Hyperraising and evidentiality

Tommy Tsz-Ming Lee¹ and Ka-Fai Yip²
¹University of Southern California, ²Yale University

1. Introduction

Raising-to-subject constructions display cross-linguistic variations. *Hyperraising* (HR, Ura 1994) is disallowed in English.

(1) English

- a. The rain_i **seems** t_i not to stop.
- b. *The rain_i **seems** that t_i will not stop.

In Cantonese and Vietnamese, we observe an apparent HR pattern with some attitude verbs.

(2) Baseline examples

- a. Ngo **gamgok/tengman** waa coeng jyu m wui ting [Cantonese] 1SG **feel.like/hear** C CL rain NEG will stop 'I feel like/hear the rain will not stop.'
- b. Tôi **cảm giác/nghe nói** rằng cơn mưa này sẽ không dừng [**V**ietnamese] 1SG **feel.like/hear** C CL rain this will NEG stop 'I feel like/hear the rain will not stop.'

Importantly, these attitude verbs demonstrate an (optional) alternation in terms of the argument structure. We call these attitude verbs **raising attitude verbs (RAVs)** and the relevant constructions **RAV-constructions**.

(3) Apparent HR pattern

gamgok/tengman waa [C] a. Coeng jyu m wui ting feel.like/hear rain NEG will stop (I) feel/hear that the rain will not stop.' b. Cơn mưa này **cảm giác/nghe nói** rằng sẽ [V]không dừng CL rain this feel.like/hear C will NEG stop (I) feel/hear that the rain will not stop.'

Such alternation, however, is not observed with other attitude verbs. We call these verbs **non-raising attitude verbs (NRAVs)**.

(4) a. *Coeng	yu	gamgok-dou/zidou	waa m	wui ting	[C]
CL	rain	feel-result/know	C	NEG will stop	
'(I) felt/	know t	hat the rain will not sto	p.'		
b. *Cơn n	nưa nà	ny cảm-thấy/biết	rằng	sẽ không dừng	[V]
CL r	ain th	is feel-result/know	C	will NEG stop	
'(I) felt/	know t	hat the rain will not sto	p.'		

The availability of such alternation crosscuts the class of attitude verbs.

Raising Attitude Verbs (RAVs)			Non-raising Attitude Verbs (NRAVs)		
Gloss	Cantonese	Vietnamese	Gloss	Cantonese	Vietnamese
'feel like'	gamgok	cảm giác	'feel-result'	gamgok-dou	cảm-thấy
'hear'	tengman/ tenggong	nghe nói	'hear-result'	teng-dou	nghe-được
'guess'	gugai	đoán (là)	'guess-result'	gu-dou	đoán-được
'believe'	soengseon	tin (là)	'think'	jingwai/ gokdak	nghĩ/cho
'suspect'	waaiji	nghi (là)	'know'	zidou	biết
'seem (lit.: fear)'	paace/taipaa/ paahai	e/sợ	'remember'	geidak	nhớ
'be.sure'	hangding	/			_
'talk-prog'	gong-gan	/			
'say-perf'	waa(-zo)	/			

Table 1 – Two classes of attitude verbs in Cantonese and Vietnamese

In this paper, we argue for three claims.

- First, we show that hyper-raising constructions are attested in both Cantonese and Vietnamese.
- Second, the availability of hyper-raising is associated with evidentiality. In particular, we suggest that hyper-raising constructions are only possible for attitude verbs that presumes indirect evidence for their clausal complements.
- Lastly, we propose a phase deactivation account for hyperraising in these languages, following the spirit in Rackowski and Richards (2005), Nunes (2008) and Halpert (2019).

Two implications:

- First, "exceptional" raising behaviors are related to the lexical semantics of predicates. Raising possibilities might not be entirely idiosyncratic (*contra* Polinsky 2013).
- Second, this paper reports another feature (i.e. evidence feature) whose Agree relation with a phase may "unlock" a phase, in addition to selectional features (Rackowski and Richards 2005) and phi-features (Halpert 2019)

Roadmap:

- Section 2 shows that RAV-constructions involve HR.
- Section 3 draws a correlation between indirect evidence and the possibility of HR.
- Section 4 presents our phase deactivation account.
- Section 5 concludes.

2. Hyper-raising

Descriptively, the sentences in (3) share the schema in (5).

(5) <u>RAV-constructions</u>

S RAV [V (O)]

where S is thematically associated with V but not RAV

What we are trying to convince you:

- The subject is in its derived position (not a hanging topic)
- The movement displays A-movement properties (not topic movement)
- The VO-clause is a finite CP (not a reduced clause)

2.1. Movement, not base generation

Resumptive/coreferent pronouns. The surface subjects cannot co-index with an embedded pronoun, suggesting they are in a derived position.

