Against a syntactic approach to *wh*-rhetorical questions —with special focus on Cantonese (and Vietnamese)

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[Vietnamese]

1 Introduction

- Rhetorical questions (RQs) are special in blending the **question** force and **assertive** force.
- Another remarkable property is it seems to trigger a **negation**, leading to the empty set interpretation of *wh*-words (henceforth "Neg-*wh*-RQs").

(1) *Wh*-rhetorical questions with a negative (empty set) answer (**Neg-wh-RQs**)

- a. After all, what does Iafak know about rhetorical questions?! (i.e., Iafak knows nothing about RQs)
- b. 講到尾,邊個會鍾意美國啲嘢食吖?! (cf. 說到底,誰會喜歡美國的食物?!)[Cantonese]
 Gongdoumei, bingo wui zungji Meigwok di jesik aa1?!
 after.all who will like US CL.PL food sFP
 RQ: 'Who would like the food in the US?! (i.e., no one likes the food in the US)'
- c. Ai mà thích mày (đâu) chứ?!
 who ма like you sfp sfp
 RQ: 'Who would like you?! (i.e., no one would like you)'
- A longstanding debate: How to analyze RQs, in particular their negative answer

The syntactic approach

(Sadock 1971, 1974; Nakashima 2018; Tang 2022b; Choi 2024c; cf. Han 2002)

- A null **negative operator** in the syntax is responsible for the negative answer
- There is some licensing relation between the Op and the *wh*-word
- Mixed flavor: projected C/force heads for questions and assertions
- Evidence for **syntactic licensing** (to be discussed later)

(2) $[..., OP_{NEG} [..., wh ...]]$

The pragmatic approach

(Rohde 2006, 2024; Caponigro and Sprouse 2007; Biezma and Rawlins 2017; Farkas 2024)

- RQs are questions whose answers are (believed to) in the Common Ground, known by both speakers and addressees → Negative answers are already known (hence "assertable")¹
- RQs permit more than negative answers
- (3) a. You should always help your mom if she needs your help. After all, who gave birth to you?
 (i.e., Your mom gave birth to you)
 (Caponigro and Sprouse 2007, ex.13)
 - b. Is the pope catholic? (i.e., of course yes)

(4)	Question type	Ans known to Speaker	Ans known to Addressee
	a. Information-seeking questions	No	Yes
	b. Quiz questions	Yes	No
	c. Rhetorical questions	Yes	Yes
	d. "Open" questions	No	No
	E.g., What's the meaning of life?	Does God exist?	

1. This is a simplified view, see Farkas (2024) for recent refinement.

- Today's empirical focus: Neg-wh-RQs
- Main Question: Are Neg-wh-RQs syntacically derived, or pragmatically derived?
- Line of argumentation: Contrasts with non-canonical wh-constructions

Recent advance on non-canonical *wh*-constructions like mirative and causal 'how' (Tsai 1999a, 2008, 2011) and NEG-wh constructions (Cheung 2008, 2009):

- (5) Non-exhaustive list of recent studies on non-canonical *wh*-constructions (cf. Tsai 2025's overview)
 - a. Cantonese (Tang 2022a, 2022b; Choi 2024a, 2024c)
 - b. Japanese (Nakashima 2018; Oguro 2018; Hill and Miyagawa 2024)
 - c. Korean (Kim 2020; Kim and Kim 2025; Cho 2023; Shin and Tsai 2025)
 - d. Mandarin (Pan 2015; Yang and Tsai 2019; Tsai 2021; Tsai and Yang 2022; Tsai 2023; Yang 2021)
 - e. Taiwan Southern Min (Lau and Tsai 2020)
 - f. Vietnamese (Phan and Tsai 2022, 2025)
 - g. ...

→ Argued to involve some syntactic dependencies

Spoiler

- The reasoning and lines of argumentation are simple:
- (6) a. There is a way to single out Neg-*wh*-RQs from other RQs, in terms of distribution. \Rightarrow §2
 - b. There has been recent evidence for the syntactic approach in non-canonical *wh*-constructions. \rightarrow §3
 - c. Let's just apply the tests to Neg-wh-RQ and see what would happen! \rightarrow §4
 - d. Then we discuss in §5-6, with some extension to Vietnamese, the following:
 - #1 Syntactic dependencies are *absent* in Neg-*wh*-RQs, unlike in non-canonical *wh* (NCWH) constructions
 → Syntactic and pragmatic approaches cover empirically different phenomena
 - #2 **Methodologically**, tests for "force shift" and syntactic dependencies should be distinguished
 - #3 **Theoretically**, there seems to be a deeper connection between pragmatic "force shift" and syntactic NCWH

2 Wh-rhetorical questions in Cantonese

The first cut: ordinary questions vs. rhetorical questions.

- Ordinary (information-seeking) wh-questions require an answer
- RQs can be answered, but does not need to be; the answer can be agreeing with the (negative) assertion

(7) 邊個會嚟啊?

Bingo wui lai aa3? who will come sFP OQ: 'Who will come?' Ans: Ming / # No answer / # Yes, you're right. RQ: 'Who will come?!' Ans: No one / No answer / Yes, you're right.

• As well known, one powerful test of RQs is to using adverbs like after all. (Sadock 1971, 1974, i.a.)

- What's remarkable about Cantonese is that SFP *aa1* enforces an rhetorical reading (Tang 2022b; Choi 2024c; but see Ng 2025); vs. using *ne1* only gives the ordinary question reading
- See also Japanese mono ka (Oguro 2018)
- (8) a. 講到尾,邊個會嚟啊?!

Gongdoumei, bingo wui lai aa3? afterall who will come sFP RQ: 'Who will come?!' Ans: No one / No answer / Yes, you're right.

- b. 邊個會嚟吖/呢?
 Bingo wui lai {aa1/ ne1}?
 who will come sFP sFP
 Aa1: RQ: 'Who will come?!' Ans: No one / No answer / Yes, you're right.
 Ne1: OQ: 'Who will come?!' Ans: Ming / #No answer / #Yes, you're right.
- (9) Devices to indicate RQs in Cantonese
 - a. Adverb gongdoumei 'after all' (Cheung 2008, 2009; Tang 2022b)
 - b. SFP aa1 (Tang 2022b; Choi 2024a, 2024c; but see Ng 2025)
 - c. Strong NPI sai 'need' (to be discussed in \$3; Choi 2022; Tang 2022b)
 - d. Discourse particle jau '(lit.) again' (not discussed; Yip 2025, adopting Wei 2020's test)

The second cut: Negative answer or not

- Using jau 'have' enforces a negative answer
- · Pragmatically odd to combine with questions with singleton set answers by world knowledge
- \rightarrow at best, can be an insult to say no one would want to give birth to you
- (10) Neg-wh-RQs: Jau-wh 'have wh' + SFP aa1
 - a. 有邊個(會)鍾意佢吖?
 - Jau bingo (wui) zungji keoi aa1?! have who will like 3sg sFP 'Who would like him/her?! (—no one)'
 - b. #有邊個(會)生你落嚟吖?
 - #Jau bingo (wui) saang nei loklai aa1?! have who will give.birth 2sG out sFP #'Who gave/ would give birth to you?! (—no one)'
 - Using *zung* 'also' gives a 'wh-else' reading
 - Together with SFP aa 1, the answer must be an empty set, excluding the presupposed salient individual
- (11) <u>Neg-wh-RQs: Zung-wh 'also wh, i.e., wh-else' + SFP aa 1</u>
 除左佢自己, 佢仲(會)鍾意邊個吖?
 Ceoi-zo keoiziji_k, keoi_k zung (wui) zungji bingo aa1?!
 except 3sg.self 3sg also will like who sFP
 'Apart from himself/herself, who else would s/he like?! (—no one else)'

- In contrast, using the cleft focus marker hai 'be' enforces a singleton set answer the answer is definite
- Existence is presupposed by the cleft marker
- (12) Neg-wh-RQs: *Hai-wh* 'be wh' + SFP *aa1* 'what (thing)'

係邊個生你落嚟吖? Hai bingo saang

nei loklai aa1?! be who give.birth 2sg out SFP 'Who gave birth to you?! (-your Mom!)'

