Postverbal *gwai* in Cantonese: A syntactic approach to rhetorical questions

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Outline

- Introduction
- Proposal
- Supporting evidence
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Introduction: Rhetorical questions (RQs)

- Interrogative utterances as a kind of assertion (Sadock 1971 among others)
- Different theoretical models to derive RQs:

Semantic line (Informativeness, Han 2002)

Discourse line (Common Ground, Caponigro & Sprouse 2007)

- Traditionally considered a pragmatic/semantic issue
- New insight: RQs may be derived syntactically (Spago 2016, Nakashima 2018, Pan 2019, Tang 2022)
- Syntax-semantics/pragmatics interface (Beyssade & Marandin 2006, Heim et al. 2016, Miyagawa 2022)

Introduction: Gwai in Cantonese

- Different gwais in (Hong Kong) Cantonese (Chan 2004)
- Lexical
- (1) Gaaming zong gwai
 Kaming encounter ghost
 'Kaming saw a ghost.'
- Intensifier
- (2) Gaaming hou gwai lengzai Kaming very ghost handsome 'Kaming is so goddamn handsome.'
- Negator
- (3) Gaaming sik gwai geoifaat Kaming know ghost syntax Intended: 'Kaming doesn't goddamn know syntax.'

Gwai as RQs

- Negator *gwai*: RQs, a colloquial form to express negation (Matthews & Yip 1994, Lee & Chin 2007)
- Usually with yes-no question particles me or tone 4 aa in Cantonese
- (4) Gaaming sik gwai geoifaat me/aa
 Kaming know ghost syntax SFP
 Intended: 'Kaming doesn't goddamn know syntax.'
- "Rhetorical yes-no questions" (cf. Han 2002)

Proposal

Gwai in Cantonese

- Base generated within νP as a suffix of the main verb
- Agree with speaker phrase (SpkP), addressee phrase (AdrP) and commitment phrase (ComP) above CP (cf. Miyagawa 2022)

(5)
[SpkP [AdrP [ComP ··· [TP [P gwai]]]]]
Agree

Supporting evidence #1: Properties of gwai

- Strong subjectivity expressing negation/denial (Winterstein et al. 2018)
- Subjective adverbial gai ngo waa
- (6) Gai ngo waa, gaaming sik gwai geoifaat as I say Kaming know ghost syntax
 Intended: 'In my opinion, Kaming doesn't goddamn know syntax.'

Cf.

(7) ??Gai ngo waa, gaming m sik geoifaat as I say Kaming not know syntax 'In my opinion, Kaming doesn't know syntax.'

Properties of gwai

Semantic account: Gwai as mixed expressive (Beltrama & Lee 2015)

- At-issue meaning: negation
- Expressive meaning: goddamn, bastard...
- "The speaker is in a 'heightened emotional state'." (Beltrama & Lee 2015: 153)
- Gwai's expressivity takes the widest scope

• Expressive component (above CP) vs. truth-conditional component (CP) (cf. Miyagawa 2022)

Properties of gwai

- Informal register (Zeng 1991)
- Sensitive to non-honorific context → the addressee is identified as a peer to the speaker
- Can be replaced by obscenity words like *nan* (literally 'penis'), *hai* (literally 'vulva')...
- (8) Gaaming sik nan/gwai geoifaat me Kaming know penis/ghost syntax SFP Intended: 'Kaming doesn't goddamn know syntax.'
- → Gwai is closely related to speaker and addressee
- →mismatch of form and function (cf. politeness marker *-mas-* in Japanese, Miyagawa 2017)

Supporting evidence #2: SFPs and intonations

- a. Agreement between SFPs and gwai
- me/aa/maa/o ho: commonly used yes-no question particles
- (9) Gaaming sik gwai geoifaat me/aa/*maa/*o ho... Kaming know ghost syntax SFP Intended: 'Kaming doesn't goddamn know syntax.'
- me: negatively biased, encoding negative expectations (Lam 2014)
- (10) Gaaming duk geoifaat me Kaming study syntax SFP
 - 'Kaming doesn't study syntax, am I right?'
 - →The speaker commits to the proposition that Kaming doesn't study syntax.
- aa: can be both neutral/negatively biased (Hara 2014)

- Gwai Agrees with me/aa (or a null negative operator that me/aa induced, cf. Choi 2022)
- Agree: [ComP NEG] ... [P V-gwai]
- Negative concord
- maa/o ho: neutral/positively biased
- →Does not induce any negative operator

- b. Agreement between intonations and gwai
- Two tonal variants of me: high-fall tone and high-level tone
- High-fall tone me: rhetorical force (Tang 2015, Rao et al. 2016 among others)
- (11) Gaaming sik geoifaat me (high-level tone)

Kaming know syntax SFP

'Does Kaming know syntax?'

