

## Indirect evidence as a licensing condition of hyperraising in Cantonese and Vietnamese

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**Introduction.** Raising-to-subject out of a finite clause (hereafter *hyperraising*) is attested in various languages (Ura 1994), and it raises concerns over the Phase Theory (that suggests that CP is a phase, Chomsky 2000, 2001) and the Ban on Improper Movement (Chomsky 1973, May 1979). The combined effects overgeneralize to rule out hyperraising in *any* language. Existing proposals to hyperraising fall into two groups: (i) the deficient-CP approach suggests that some CPs are inherently non-phasal, if these CPs lack some relevant properties of ordinary ones (e.g. Ferreira 2005 for Spanish; Zeller 2006 for Nguni; Alexiadou & Anagnostopoulou 1999 for Greek; Uchibori 2000 for Japanese); (ii) the conditioned-phase-deactivation approach suggests that a CP ceases to be a phase if it stands in a syntactic relation with a higher head, as argued in Nunes (2008), Halpert (2016, 2019).

**Goals.** This study provides further evidence in support of the second approach and we further propose that an *evidential* component encoded in the embedding predicate serves to deactivate a CP phase, hence licensing hyperraising. Since hyperraising is only licensed by a subset of attitude verbs, this approach, by making reference to evidentiality, captures the *language-internal variation* among embedding predicates.

**The data.** In **Cantonese** and **Vietnamese**, some attitude verbs ('feel.like'/'hear.say') show a raising pattern, where the surface subject is thematically related to the embedded predicate (i.e. surface subject ≠ attitude holder), as in (1), despite the presence of a CP boundary (marked by complementizers).

- (1) a. *Coeng-jyu*<sub>i</sub> gamgok tengman waa t<sub>i</sub> m wui ting [Cantonese]  
CL-rain feel.like hear.say C NEG will stop  
b. *Con-mưn*<sub>n</sub>à<sub>y</sub><sub>i</sub> cảm giác nghe nói rằng t<sub>i</sub> sẽ không dừng [Vietnamese]  
CL-rain this feel.like hear.say C will NEG stop  
Both: '(lit.) The rain is felt/heard that (it) won't stop.'

Yet, the same raising pattern is not observed with other attitude verbs ('feel-RESULT'/'know'), as in (2).

- (2) a. \**Coeng-yu*<sub>i</sub> gamgok-dou zidou waa t<sub>i</sub> m wui ting [C]  
CL-rain feel-RESULT know C NEG will stop  
b. \**Con-mưn*<sub>n</sub>à<sub>y</sub><sub>i</sub> cảm thấy biết rằng t<sub>i</sub> sẽ không dừng [V]  
CL-rain this feel-RESULT know C will NEG stop  
Both: '(lit.) The rain is felt/known that (it) won't stop.'

**Evidence for A-movement in (1).** The embedded subject in (1) lands on matrix Spec TP. **First**, (3) suggests that the movement privileges *subjects* over *objects*, an asymmetry attributable to a locality condition for A-movement: the subject is a closer Goal to the matrix Probe than the object. This also suggests that the subject is not raised by topicalization (which does not show the same asymmetry).

- (3) a. *go-toifung*<sub>subj</sub> gamgok [<sub>CP</sub> t<sub>subj</sub> wui ceoiwai jat-zo-singsi] Subj-obj asymmetry [C]  
CL-hurricane feel.like will destroy one-CL-city  
b. \**jat-zo-singsi*<sub>obj</sub> gamgok [<sub>CP</sub> go-toifung wui ceoiwai t<sub>obj</sub> ]  
one-CL-city feel.like CL-hurricane will destroy  
Both intended: '(lit.) The hurricane is felt that (it) will destroy a city.'

**Second**, (4b) shows that the moved subject can bind a pronominal variable that it fails to bind before movement (=4a), instantiating a typical property of A-movement. Data in Cantonese:

- (4) a. \*[on *keoi*<sub>i</sub> caandei ge m-tung] tengman [<sub>CP</sub> mui-lap-zyunsek<sub>i</sub> dou jau m-tung gwongzaak]  
accord it origin MOD different hear.say every-CL-diamond all have different luster  
b. *mui-lap-zyunsek*<sub>i</sub> [on *keoi*<sub>i</sub> caandei ge m-tung] tengman [<sub>CP</sub> t<sub>i</sub> dou jau m-tung gwongzaak]  
every-CL-diamond accord it origin MOD different hear.say all have different luster  
'Every piece of diamond<sub>i</sub>, according to its<sub>i</sub> origin is heard that (it) will have different lusters.'