- Now, we have the forms mapping to different types of RQs (sorted by answer type)
- This is important, since for an ambiguous/underspecific constructions, sometimes a reading is less accessible but might not be completely unavailable
 - \rightarrow Ungrammaticality of *jau/zung-wh* + *aa1* RQs directly indicate the unavailability of negative answers
- (13) Different forms of *wh*-rhetorical questions in Cantonese
 - ① Unmarked (or with SFP *aa1*)
 - 2 Jau-wh 'have wh' + SFP aa1
- ➔ Ans: empty set or singleton set

 $\rightarrow \Delta_3$

- → Ans: empty set
- ③ Zung-wh 'also wh, i.e., wh-else' + SFP $aa1 \rightarrow$ Ans: empty set
- ④ *Hai-wh* 'be wh' + SFP *aa1* 'what (thing)' → Ans: singleton set

3 Non-canonical wh-constructions in Cantonese

For the purpose of this talk, I limit the scope of non-canonical wh (NCWH) to:

(i) a limited set of wh-words that (ii) obligatorily triggers a **negation** (iii) in a certain syntactic position and (iv) lacks an (informational seeking) interrogative use.

3.1 Overview

Four such NCWH constructions are found in Cantonese:

- (14) Non-canonical wh (NCWH) constructions in Cantonese
 - Sentence-initial *matje/ me* 'what (thing)' (\neq *mat* 'what', see below) $\rightarrow \Delta_1$
 - NEG-WH constructions: bin(dou) 'where', dim 'how', geisi 'when' $\rightarrow \Delta_2$
 - Special modal saimat 'needn't, lit. need-what'
 - **④** Post-verbal (infixal) wh-applicative mat/matje(je)/me(je) 'what (thing)' $\rightarrow \Delta_4$
- (15) $\left[\sum_{P} \Delta_1 \dots \sum_{P} \text{Subj} \dots \Delta_2 \left[\sum_{M \in P} \text{will/can/need}, \dots \right] \Delta_3 \right] \dots \left[\sum_{P} V \Delta_4 (V) \text{Obj} \right] \right] \right]$
 - • Sentence-initial matje/ me 'what (thing)'²
 - The highest NCWH: *Matje* (fused as *me*) (Mandarin: Cheung 2008; Tsai 2011, 2015; Pan 2015; Yang 2021, i.a.)
- (16) 乜嘢佢會嚟吖?!

Matje keoi wui lai aa1?! what 3sg will come sFP 'No way s/he will come.'

^{2.} Cheung (2008) mentions cases with post-subject me 'what'. His examples however should be analyzed as sentence-initial me with a preceding topic.

Initial matje vs. mat

- NCWH matje/me is different from sentence-initial mat (Tang 2008; Cheng 2021).
- Sentence-initial *mat* is a speech act modifier that occurs in yes-no questions (marked by *me1* and *aa4*), *why*-questions (marked by *ge2*), and declaratives (marked by *gaa3*).
- It does not necessarily inducing a negation (but only some degree of negative bias that trigger a surprise/whining reading) → Not a non-canonical wh construction under discussion

(17) a. 乜你去咩/呀/嘅/架?

Mat nei heoi me1/aa4/ge2/gaa3? what 2sG go sFP Me1/aa4: 'What, you will go?' (surprise) Ge2: 'Why do you go?' (causal) Gaa3: 'Oh, how come you will go?!' (whining)

- b. *乜嘢/咩你去咩/呀/嘅/架?
- ***Matje/me** keoi wui lai me1/aa4/ge2/gaa3? what 3sG will come sFP
- ② NEG-WH constructions (Cheung 2008, 2009; Tang 2022b; Choi 2024a, 2024c)
- Most widely studied
- Unlike Mandarin (Tsai 1999b, 2008, 2023; Tang 2015a; Cheung 2008, *i.a.*), Cantonese NEG-WH must be preverbal/modal and cannot precede the subject.
- → Should **not** be conflated with sentence-initial *matje* 'what' (see also differences in SFP pairing)
- (18) a. 阿明邊(度)/點/幾時可以去吖?!

Aaming {bin(dou)/ dim/ geisi} hoji heoi aa1?!Mingwherehowwhen can gosFP'No way Ming can go.'

- b. *邊(度)/*點/??幾時阿明可以去吖?!
 {*bin(dou)/ *dim/ ??geisi} Aaming hoji heoi aa1?!
 where how when Ming can go sFP
- Special modal *saimat* 'needn't, lit. need-what' (Tang 2022b)
- Sai 'need' itself is a strong NPI (Choi 2022)

(19) 佢使乜抹地吖?!

Keoi saimatmaat dei aal?!(Tang 2022b:310)3sgneed-what clean floor sFP'What is the point of his/her cleaning the floor?' (i.e., S/he does not need to clean the floor).

- ● Post-verbal (infixal) *wh*-applicative *mat/matje(je)/me(je)* 'what (thing)'³ (Cheng 2021; Tang 2022a, 2022b; Choi 2024a, 2024c; cf. Lee and Yip 2025)
- Also widely studied (Mandarin: Tsai 2011, 2021; Pan 2015; Yang 2021; Tang 2022a, i.a.)

^{3.} Note that the availability of *tausin* in (20b) suggests *against* Phan and Tsai (2022, p.172)'s claim the Cantonese *wh*-applicative must be "bare", like Vietnamese.