- (6) Aaming_ine, ngo **gamgok** [waa keoi_i m-wui lai] (Base-generated topic) Ming TOP 1SG **feel.like** C 3SG NEG-will come 'As for Ming, I feel like he will not come.'
- (7) Aaming_i **gamgok** [waa (*keoi_i) m-wui lai] (Ban on resumptive pronouns) Ming **feel.like** C 3SG NEG-will come '(I) feel like Ming will not come.' (*cf.* OK'Ming_i feels like he_i will not come')

Island effects. The surface subject cannot be thematically associated with an embedded predicate in an island, such as the complex NP island in (9).

(8) *Aaming_i **tenggong** [waa [$_{DP}$ [$_{CP}$ t_i jiging zau-zo] ge siusik] hai gaa ge] Ming **hear** C already leave-PERF MOD rumor be false SFP '(I) hear that the rumor that Ming already left is false.'

Idiomatic meaning. Displacement of the subject of a sentential idiom retains the idiomatic reading.

(9) ni-zek laaihaamou_i **gamgok** [waa t_i soeng sik tinngojuk] this-CL toad **feel.like** C want eat swan.meat '(I) feel like (s/he) is aiming at the moon.' (lit.: '(I) feel like that this toad wants to eat swan meat.')

2.2. A-movement, instead of A'-movement

A subject-object asymmetry. The movement in (11) privileges subjects over objects (both direct and indirect), an asymmetry attributable to a locality condition for A-movement.

```
(10)a. Aaming gamgok [ waa t<sub>subi</sub> bei-zo
                                                houdou syu Aafan ]
                                                                                   (subject)
      Ming
               feel.like
                                     give-PERF many
                                                         book Fan
                        gamgok [ waa Aaming bei-zo
   b. *houdou syu
                                                              \mathbf{t}_{\mathrm{DO}}
                                                                   Aafan ]
                                                                                 (direct object)
                                             Ming give-PERF
                 book feel.like
                                       C
                                                                      Fan
       many
                                                     houdou syu
   c. *Aafan gamgok [ waa Aaming bei-zo
                                                                      \mathbf{t}_{\mathbf{IO}}
                                                                                (indirect object)
       Fan
               feel.like
                            C
                                  Ming
                                           give-PERF many
                                                                book
    (a-c): '(I) feel like Ming gave many books to Fan.'
```

New binding possibility. The surface subject can bind a pronominal variable in the matrix clause after movement, as shown by the contrast in the sentences in (12).

(11)a. <u>Impossible binding on pronouns</u>

```
*[on keoi; caandeige m-tung] ngo tengman ...
accord it origin MOD difference 1SG hear.say
... [ waa mui-lap-zyunsek; dou jau m-tung gwongzaak]
C every-CL-diamond all have different luster
'According to its; origin, I heard that every piece of diamond; will have different lusters.'
```

b. Possible binding on pronoun

```
mui-lap-zyunsek_i [ on keoi_i caandeige m-tung] tengman ... every-CL-diamond accord it origin MOD difference hear.say .... [ waa t_i dou jau m-tung gwongzaak] C all have different luster (Lit.) 'Every piece of diamond_i, according to its_i origin, (I) heard, will have different lusters.'
```

2.3. The complement clause as a (finite) CP

C head. waa (Cantonese, Hwang 2000, Yeung 2006) and là/rằng (Vietnamese, Chappell 2008)

Embedded topics. Under standard assumptions, topics are base generated in CP peripheral position (Rizzi 1997).

```
(12)a. ngo gamgok [CP gam-do-ceot-hei [TP Aaming zinghaitai-zo ni-ceot-hei]] (transitive)

I feel.like so-many-CL-film Ming only watch-PERF this-cl-film

'I feel like, among so many films, Ming only watched this one.'

b. Aaming gamgok [CP gam-do-ceot-hei [TP zinghai tai-zo ni-ceot-hei]] (RAVs)

Ming feel.like so-many-CL-film only watch-PERF this-cl-film

'(I) feel like, among so many films, Ming only watched this one.'
```

3. Evidentiality and the two classes of attitude verbs

The remaining issue: why there is an asymmetry between the two sets of attitude verbs?

Our suggestion:

- RAVs all come with an evidential requirement in their lexical semantics, which requires the attitude report to be based on *indirect evidence*.
- Such requirement is lacking in NRAVs.

We start with some (near-)minimal pairs in Table 1 (partly repeated below): some RAVs differ from NRAVs in the absence of the verbal suffix -dou.

```
(13)RAVs: gamgok 'feel like' tengman 'hear' gugai 'guess'
NRAVs: gamgok-dou 'feel-result' teng-dou 'hear-result' gu-dou 'guess-result'
```

Descriptively, *-dou* indicates "accomplishment or successful completion of an action" and it is used to forms verbs of perception (Matthews and Yip 2011:251-2).