**An evidential component.** We propose that attitude verbs can be classified into two groups based on whether the attitude report is *indirect-evidence-based*. (5a) shows that verbs in (1b) are compatible with direct evidence, whereas those in (1a) show the opposite in (5b). The latter ones are only compatible with

indirect evidence. The distinction in evidentiality correlates with their raising possibilities: only the *indirect-evidence-based* attitude verbs license raising.

(5) *Scenario: It is 10°C. Aaming went out without wearing a coat. Shivering, he said:*

a. ngo [gamgok-dou] [xidou] ceotminhou dung [C, same for V [cảm-thấy] / [biết]]  
 1SG feel-result know outside very cold ‘I feel/ think/ know it is cold outside.’

b. #ngo [gamgok] [tengman] ceotminhou dung [C, same for V [cảm giác] / [nghe nói]]  
 1SG feel.like/hear outside very cold ‘I feel like/ hear that it is cold outside.’

The evidential component proposed here can be seen as an extension of von Stechow & Gillies’ (2010) proposal on English *must*, which encodes an evidential component in its lexical semantics. The correlation between raising possibility and evidentiality is further supported by evidence in Romanian (Alboiu & Hill 2016): when perception verbs take indicative clauses, raising(-to-object) is allowed only if the sentence comes with an indirect evidential reading.

**Analysis.** Our proposal consists of three components: (i) CP may carry an [EV] feature, an interpretable feature that marks an indirect evidence-based proposition (see Kratzer 2016). While [EV] has no phonological realization in Cantonese and Vietnamese embedded clauses, it may be realized overtly in other languages, such as C-T agreement in Quechua (Faller 2002, Sánchez 2004). (ii) Attitude verbs in (2), but not in (3), carry an uninterpretable counterpart [uEV], which agrees with the embedded CP. Again, Cantonese and Vietnamese generally lack morphological inflection. However, in other morphologically rich languages like Lithuanian, verbal inflection may be used to mark evidentiality (Gronemeyer 1997). (iii) With this featural setup, we adopt the idea of “phase unlocking” advocated in Rackowski & Richards (2005), which suggests that the locality condition imposed by CPs is obviated if a higher head first agrees with a phase and then goes on to agree with a phase-internal element. Substantially, the [uEV] feature on attitude verbs in (2) agrees with the [EV] feature on CP (=6a). This Agree relation ‘unlocks’ the CP phase. Consequently, it enables a *second* Agree relation (e.g. for EPP or Case) between the attitude verb and the embedded subject (=6b). A-movement across a CP boundary is achieved with no intermediate touchdown in Spec CP, hence no Improper Movement. The derivation goes on as (6c) depicted.

(6) a. An attitude verb c-selects and agrees with a CP phase:

[<sub>VP</sub> v [<sub>uEV</sub>] [EPP] [<sub>CP</sub> [EV] C [<sub>TP</sub> S VP ] ] ]

b. It further agrees with S and triggers movement:

[<sub>VP</sub> S<sub>i</sub> v [<sub>uEV</sub>] [EPP] [<sub>CP</sub> [EV] C [<sub>TP</sub> t<sub>i</sub> VP ] ] ] (if there is no DP/*pro* in the numeration)

c. The S is further raised to the matrix Spec TP (= raising-to-subject constructions).

It follows that verbs in (3) and in English lack an [uEV] feature, and the step in (6b) is thus impossible without the mediation of Spec CP and subsequent A-movement from which instantiates Improper Movement. Note that if there is a DP or *pro* in the numeration, the EPP feature on the verb in (6b) can be alternatively satisfied by Merge (rather than Move), deriving (5b).

**Discussions.** (i) Our proposal attributed some ‘exceptional’ raising behaviors to the lexical semantics of predicates. That is, only indirect-evidence-based attitude verbs carry an [uEV] feature which enables hyperraising. This echoes Wurmbrand’s (2019) recent claim that raising is more restricted than previously thought. Besides phase, raising may also be constrained by topichood of the raised DP (Sener 2011 for Turkish), predicative properties (Yoon 2007 for Korean; Horn 2008 for Japanese) and thematic configuration of the matrix predicates (Wurmbrand 2018 for English). With cross-linguistic support, we showed that evidentiality also plays a significant role in raising. (ii) This paper supported the view that phases may be deactivated during derivation, by reporting a novel ‘unlocking’ effect of Agree relation on [EV] features between verbs and their complement clauses. The finding is consistent with Rackowski & Richards’ (2005) claim that Agree relation on Case between *v* and a CP helps explain the pattern of multiple *wh*-movement in Tagalog, and with Halpert’s (2019) proposal that T *phi*-agrees with a CP in Zulu, which then allows for hyperraising of an embedded subject. That phasehood is conditioned dynamically provides a way to explain why locality conditions may be ‘selective’.