(20)	a.	你喊乜嘢吖?! Nei haam- matie aa1?!			
		2sg crv-what spp			
		(i) NOT: *'Why are you crying?	,		
		(ii) ONLY: 'There is no reason f	or vou to crv!'		(Tang 2022b:336)
	b.	頭先喊咩喊?!			
		Tausin haam- me -haam?!			
		just.now cry-what-cry			
		'There was no reason for you to	o cry just now!'	(Tang 2022a:	:45, glosses and translation added)
3.2	Th	e syntactic approach			
•	Rec	cently, it has been argued that NC	WH constructions in	1 Cantonese sh	ould receive a syntactic approach
	(Ta	ng 2022b; Choi 2024a, 2024c; pa	<i>ice</i> the semantic/prag	gmatic approa	ch in Cheung 2009) ⁴
•	The	e wh-words are licensed by some	higher operators		
	(i) [Assert] features			
	(ii)	A negative operator			
	(iii)	An interrogative C head (in Tan	ng 2022b; absent in C	hoi 2024a)	
→	NC	CWH constructions as RQs: by na	ature negative asserti	ion	
•	The	e licensing is argued to be synta d	ctic Agree (Choi 202	24a, 2024c)	
(21)	Тат	ng (2022b)'s proposal for NCWH	constructions (simp	lified)	
(21)	Γ _E F	Flaggart [CD OPyro [C[Int]] saima	<i>t/</i> 'where'/'what' etc.]]]]	
	LF -			ווונו	
(22)	$\frac{Ch}{r}$	oi (2024a, 2024c)'s proposal for I	NCWH construction	\underline{s} (cf. N	liyagawa 2022's treetop structure)
	lsai	$P SA_{[iAssert]} _{CommitP} OP_{[iNeg]} _{CP}$. ['where'/'what' etc.	[uAssert,uNeg] ····]]]]
		Agr	ree		
Excu	irsio	n: Gwai (鬼) 'ghost': Neg-yes/no	-RQ series		
•	• G1	wai as a negator (Lee and Chin 20	007) but paired with	yes-no questio	on particles <i>me1/aa4</i>
→	Cı	irious parallel with NCWH: gwa	ii 'ghost' may also be	preverbal and	postverbal
(23)	[ci	$_{\mathrm{P}}$ [$_{\mathrm{TP}}$ {Subj/ Δ_1 } (Δ_2) [$_{\mathrm{ModP}}$ 'w	vill/can/need' (Δ_2)	$[_{ m vP} m V extsf{-}\Delta_3 m Obj$]]]]
(24) ;	a.	且唔知咩/呀?! b.	. 佢鬼得意咩/呀?!	с	. 嘉明識鬼句法咩/呀?!
	G	wai m-zi me1/aa4!	Keoi gwai -dakji (m	ie1/aa4)!	Gaaming sik- gwai geoifaat
	gł	nost not-know sfp	3sg ghost-cute sfi	Р	Kaming know-ghost syntax
	'N	lo one doesn't know!' (i.e., ev-	'S/he isn't cute!'		me1/aa4!
	er	yone knows)	(Lee and Chin 2	2007:42, SFP	SFP
			added)		'Kaming doesn't goddamn know
					syntax.' (Choi 2024c:41, adapted)

^{4.} Cheung (2009) proposes to derive the negative meaning via a Mis-Conclusion Condition (MCC) conventional implicature: "For all the SK knows, the SK thinks that the DP should have every reason to believe that $\neg p$." This implicature is hard-wired in the NEG-WH. Note that Cheung (2008) earlier proposes differently that an Empty Answer Set (EAS) morpheme is located at Force head to license the *wh*-words, which resembles the recent syntactic licensing proposals.

(Tang 2022b:332)

3.2.1 Strong NPI licensing

- Diagnosing the **negative operator**
 - (26) $[_{SAP} SA_{[iAssert]} [_{CommitP} OP_{[iNeg]} [_{CP} \dots ['where'/'what' etc._{[uAssert,uNeg]} \dots]]]]$
- Sai 'need' itself is a strong NPI (Choi 2022; Tang 2022b)
- · Can only be licensed by clause-mate negation, but not simply downward entailing contexts

(27)	佢*(唔)使抹地。 ((28)	*如果低	巨使抹	;地,.	•••••		
	Keoi * <u>(m-)</u> sai maat dei.		*Jyugwo	keoi	sai	maat	dei,	
	3sg not-need clean floor		if	3sg	need	clean	floor	
	'S/he does not need to clean the floor.'		'If s/he 1	needs	to clea	an the	floor, .	, ··
	(adapted from Tang 2022b:	330)						(Tang 2022b:331)

- Sentence-initial NEG-WH also licenses sai.
- Postverbal *mat* 'what' does not, but probably due to intervention effects: *sai*, as a modal, carries [Qu] features (see below for discussion on intervention effects).

(29) a. 乜嘢佢使抹地啫?!

Matje keoi **sai** maat dei zek1?! what 3sg need clean floor sFP 'No way s/he needs to clean the floor.'

- b. 但邊度使抹地吖!
 Keoi <u>bindou</u> sai maat dei aa1?!
 3sg where need clean floor sFP
 'No way s/he needs to clean the floor.'
- c. *佢使抹乜地吖!

*Keoi **sai** maat-<u>mat</u> dei aa1?! 3sG need clean-what floor sFP Int.: 'No way s/he needs to clean the floor, ...'

3.2.2 SFP pairing

- Diagnosing the **assertive force head**
 - (30) $[\text{SAP} \ \textbf{SA}_{[iAssert]} \ [\text{CommitP OP}_{[iNeg]} \ [\text{CP } \dots \ [`where'/`what' etc._{[uAssert,uNeg]} \dots]]]]$

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- We have seen examples with *aa1* above → argued to realize [Assert] (Tang 2022b; Choi 2024c)
- Under the intended ordinary question reading, *aa1* is unnatural (but see Ng 2025 and discussion in §5).
- (31) a. 我想問吓,嘉明去咗邊度??吖/先?
 Ngo soeng man-haa, Gaaming heoi-zo bindou {??aa1/ sin1}?! (Ordinary question) 1sG want ask Kaming go-PFV where SFP SFP 'I'd like to ask, where did Kaming go to?'
 b. 嘉明邊度識句法吖/??先?!
 - Gaaming bindou sik geoifaat {aa1/ ??sin1}?!
 (Neg wh)

 Kaming where know syntax sFP sFP
 (No way will Kaming know about syntax.'

Constructions	All Qs		Wh	Y/N-Qs			
	aa3	ne 1	sin1	aa 1	zek 1	me 1	aa4
Ordinary wh-Qs	OK	OK	OK	(*)	(*)	*	*
Rhetorical wh-Qs	OK	*	OK	OK	OK	*	*
• Initial <i>matje</i> 'what (thing)'	OK	*	*	OK	OK	*	*
2 Neg-wh	OK	OK	*	OK	OK	*	*
Saimat 'need-what'	OK	*	OK	OK	OK	*	*
Postverbal mat 'what'	OK	*	*	OK	OK	*	*
Initial <i>mat</i> 'what'	OK	*	*	*	*	OK	OK

Table 1: SFP pairing effects in Cantonese NCWH constructions

3.2.3 Intervention effects

One way to detect syntactic dependencies: intervention/minimality effects.

- $(32) \quad \begin{bmatrix} SAP \ SA_{[iAssert]} \ \begin{bmatrix} CommitP \ OP_{[iNeg]} \ \begin{bmatrix} CP \ \dots \ \begin{bmatrix} 'where' / 'what' \ etc._{[uAssert,uNeg]} \ \dots \ \end{bmatrix} \end{bmatrix} \end{bmatrix} \\ \hline Agree$
 - The relevant feature here is [Qu], a super-feature shared by quantificational elements (e.g. negation [NEG] and focus [Foc] are covered by [Qu]).
- (33) Rizzi (2001, 2004)'s feature-based Relativized Minimality
 - a. A dependency between X and Y is in a minimal configuration iff there is no Z such that Z carries the same feature with X and Y, and that Z c-commands Y and is c-commanded by X (i.e. intervenes between X & Y).
 - b. X ... Z ... Y $\begin{bmatrix} Q \upsilon \end{bmatrix} \dots \begin{bmatrix} Q \upsilon \end{bmatrix} \dots \begin{bmatrix} Q \upsilon \end{bmatrix}$
 - In Chinese (Cantonese and Mandarin), elements that carry the super-feature [Qu] are give in (34).

