\text{badma} & \quad \text{jama:-nu:d-i:j} / ??\text{jama:-nu:d} \quad \text{xoni-d} / \text{jama:-nu:d} \quad \text{bəŋ} \\
\text{Badma.NOM} & \quad \text{goat-PL-ACC} / \text{goat-PL-NOM} \quad \text{sheep-PL} / \text{goat-PL} \quad \text{NOT} \\
\text{gə-ʒə} & \quad \text{han-a:} \\
\text{say-CONV} & \quad \text{think-PST}
\end{align*}
\]

‘Badma thought of goats that they were sheep / not goats.’

• 2 When there are no individuals of the kind denoted by the accusative subject (magical birds Harudi, white ravens), the sentence is infelicitous:

(35) səsəg \quad \text{xan} \quad \text{garudi} \quad \text{fubu:-n} / #\text{fubu:-jə} \quad \text{oi} \quad \text{so:-gu:r} \quad \text{ni:d-ə}: \\
\text{Seseg.NOM} \quad \text{HON} \quad \text{Garudi} \quad \text{bird-NOM} / \text{bird-ACC} \quad \text{forest} \quad \text{in-INSTR} \quad \text{fly-PST} \\
gə-ʒə \quad \text{han-a:} \quad \text{xarin} \quad \text{xan} \quad \text{garudi} \quad \text{fubu:-n} \quad \text{gazar} \quad \text{də:ŋə} \quad \text{ügi:} \quad \text{gə-ʒə} \\
\text{say-CONV} \quad \text{think-PST} \quad \text{but} \quad \text{HON} \quad \text{Garudi} \quad \text{bird-NOM} \quad \text{Earth} \quad \text{on} \quad \text{NEG} \quad \text{say-CONV} \\
məd-ə-ŋə-b \\
\text{know-PRS-1SG}
\]

‘Seseg thought that bird Garudi flew through the forest, but I know that there is no bird Garudi on the Earth.’

(36) bəxī: \quad \text{turla:g-u:d} \quad \text{xara} \quad \text{gə-ʒə} \quad \text{darima} \quad \text{məd-ə:-gu:r} \\
\text{all} \quad \text{raven-PL} \quad \text{black} \quad \text{say-CONV} \quad \text{Darima.NOM} \quad \text{know-PST-NEG} \\
‘Darima didn’t know that all ravens are black.’

a. \quad \text{saga:n} \quad \text{turla:g} \quad \text{gər-əi} \quad \text{xarzə:-gə:r} \quad \text{ni:d-ə-bəŋ} \quad \text{gə-ʒə} \quad \text{tərə} \\
\text{white} \quad \text{raven.NOM} \quad \text{house-GEN} \quad \text{side-INSTR} \quad \text{fly-PST2} \quad \text{say-CONV} \quad \text{that.NOM} \\
\text{üösəqələr} \quad \text{han-a:} \\
yesterday \quad \text{think-PST} \\
‘She thought that a white raven flew by the house yesterday.’

b. \quad #\text{saga:n} \quad \text{turla:g-i:jə} \quad \text{gər-əi} \quad \text{xarzə:-gə:r} \quad \text{ni:d-ə-bəŋ} \quad \text{gə-ʒə} \\
\text{white} \quad \text{raven-ACC} \quad \text{house-GEN} \quad \text{side-INSTR} \quad \text{fly-PST2} \quad \text{say-CONV} \\
tərə \quad \text{üösəqələr} \quad \text{han-a:} \\
\text{that.NOM} \quad \text{yesterday} \quad \text{think-PST} \\
‘She thought of a white raven that it flew by the house yesterday.’

• 3 Accusative subjects have to be specific, which creates a funny effect in (37): a man must have been afraid of a particular mosquito. See also informant’s comment about (38).

(37) Context: A man was considering to go outside, and decided not to.
'An elderly man thought that a mosquito will bite him.'

(38) Context: In the morning I left some cat food near my house. In the evening I saw that the food is gone.

‘In the evening I thought that some cat ate the food.’

Comment from the informant about ACC:
In this case (unlike with NOM – T.) I suspect some cat in the eating of the food. Maybe I think it was my cat, or have some other concrete cat in mind.

★ If the hyperraised subject saturates an argument in the matrix clause, obligatoriness of de re is expected.

★ Potential concern: how to reconcile obligatoriness of de re we have seen with the ability of the subject to form an idiom with the embedded predicate:

(39) sajana badm-i:n zürxnə /zürx-i:jə am-a:r-a:
Sajana.NOM Badma-GEN heart.NOM /heart-ACC mouth-INSTR-REFL
gar-a: gə-ʒə xar-a:
go.out-PST say-CONV see-PST
Lit.: ‘Sajana saw, that Badma’s heart went out of the mouth’.
Idiom.: Sajana saw that Badma got greatly frightened.

◦ What I currently predict this to mean: Sajana saw of Badma’s heart, that Badma got greatly frightened.

5.3 Impossibility of indexical shifting

• While Buryat is a language with a lot of indexical shifting, accusative subjects can never shift:

(40) Accusative subjects never shift
a. badma namajə sajan-i:jə zura-xa gə-ʒə han-a:
Badma.NOM 1SG.ACC Sajana-ACC draw-FUT say-CONV think-PST
‘Badma thought that I speaker will draw Sajana.’
b. badma bi sajan-ijj zura-xa-b g9-z9
Badma.NOM 1SG.NOM Sajana-ACC draw-FUT-1SG say-CONV
han-a:
think-PST
‘Badma\(_k\) thought that he\(_k\)/speaker will draw Sajana.’

- It is possible to account for these facts by using a monster operator (Shklovsky & Sudo 2014, a.o.) together with the claim that accusative subjects need to move above it.
- If hyperraising is raising to a \(\theta\)-position, we might not need monsters: when a pronoun saturates a predicate, one of the positions it is inserted in is in the matrix context.
- The only requirement we need is: a pronoun that saturates two argument positions at once cannot refer in them to two different individuals (*Badma\(_k\) thought of me\(_k\)/speaker that he\(_k\) will draw Sajana*).

**Summary:** Reconstructing hyperraised arguments in order to get de dicto/shifted readings/license an NPI is impossible because they need to saturate the verb’s Theme argument.

### 6 Some open questions

**★ Implication:** ability to be hyperraised out of is not predicted to correlate with finiteness, but is predicted to correlate with syntactic distribution.

**★ English ECM: could it have the same raising-to-object LF as I propose for Buryat?**

**★ What about hyperraising to subject? The explanation is extendable to hyperraising to subject (I think), but do we want it to be extendable?**

**References:**