(14) *Direct context*: Ming is playing piano now. You hear the sound and say:

```
a. ngo { teng-dou/ #tengman } Aaming taan-gan kam (transitive usage)
1SG hear-result hear.say Ming play-PROG piano
'I hear Ming playing piano.'
```

b. #Aaming **tengman** taan-gan kam (RAV-constructions)
Ming **hear.say** play-PROG piano
'Ming, (I) heard that Ming is playing piano.'

The requirement of indirect evidence also applies to other RAVs.

Raisir	ng Attitude Verbs (RAVs)	Non-raising Attitude Verbs (NRAVs)		
Gloss	Verbs	Evidence	Gloss	Verbs	Evidence
'feel like'	gamgok	inferential	'feel-result'	gamgok-dou	direct sensory
'hear'	tengman/tenggong	hearsay	'hear-result'	teng-dou	direct sensory
'guess'	gugai	inferential	'guess-result'	gu-dou	direct sensory
'believe'	soengseon	inferential	'think'	jingwai/ gokdak	underspecified
'suspect'	waaiji	inferential	'know'	zidou	direct (factive)
'seem (lit.: fear)'	paace/taipaa/ paahai	inferential	'remember'	geidak	direct
'be.sure'	hangding	inferential			
'talk-prog'	gong-gan	hearsay			
'say-perf'	waa(-zo)	hearsay			

Table 2 – Two classes of attitude verbs and their evidential component

There is supporting evidence for this distinction. It patterns with epistemic modals in English which display a similar requirement (von Fintel and Gillies 2010).

(15)[Seeing the pouring rain]

(direct evidence)

- a. It's raining.
- b. ??It must be raining.

(16)[Seeing wet rain gears and knowing rain is the only possible cause]

(indirect evidence)

- a. It's raining.
- b. It must be raining.

The correlation between raising possibility and evidentiality is further supported by evidence in Romanian (Alboiu and Hill 2013, 2016).

(17) Raising correlates with indirect evidentiality in Romanian (Alboiu and Hill 2013:295-6)

a. Văd [că e murdar pe mâini]

(direct evidence)

on hands see.1 that is dirty

'I see his hands are dirty.'

auzit [că Mihai_k repară_k casa have.1SG heard that Mihai fixes house.the (indirect evidence)

'I've heard that Mihai is fixing the house.'

c. L-am auzit **pe Mihai**_k [că repară_k casa] (RtO, indirect evidence) house.the him-have.1sGheard DOM Mihai that fixes 'I've heard Mihai (claiming that) he's fixing the house.'

4. Towards a proposal

Standard generative theories are too restrictive in that they systematically rule out any instance of HR constructions, by virtue of (#1) the ban on Improper Movement (IM, Chomsky 1973, Chomsky 1986), (#2) the Phase Impenetrability Condition (PIC, Chomsky 2001)

Three families of proposals on HR:

#1	Featural distinction on A/A'-positions
	(a) Spec,CP as A-positions (Obata and Epstein 2011, Fong 2019)
	(b) Hyper-raising as A'-movement with A-movement effects (Alboiu and Hill
	2016)
#2	Conditioned deactivation of PIC
	(a) Selective opacity of a domain: (i) Phase unlocking (Halpert 2019)
	(b) Deactivation of phasehood: (i) Defective CP (Nunes 2008); (ii) Exfoliation
	(Pesetsky 2019)
#3	Parametrization on Multiple Case
	(a) Parametrization on Multiple Agree (Halpert 2019)
	(b) Spec, TP _{fin} may not be Case positions (Ura 1994)

Table 3: Different approaches on hyper-raising

Our proposal: along the line of conditioned deactivation of PIC (#2).

- We suggest that PIC can be obviated under certain circumstances.
 - PIC is obviated by an Agree relation between the matrix verb and the entire CP.
 - the requirement of indirect evidence materializes as a syntactic feature [EV].
- The proposal bears a family resemblance to approaches to locality in Rackowski and Richards (2005), Nunes (2008) and Halpert (2019).

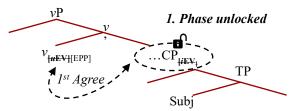
(18) Featural setup

- a. There are two (null) C heads, namely, C and $C_{\text{[EV]}}$.
- b. [EV] is an interpretable feature that marks an indirect-evidence-based proposition.
- c. RAVs (≠NRAVs) carry an uninterpretable counterpart [uEV], which agrees with a CP.

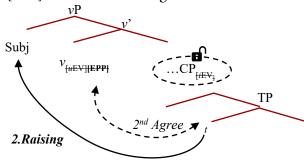
Crucially, it is the Agree relation between RAVs and CP in terms of the proposed evidential feature that enables A-movement from within the finite CP.

(19) Graphic representation of the proposed derivation of RAV-constructions

a. [EV]: the first Agree relation between the probe ν and the CP



b. [EPP] on ν : the second Agree relation between the probe ν and the embedded subject



c. [EPP] on T: the subject is further raised to Spec TP (not shown).

5. Concluding remarks

[repeated from above]

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