((b) adapted from Choi 2024c:11)

- Their [Qu]-feature is independently motivated by the minimality effects they triggered on two syntactic dependencies, A-not-A and *why*-questions (Wu 1997; A. Law 2001; Soh 2005; Tsai and Yang 2015).⁵
- → They also trigger RM effects to Cantonese Agree dependencies (Yip 2019, 2022, 2023; see §3.2.4)
- (34) Elements with and without [Qu]-features in Chinese (Cantonese and Mandarin)
 - a. With [Qv]-features: (i.e. Minimality effects to A-not-A and why dependencies)
 i. Negation (Soh 2005)
 ii. Focus operators, e.g. 'only' (Soh 2005)
 iii. Modals, e.g. 'must' (Tsai and Yang 2015)
 iv. Quantifiers, e.g. 'no one' (Wu 1997; A. Law 2001)
 v. Adverbs of quantification, e.g. 'often' (A. Law 2001; Soh 2005)
 b. Without [Qv]-features: (i.e. No minimality effects to A-not-A and why dependencies)
 i. Locative adverbials, e.g. 'on the subway' (Ernst 1994)
 ii. Temporal adverbials, e.g. 'today' (Ernst 1994)
 - iii. Wh-nominals, e.g. 'who' (C.-T. J. Huang 1982b)

(25) Intervention by models with NEC WI

- As argued for by Choi (2024a, 2024c) non-canonical wh-constructions display intervention effects
- Illustrated with **2** NEG-WH below, but the pattern is general to other NCWH constructions **0**, **3**, and **4**.

(33)	<u> </u>	civention by moudis with NEG-WH	((b) adapted from Chor 2024C.11)
	a.	嘉明邊度可能會讀書吖?!	
		Gaaming bindou [honang] wui duksyu aa1?!	
		Kaming where possibly will study SFP	
		'No way will Kaming possibly study.'	
	b.	*嘉明可能邊度會讀書吖?!	
		*Gaaming [honang] bindou wui duksyu aa1?!	
		Kaming possibly where will study SFP	
(36)	Inte	ervention by universal quantifiers with NEG-WH	((b) adapted from Cheung 2008:69)
	a.	佢邊度每個星期日都會去教會吖!	
		Keoi bindou [mui go singkeijat] dou wui heoi gaauwui	aa1!
		3sg where every cL Sunday DOU will go church	SFP
		'No way will s/he go to church every Sunday.'	
	b.	*佢每個星期日都邊度會去教會吖!	
		*Keoi [mui go singkeijat] dou bindou wui heoi gaauwui	aa1!
		3sg every cL Sunday DOU where will go church	SFP
(37)	Inte	ervention by quantificational adverbs with NEG-WH	((b) adapted from Choi 2024c:11)
	a.	佢邊度會成日都讀書吖!	
		Keoi bindou wui [singjat] [dou] duksyu aa1!	
		3sg where willalways DOU study spp	
		'No way will s/he always study.'	

^{5.} Note that this set of elements is language-specific. For instance, while all the *wh*-elements in English carry [Qu], only *wh*-adverbs ('why' and 'how') carry [Qu] in Chinese. *Wh*-nominals like 'who' are variables and

b. *佢成日都邊度會讀書吖! *Keoi [singjat] [dou] bindou wui duksyu aa1! 3sg always DOU where will study SFP (38) Intervention by negation with NEG-WH a. 佢邊度係冇交文吖! Keoi **bindou** hai [mou] gaau man aa1! 3sg where be not.pfv submit paper sfp 'No way s/he did not submit papers.' b. * 但冇邊度(係)交文吖! *Keoi [mou] **bindou** (hai) gaau man aal! 3sg not.pfv where be submit paper SFP (39) Intervention by 'only' focus with NEG-WH 邊度會淨係John嚟吖! a. Bindou wui [zinghai John] lei aa! where will only John come sfp

b. *淨係John邊度會嚟吖!

'No way will only John come.'

*Zinghai John **bindou** wui lei aa! only John where will come sFP ((b) adapted from Cheung 2008:69)

Intervened by:	Modals	Quantifiers	Q-advs	Negation	'Only' focus
A-not-A/why-questions	×	×	×	×	×
• Initial <i>matje</i> 'what (thing)'	×	×	×	×	×
2 Neg-wh	×	×	×	×	×
Saimat 'need-what'	×	×	×	×	×
Ostverbal mat 'what'	×	×	×	×	×

Table 2: Intervention effects in Cantonese NCWH constructions

- The above intervention patterns support the existence of a **quantificational** syntactic dependency in these NCWH constructions.
- It can be covert movement or Agree see below.
- (40) Minimality effects diagnose Agree in Cantonese NCWH constructions

(Choi 2024c, ex.182)



3.2.4 Non-embeddability

Distinguishing **Agree** from **covert movement**: locality, implemented under the **Phase Impenetrability Condition (PIC)** (Chomsky 2001).

(41) Phase Impenetrability Condition (PIC) (Chomsky 2001)

 $[_{ZP} \dots Z [_{XP} X \dots [_{HP} \alpha [H YP]]]];$

where Z and H are phase heads, and YP is visible to operations in XP but not ZP.

- Unlike movement which may cross phase/clause boundaries via the edge, most Agree relations can only be locally applied within phasal domains.
- An example: negative concord, indicative-clause bounded (Zanuttini 1991; Zeijlstra 2004, among others)
- Long-distance negative concord only in subjunctive clauses, e.g. Spanish and Italian (Zeijlstra 2004)

(42)	a.	*Gianni no i	n ha	[vP	detto	[_{CP}	che	a	[v]	achato(?)	niente]]]	
		Gianni Neo	a has		said		that	has		bought	n-thing		
		Int.: 'John d	lidn't sa	ay th	nat he	boug	ht an	ythiı	ıg.'				(Italian, Zeijlstra 2008:43)
	b.	Dudo	[subjunc	tive	que	vayaı	n	[,	vP	a encontar	nada]]	
		doubt.1SG			that	will.3	BPL.SU	JBJ		find	n-thing		
		'I doubt the	y will f	ind	anyth	ing.'							(Spanish, Zeijlstra 2008:43)

- Assuming subjunctive clauses do not have a phasal CP (but a deficient non-phasal CP), negative concord observes PIC.
- There are two phases: CP and vP
- Agree can only apply across one phase boundary, but not two.
- (43) Some analogous Agree phenomena in Chinese (or Cantonese specifically)
 - a. Aspect lowering (Grano 2014; N. Huang 2018; C.-T. J. Huang 2022; Liu and Yip 2025)
 - b. Universal concord (Yip 2022)
 - c. Exclusive doubling ("only" concord, Yip 2023)
 - d. ...
 - → All subject to the similar locality constraints!
 - NCWH constructions cannot be embedded:⁶

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(44) NEG WH cannot be embedded
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*嘉明知道佢邊度識句法(吖)?!

*Gaaming zidou [keoi **bindou** sik geoifaat] aa1?! Kaming know 3SG where know syntax sFP Int.: 'Kaming knows that s/he doesn't understand syntax.' Or 'It is not the case that Kaming knows that s/he understands syntax.' (Choi 2024a:12, SFP added)

^{6.} Unlike Mandarin High-HOW (pre-subject) *zenme* that can be embedded under 'surprise' (Tsai 2023), Cantonese NCWH constructions cannot (only causal *dim* 'how' can). This might be related to the fact that Cantonese NEG wH lacks the pre-subject usage.

(45)	Saimat cannot be embedded *我勸佢使乜抹佢自己嘅地吖?!	
÷	*Ngo hyun keoi _k [saimat maat keoizigei _k -ge dei] aa1?!	
	1sg persuade 3sg need-what clean 3sg.self-ge floor sfp	
	Int.: 'I persuade him/her not to clean his/her floor.'	(Tang 2022b:343)
(46)	Postverbal <i>wh</i> -applicative cannot be embedded	
	*每個人都覺得自己喊乜喊吖?!	
÷	*[Mui go jan] _k dou gokdak [ziji _k haam- mat -haam] aa1?!	
	every CL person DOU think self cry-what-cry SFP	
	Int.: 'Everyone _k thinks that there is no reason for them _k to cry.'	
•	If the agreeing head (e.g., SAP and CommitP) projects only in root clause,	
→	The embedded clause cannot project SAP and CommitP	
→	On the other hand, agreeing with the matrix SAP/CommitP crosses two phases \rightarrow PI	C violation
(47)	Non-embeddability diagnoses Agree in Cantonese NCWH constructions	
	a. *[CP-matrix [VP-matrix V [SAP SA _[iAssert] [CommitP OP _[iNeg] [CP [$wh_{[uAssert,uNeg]}$	
	\rightarrow Unable to embed SAP and CommitP	
	b. * $[_{SAP} SA_{[iAssert]} [_{CommitP} OP_{[iNeg]} [_{vP} [_{vP-matrix} V [_{CP-embedded} C [wh_{[uAssert,uNe}]]$	g]

Agree due to PIC violation

Testing syntactic dependency in Cantonese Neg-wh-RQs 4

Let's apply the syntactic tests above to see whether Neg-wh-RQs (formed by jau-wh 'have-wh' and zung-wh 'wh-else' + *aa 1*) have the syntactic dependency!

Potential support? 4.1

At first glance, there are two potential supports.

- *#*1: The same SFP pairing → [Assert] at SAP?
- wh-RQs (both Neg and non-Neg wh-RQs) are also paired with aa1

Constructions	All Qs		Wh	Y/N-Qs			
	aa3	ne 1	sin1	aa 1	zek 1	me 1	aa4
Ordinary wh-Qs	OK	OK	OK	(*)	(*)	*	*
Rhetorical wh-Qs	OK	*	OK	OK	OK	*	*
• Initial <i>matje</i> 'what (thing)'	OK	*	*	OK	OK	*	*
2 Neg-wh	OK	OK	*	OK	OK	*	*
Saimat 'need-what'	OK	*	OK	OK	OK	*	*
Postverbal mat 'what'	OK	*	*	OK	OK	*	*
Initial <i>mat</i> 'what'	OK	*	*	*	*	OK	OK

Table 3: SFP pairing effects in Cantonese NCWH constructions and RQs (reproduced)

- #2: NPI licensing \rightarrow OP_[Neg] at CommitP?
- Only Neg-wh-RQs can license strong NPI sai 'need'
- (48) Contrast in strong NPI licensing
 - a. (仲)有邊個使抹地吖?! (Zung) jau bingo **sai** maat dei aa1! also have who need clean floor sFP 'Who(else) needs to clean floor? (— no one.)'
 - b. *係邊個使抹地吖?!
 - *Hai bingo **sai** maat dei aa1! be who need clean floor sFP Int.: 'Who needs to clean floor? (— you.)'
 - → However, if we examine the *dependency* itself, there doesn't seem to be support ...
 - Contra. what Choi (2024c) claims for neg-wh-RQs in Cantonese

4.2 Counter-argument #1: No intervention effects

- Quantificational elements may intervene!
- Modals, quantifiers, quantificational adverbs, negation
- (49) No intervention effects by modals in Neg-wh-RQs
 - a. 你仲可以去邊吖?! Nei zung [hoji] heoi **bin** aa1?! 2sg also can go where sFP 'Where-else can you go?! (—nowhere else)'
 - b. 你覺得可能會有邊個嚟吖?!
 Nei gokdak [honang] [wui] jau bingo lai aa1?!
 2sg think possibly will have who need come
 'Who do you think will possibly come?! (— no one will come.)'
- (50) No intervention effects by universal quantifiers in Neg-wh-RQs
 - a. You're a teacher mad at Hong Kong students they never pay attention to the class. 除咗訓覺,每個香港學生上堂都仲會做乜吖?!
 Ceoi-zo fangaau, [mui go Hoenggong hoksaang] soengtong zung wui dou zou mat aa1?! except sleep every cL Hong Kong student attend.class DOU also will do what sFP 'Apart from sleeping, what-else would Hong Kong students do in classes?! (—nothing else)'
 b. You're a teacher and your college asks you whether they need to come back to school every Sunday. You think it's ridiculous, since no students would go to school on every Sunday:
 - 你話每個星期日有邊個會去上堂吖?! Nei waa [mui go singkeijat] jau **bingo** wui heoi soengtong aa1?! 2sG say every CL Sunday have who will go attend.class sFP 'You tell me, every Sunday, who would go to school?! (— no one.)'

- (51) No intervention effects by quantificational adverbs in Neg-wh-RQs
 - a. 除咗酒吧, 佢仲會成日去邊吖?! Ceoi-zo zaubaa, keoi zung wui [sengjat] heoi **bin** aa1?! except bar 3sG also will always go where sFP 'Apart from bar, where-else would he always go?! (—nowhere else)'
 - b. 你話成日都有邊個嚟吖?!
 Nei waa [sengjat] [dou] jau bingo lai aa1?!
 2sg say always DOU have who come sFP
 'You tell me, who would always come?! (— no one.)'
 - Negation *m* 'not' does not trigger intervention effects
 - It is more difficult to construct the negation test for *jau-wh* unless with embedding, since *m* 'not' cannot precede subjects
 - Note that sentential negation *m*-hai 'not-be' is incompatible with RQs, regardless of its syntactic position
- (52) No intervention effects by negation in Neg-wh-RQs
 - a. Ming always wants to please everyone so he would invites everyone to whenever he organizes a party except you, who he hates the most. 除咗你, 佢仲會唔請邊個嚟吖?!
 Ceoi-zo nei, keoi zung wui [m-]ceng bingo lai aa1?! except 2sg 3sg also will not-invite who come sFP 'Apart from you, who-else would he not invite?! (—no one else)'
 b. Teachers always know more than you thought. You say to me that teachers might not notice students who
 - sit in the back cheating. I think you're very naive as they of course notice every student who cheat: ?老師會唔知道有邊個學生出貓吖?! Lousi wui [m-]zidou jau **bin-go hoksaang** coetmaau aa1?!

teacher will not-know have which-CL student cheat sFP 'Who would teachers not notice to cheat?! (— no one.)'

- 'Only' focus triggers intervention effects to Neg-wh-RQs
- However, 'only' focus also triggers intervention effects to ordinary *wh*-Qs! (Soh 2005; Yang 2012; Li and Cheung 2012, 2015; Li and Law 2016)

(53) Intervention effects by 'only' focus in Neg-wh-RQs

(cf. OK仲會有邊個係淨係阿明鍾意嘅吖?!) *淨係阿明仲會鍾意邊個吖?! a. *[Zinghai Aaming] zung wui zungji bingo aa1?! only Ming also will like who sfp Int.: 'Who-else is the x such that only Ming like x?! (-no one else)' b. *淨係考試前有邊個(先)溫書吖?! (cf. OK有邊個淨係考試前(先)溫書吖?!) *[Zinghai haausi cin] jau **bingo** (sin) wansyu aa1?! only exam before have who then study SFP Int.: 'Who is the x such that only right before exams x studies?! (- no one.)'

- (54) Intervention effects by 'only' focus in ordinary wh-Qs
 *淨係阿明鍾意邊個呢?
 *[Zinghai Aaming] zungji bingo ne1?
 - only Ming like who sFP Int.: 'Who is the x such that only Ming like x?'
 - Focus intervention effects are semantic in nature (Beck 2006) and should be distinguished from quantificational minimality effects
 - → Alternatively, [Foc] and [Qu] should be distinguished as two superfeature classes in RM: See Yip (2022) for [Qu] but not [Foc] blocking universal concord; see T. T.-M. Lee (2022, 2024) for [Foc] but not [Qu] blocking verb doubling

Dependencies	Focus intervention	Quantifier intervention
A-not-A/'why'	YES	YES
Verb doubling	YES	NO
Universal concord	NO	YES

Table 4: Intervention effects to different syntactic dependencies in Cantonese

→ The above supports the following superfeature inventory in Cantonese (see Tsai and Yang 2015 for [Mod] in Mandarin) in (55).

- (55) Superfeatures in Cantonese
 - a. [A]: case?
 - b. [Qu]: Wh-adverbs, Neg, measure, focus operators, modals, quantified DPs
 - c. [Foc]: *Wh*-nominals, focus *associates*, doubled verbs
 - d. [Mod]: evaluative, epistemic, Neg, frequentative, celerative, measure, manner, ...
 - e. [Top]
 - Zinghai Aaming 'only Ming' has both [Qu] (from the operator) and [Foc] (from the associate)
 - Neg-*wh*-RQs behave like ordinary wh-Qs formed by *wh*-nominals: only focus intervention, no quantifier intervention

Intervened by:		[Qu] ele	[Qu+Foc] elements		
	Modals	Quantifiers	Q-advs	'Only' focus	
Wh-nominal questions	~	~	~	✓	×
Neg-wh-RQs	~	~	~	✓	×
A-not-A/why-questions	×	×	×	×	×
• Initial <i>matje</i> 'what (thing)'	×	×	×	×	×
2 Neg-wh	×	×	×	×	×
Saimat 'need-what'	×	×	×	×	×
Postverbal mat 'what'	×	×	×	×	×

Table 5: Intervention effects in Cantonese NCWH constructions, wh-Qs, and Neg-wh-RQs

4.3 Counter-argument #2: Embeddability

- Whether RQs can be embedded is subject to debate
- Caponigro and Sprouse (2007) gives an example of embedded RQs in English
- (56) Should I even ask [who would give a damn if I stopped coming to work?]

(Caponigro and Sprouse 2007, ex.19)

- Whether the rhetorical force can be really embedded is subject to further discussion (cf. Tsai 2023)
- Neg-wh-RQs: at least the wh-words can be embedded, unlike NCWH constructions

(57) Embedded Neg-wh-RQs

After being betrayed for so many times, ...

- a. 佢仲會覺得邊個係好人吖?!
 Keoi zung wui gokdak [bingo hai houjan] aa1?
 3sg also will think who be good.guy sFP
 'Who-else would he think is a good guy? (—no one)'
- b. 佢覺得有邊個可以信任嘅吖?!
 Keoi gokdak [jau bingo hoji seonjam] aa1?
 3sg think have who can trust sFP
 'Who does he think can be trusted? (—no one)'
- This is real syntactic embedding, not quotation
- As evidenced by variable binding below

(58) Embedded Neg-wh-RQs with variable binding

Hong Kong students nowadays are very fragile. They often think that no one understands them. 每個學生都覺得有邊個會體諒自己吖?!

[Mui go hoksaang]_{*i*} dou gokdak [jau **bingo** wui tailoeng ziji_{*i*}] aa1? every CL student DOU think have who will understand self sFP 'Every student_{*i*} thinks, who would understand them_{*i*}?! (—no one)'

- · Even embedding under islands is possible
- This is the same with *wh*-nominals: no islands, interrogative force obtained via unselective binding rather than covert movement (Tsai 1994, 1999a; *pace* C.-T. J. Huang 1982a)
- (59) Neg-wh-RQs with islands

除咗村上春樹, 佢仲會鍾意邊個作家寫嘅書吖?!

Ceoi-zo Cunsoengceonsyu, keoi zung wui zungji [[**bin-go zukgaa** se]-ge syu] aa1? except Haruki Murakami 3sG also will like which-cL writer write-GE book sFP 'Apart from Haruki Murakami, who-else is the x such that s/he likes the books that x writes?! (—no one else)'

(60) <u>Ordinary-wh</u> with islands 佢鍾意邊個作家寫嘅書呢?

Keoi zungji [[**bin-go zukgaa** se]-ge syu] ne1? 3sG like which-CL writer write-GE book sFP 'Who is the x such that s/he likes the books that x writes?'

4.4	Counter-argument #3: <i>Doudai</i> 'the-hell' test					
•	The last argument comes from <i>doudai</i> 'the-hell'					
•	Must c-command an interrogative wh-word (Huang and Ochi 2004; P. Law 200	8)				
	\rightarrow universal <i>wh</i> or NPI <i>wh</i> do not count					
(61)	Doudai 'the-hell' must c-command an interrogative wh-word					
	a. 但到低曾云邊度?	/				
	Keoi doudai wui heoi bindou?	(Interrogative wh)				
	3sg the hell will go where					
	Where-the-hell Will S/he go?					
	b. ^ 但到低邊度都曾去					
	*Keoi doudai bindou <u>dou</u> wui heoi	(*Universal wh)				
	3sg the.hell where DOU will go					
	Int.: 'S/he will go everywhere.'					
	c. (*)佢到底冇去邊度					
	(*)Keoi doudai mou heoi bindou	(*NPI <i>wh</i>)				
	3sg the.hell not.pfv go where					
	Int: *'S/he did not go anywhere.' (unavailable reading)					
	ONLY: 'Where-the-hell did s/he not go?'					
•	Doudai (i) binds the wh; and (ii) requires a Q-operator					
•	Huang and Ochi (2004): two dependencies					
(62)	$\begin{bmatrix} CP \ \mathbf{Q} \dots \begin{bmatrix} AttP/(\cdot, -\cdot)P \ \boldsymbol{doudai}_{[+Q,+wh]} \text{ 'the hell' } \begin{bmatrix} (\cdot, -\cdot)^0 \dots \begin{bmatrix} \dots \ \boldsymbol{wh} \dots \end{bmatrix} \end{bmatrix}$					
•	• Tang (2015b): incompatible with clause-initial denial <i>zenme</i> 'how' in Mandarin (also noted in Tsai 2021:fn1 for postverbal <i>wh</i>)					
	• Cantonese saimat 'needn't' is incompatible with <i>doudai</i> (Tang 2022b) same for other NCWH					
	→ Expected if there exists an $OP_{[Neg]}$ to bind the <i>wh</i> , just like NPI <i>wh</i>					
(63)	Doudai 'the-hell' is incompatible with NCWH constructions					
	a. *佢到底邊度會去(吖)?					
	*Keoi doudai bindou wui heoi (aa1)?	(neg wh)				
	3sg the.hell where will go sfp					
	Int.: 'No way s/he will go.'					
	b. *佢到底使乜抹地吖?					
	*Keoi doudai saimat maat dei aa1?	(Saimat 'needn't')				
	3sg the.hell need-what clean floor spp					
	Int.: 'What the hell is the point of his/her cleaning the floor?'	(Tang 2022b:309)				
	c. *佢到底喊乜喊(吖)?!					
	*Keoi doudai haam- mat -haam (aa1)?	(Wh-applicative)				
	3sg the.hell cry-what-cry sFP					

Int.: 'There is no reason for him/her to cry.'

- As well known in English, 'the hell' is compatible with, and sometimes triggers a rhetorical reading (F. Lee 1994; Cheung 2008; Farkas 2024; Rohde 2024; cf. Ippolito 2024)
- → Let's apply this test to Cantonese Neg-*wh*-RQs!
- (64) a. Who the hell likes Brussels sprouts?
 - b. Who (the hell) would help Carl?
- (65) *Doudai* 'the-hell' in Neg-wh-RQs
 - a. 到底有邊個(會)鍾意佢吖?
 Doudai jau bingo (wui) zungji keoi aa1?!
 the.hell have who will like 3sG sFP
 'Who-the-hell would like him/her?! (—no one)'
 - b. 除左佢自己,佢到底仲(會)鍾意邊個吖?
 Ceoi-zo keoiziji_k, keoi_k doudai zung (wui) zungji bingo aa1?!
 except 3sG.self 3sG the.hell also will like who sFP
 'Apart from himself/herself, who-the-hell (else) would s/he like?! (—no one else)'
 - Also works for *wh*-RQs with a singleton set answer
 - Note that Chinese *doudai* is not subject to the anti-D-linking constraint, and may associate with D-linkedwh like 'which', unlike English *the hell*
- (66) <u>Doudai 'the-hell' in Singleton-wh-RQs</u>
 到底係邊個生你落嚟吖?
 Doudai hai bingo saang nei loklai aa1?!
 the.hell be who give.birth 2sg out sFP

'After all, who gave birth to you?! (—your Mom!)'

Constructions aa1 pairing Strong NPI [Qu]-intervention Root phenomena X X Wh-nominal questions X X 1 1 X X Neg-wh-RQs Singleton-wh-RQs 1 X X X X A-not-A/why-questions X $\checkmark_{\text{A-not-A}}/\mathbf{X}$ 1 ~ • Initial *matje* 'what (thing)' ~ 1 1 ~ **2** Neg-wh 1 1 1 Saimat 'need-what' V ✓

5 Where do we stand now?

• Postverbal *mat* 'what'

Table 6: Summary of the tests to different wh-constructions in Cantonese

→ #1 There are syntactic dependencies (Agree) in **0**-**④** NCWH constructions, but not in Neg-*wh*-RQs

N/A

 \rightarrow #2 The *wh*-words in NCWH are **bound by OP**_[Neg], but not in Neg-*wh*-RQs

1

→ #3 There is some projection high in NCWH constructions and (Neg-)wh-RQs responsible for the rhetorical force, headed by aa1

(F. Lee 1994) (Farkas 2024, ex.67)

'The-hell'

1

1

1

1

X

X

X

X

- Option 1: A compromised syntactic approach: Same structure and features, no syntactic dependency.
- → SAP_[Assert] as *aa1*; OP_[Neg] accounts for the negative answer and strong NPI licensing
- → No dependency: no intervention/embedding constraints whatsoever
- → Add a Q operator for *doudai* 'the-hell'
- *Key difference from NCWH*: whether the *wh* carries $[uAssert, uNeg] \rightarrow$ reduced to lexicon
- (67) A compromised syntactic approach to Neg-wh-RQs (to be rejected) [SAP SA_[iAssert] [CommitP OP_[iNeg] [CP Q [... wh ...]]]]
- A syntactic approach to NCWH (Choi 2024c) (68) $\begin{bmatrix} SAP \ SA_{[iAssert]} \ [CommitP \ OP_{[iNeg]} \ [CP \ \dots \ [\ wh_{[uAssert,uNeg]} \ \dots \]]]] \\ _ \ Agree \end{bmatrix}$

- \leftarrow Problem 1: Unclear how the negative meaning of the *wh* is derived.
 - Wh is bound by Q (mediated via 'the hell' when it's present) $\rightarrow OP_{[Neg]}$ must **not** bind wh
 - If OP_[Neg] operates on CP: semantic clash, would be negating a question (i.e., a set of propositions)
- ← Problem 2: Whether *aa1* pronounces [Assert] is doubtful
- The pairing is not strict (e.g., default *aa3* always possible; *sin1* possible for *saimat* 'needn't')
- Ng (2025): *aa1* can be used in **Cornering Questions** → No assertive force, not RQs! (see also Tang 2022b) ex.165, provided by an anonymous reviewer)
- Cornering effects: asking for a final answer (cf. Ippolito 2024)
- (69) a. Do you want it?
 - b. Do you want it **or not**?
- (70) Aa1 in cornering questions

The mother told her son that she could buy him one and only one toy. The child first picked toy A, but he later picked toy B. The mother asked:

噉你到底要邊個吖?! Gam nei doudai jiu bin-go

then 2sg the.hell want which-cl sFP 'Which one do you want, then?'

(Ng 2025, ex.19)

- Ng (2025) proposes that *aa1* signals **doxastic dissonance** (conflicts in belief states) (Ippolito 2024)
 - RQs: External doxastic dissonance (i.e., a conflict between the belief systems of interlocutors)
 - Cornering Qs: Internal doxastic dissonance (i.e., a conflict within the speaker's belief system)
- Option 2: A pragmatic approach, no features, no dependency
- → The negative reading is derived pragmatically: answer already in the CG

aa1?!

- → "Force shift" arises in the form of **indirect speech acts**, akin to the conversational implicature in *can* you pass to the salt? (do not necessarily project).
- → Aa1 projects a higher head signaling doxastic dissonance (tentatively: CommitP, cf. Miyagawa 2022; Hill and Miyagawa 2024): compatible with RQs with the force shift
- → No dependency: no intervention/embedding constraints whatsoever
- → Q operator for *doudai* 'the-hell'

- (71) A pragmatic approach to Neg-*wh*-RQs
 - a. [_{CommitP} *aa1* [_{CP} Q [... *wh* ...]]]
 - b. Pragmatic condition (informal): the empty set answer to [[CP]] is contained in the CG
 → Triggers indirect assertive speech act

How rhetorical force arises: see Yip (2025) for Neg-yes/no-RQ with aa4

- (72) You are an art teacher, and you see your student drew a six-legged spider. You say:
 你覺得蜘蛛得六隻腳架?
 [(Nei gokdak) [zizyu dak lok zek goek] gaa4]?
 2SG think spider only.have six CL leg SFP
 'Do you think that spiders only have six legs?' (i.e., spiders do not only have six legs)
- (73) The derivation of the rhetorical reading
 - a. First, the speaker knows that the proposition p being discussed is obviously false, which should be known to everyone in the context (i.e. the speaker knows p, know(s,¬p), and the speaker believes that the negated proposition is in the Common Ground, believe(s,¬p∈CG)).
 - b. Second, however, there is contextual evidence showing that some discourse participant (i.e., the addressee) does not share the same belief, such as directly claiming p (i.e., believe(a,p)).
 - c. Third, since the speaker has knowledge of $\neg p$, the speaker refuses to update his/her epistemic state. There is no way to incorporate p into the CG. Also, the falsity of p is too obvious for the speaker to update his/her belief on the CG immediately (i.e., the speaker thinks that the addressee should not believe p, and $\neg p$ should be contained in the CG). Thus, there is a conflict between the speaker's belief about the CG (i.e., $\neg p \in CG$) and the addressee's belief (i.e., believe(a,p) $\rightsquigarrow \neg p \notin CG$).
 - d. Fourth, the speaker asks the addressee to confirm his/her belief of p. Since the addressee just asserted p, the question can be understood as a challenge to the addressee's belief as a conversational implicature: "the proposition you believed is not true, are you sure you (still) believe it?" This results in the "rhetorical/ disproval" reading.
 - *Key difference from NCWH*: The *wh* carries a special [*u*Neg] feature that requires licensing by a high operator in the speech act phrase level (possibly a denial operator) → responsible for "force shift"
 - *Aa1* pairing is an indirect result of force shift: denying the propositions requires belief conflicts with the addressee
- (74) A revised syntactic approach to NCWH

 $\begin{bmatrix} \text{SAP SA}_{[i\text{Neg}]} \begin{bmatrix} \text{CommitP} aa1 \begin{bmatrix} \text{CP} \dots \begin{bmatrix} wh_{[u\text{SA},u\text{Neg}]} \dots \end{bmatrix} \end{bmatrix} \end{bmatrix}$

- Open questions
- **#1** "Force shift" **feeds** syntactic licensing? Neg-wh-RQs and NCWH constructions share the same force and pragmatic conditions (and thus the same pairing with *aa 1*)
 - → Indirect SA vs. syntactic SA operator: **syntacticization** of the SA?
 - → Must be lexically encoded with certain *wh*, in terms of features
- #2 Why these *wh* as NCWHs?

E.g., 'where', 'how' and 'when' (cross-linguistically common, particularly 'where'; Cheung 2008)

→ An (episodic) event must take place at a certain time, certain location, in a certain way/manner

→ No location, No time, No manner → non-existence of the event (and gradually grammaticalize to convey modal base/ conversational background? cf. Cheung 2009)

#3 Strong NPI licensing by implicature in Neg-wh-RQs? (Linebarger 1987; Eckardt, Regine & Eva 2013; Horn 2016)

Major takeaways (reproduced from the introduction)

- #1 Syntactic dependencies are *absent* in Neg-*wh*-RQs, unlike in non-canonical *wh* (NCWH) constructions
 → Syntactic and pragmatic approaches cover empirically different phenomena
- #2 Methodologically, tests for "force shift" and syntactic dependencies should be distinguished
- #3 **Theoretically**, there seems to be a deeper connection between pragmatic "force shift" and syntactic NCWH

6 Concluding remarks: Vietnamese Neg-wh-RQ

(jointly with Linh Pham, USC)

- As pointed by Phan and Tsai (2022), the particle *mà* enforces a rhetorical reading
- Forming Neg-wh-RQs: mà ... (đâu) chứ (cf. Phan and Tsai 2025 for SFP đâu)

(75)	a.	Tí (mà)	thích	gì?
		Ті ма	like	what
		Without	mà: 'W	/hat does Ti like?'

(Phan and Tsai 2022:177)

b. Ai mà (sinh ra) cái thứ (loại) như mày (đâu) chứ!
 who ма give.birth cl type like you sfp sfp
 RQ: 'Nobody would gave birth to you jerk!'

With Mà: ONLY RQ reading: 'Ti likes nothing.'

- Similar to Cantonese, syntactic Agree has been argued to play a role in Vietnamese NCWHs (Phan and Tsai 2022), e.g., for the obligatory particle *mà* (and binding *wh* by a whining force operator)
- → How about Neg-*wh*-RQs also with *mà*?

(76)	a.	Mày khóc gì mà khóc?!	
		2sg cry what ma cry	
		'What are you crying for?!' ($pprox$ 'You shouldn't cry!') [disapproval]	
		'It's not the case you're crying!' [denial]	(Phan and Tsai 2022:169)
	b.	Gì mà mày khóc?!	
		what ма 2sg cry	
		It's not the case you're crying!' [denial]	(Phan and Tsai 2022:169)

No intervention effects

- [Qu]-elements like modals do **not** trigger intervention effects to Neg-wh-RQs between mà and wh:
- (77) <u>No intervention effects by modals to Neg-wh-RQs</u> Said by a police, about a disabled criminal:

Tên què đó **mà** <u>có thể</u> đi **đâu** chứ?! CL disabled MA can go where sFP 'Where can the handicap go? (— no where)'

- Below, the final *dâu* should be higher than the quantifier subject at TP (Phan and Tsai 2025) → Still, no intervention effects are triggered
 - \rightarrow If final *dâu* "signals" (by requiring) a negation, it does not establish a dependency with the *wh*
- Note that here, the universal quaniifer is before *mà*
 - \rightarrow also does not affect its potential dependency with any higher operator
- (78) No intervention effects by universal quantifiers to Neg-wh-RQs

You're a Vietnamese teacher arriving in Hong Kong, and discover that HK students are really lazy. Ngoài ngủ ra thì <u>mọi đứa học sinh Hồng Kông</u> (**mà**) có thể làm được **gì đâu** chứ? except sleep out тор every cL student Hong Kong ма can do able what sFP sFP 'Except for sleeping, what(else) would every Hong Kong student do in class?! (— nothing!)'

• Even negation occurs unproblematically between *mà* and the *wh*:

(79) No intervention effects by negation to Neg-wh-RQs

Nam wants to please everyone, but except Lan. He really hates her. Regarding who to invite to Nam's party: Ngoài Lan ra, nó mà không mời ai nữa chứ? except Lan out 3sg ма not invite who else sfp 'Except Lan, who-else will he not invite? (— no one else, i.e., Nam invites everyone but Lan)'

Embeddability

• The *wh*, and *mà*, in Neg-*wh*-RQs are embeddable

(80) <u>Embedding Neg-wh-RQs</u>

Nam is very paranoid. Nó (mà) nghĩ [nó (mà) có thể tin tưởng ai] đâu chứ? Зъд ма think Зъд ма can trust who sғр sғр 'Who does he thinks he can trust? (— no one.)'

(81) Embedding Neg-*wh*-RQs with variable binding

Teenagers nowadays are very annoying. They often think that no one understands them. [Moi đứa tuổi teen]_i đều nghĩ [**ai mà** có thể hiểu được mình_i] đâu chứ? every CL teenager DEU think who MA can understand able self sFP sFP 'Who does every teenager_i thinks would understand him/her_i (lit. self) (— no one.)' Takeaway for Vietnamese

- Vietnamese Neg-wh-RQs do not involve a syntactic dependency either
- → The occurrence of mà, dâu and chú, at least in Neg-wh-RQs, are not due to syntactc requirement (but probably to achieve force shift for RQ formation) (See Phan and Tsai 2022, Phan 2024 for the meaning contribution by mà)
- → The syntactic dependencies **realize** in NCWH constructions, and *mà* becomes obligatory
 - → Another case of force shift feeding syntactic licensing

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