OR Intended: 'Kaming doesn't know syntax.'

(12) Gaaming sik geoifaat me (high-fall tone)

Kaming know syntax SFP

Intended: 'Kaming doesn't know syntax.'

- a L% boundary tone may superimpose on aa (Lee 2021)
- Boundary tone in Cantonese is treated as SFP (Zhang & Tang 2014, Lau 2019, Tang 2020)
- High-fall tone *me*: [SpkP L\% ...[ComP me]]

- Me in sentences with gwai: √ high-fall tone
 X high-level tone
 (13) Gaaming sik gwai geoifaat me *(L%)
 Kaming know ghost syntax SFP SFP
 Intended: 'Kaming doesn't goddamn know syntax.'
- Me may be omitted, but L% must be presented
- Wan: ✓ high-fall tone X high-level tone
- (14) Gaaming sik gwai maahaktou**wan** *(L%)/*H% Kaming know ghost Mark Twain SFP

Intended: 'Kaming doesn't goddamn know Mark Twain.'

- L% in Cantonese: speaker-oriented subjectivity (Ding 2013), assertive force (Lin 2002)
- Obligatory to have the L% for the *gwai* sentence to be typed as an assertion
- [Assert] feature (Nakashima 2018, Tang 2022a)
- Agree: [SpkP L% [Assert]]...[vP V-gwai]

Supporting evidence #3: Scopal interaction

• Gwai's negation scope is very high despite its suffixal nature

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(15) Keoi hai zou-gan jat joeng je ge sihau sik
S/he when do-ing a CL thing PRT time know
gwai jatsamjijung me.
ghost multi-task SFP
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Intended: 'It is not the case that when s/he is doing something, s/he is able to multi-task.'

$$OK \sim > \exists$$
 / $* \exists > \sim$

Scopal interaction

(16) **Jyugwo nei jicin tung-gwo jatgojan joekwui**,

If you beforewith-SUF someone dating, **nei jigaa sai gwai hok dim flirt jan me**you now need ghost learn how flirt person SFP

Intended: 'It is not the case that if you have dated somebody before, you need to learn how to flirt now.'

$$OK \sim > \exists$$
 / $* \exists > \sim$

• premise-conditional attached to the peripheral CP (Haegeman 2003)

Scopal interaction

- "External negation" (Horn 1989, Hsieh 2001)
- u[NEG] for gwai
- Semantically empty item for concord
- Gwai must Agree with the sentential i[NEG] to be valued
- [me/aa/Op i[NEG]]...CP/TP... [gwai u[NEG]]

Predictions #1: Minimality effects

- Gwai Agrees with NEG in ComP
- Negative concord as syntactic agreement (Zeljlstra 2004, see also Yip 2021 and ref. therein)
- → Minimality is expected
- Featural Relativized Minimality (Rizzi 2004)
- Quantificational feature: Neg, focus, modality...
- fRM for gwai: $[ComP NEG_{[Qu]}] \dots (*Z_{[Qu]}) \dots [VP V-gwai_{[Qu]}]$

- Focus operator: dak, SFP zaa
- (17) *Dak gaaming sik gwai geoifaat only Kaming know ghost syntax 'Only Kaming doesn't goddamn know syntax.'
- (18) *Gaaming sik gwai geoifaat zaa

 Kaming know ghost syntax SFP-only

 'Kaming only doesn't goddamn know syntax.'
- Epistemic modals: jatding, ganghai
- (19) *Gaaming jatding/ganghai sik gwai geoifaat Kaming certainly know ghost syntax 'Certainly, Kaming doesn't goddamn know syntax.'

- Quantifiers: sojaujan (dou), (jau) jatdijan
- (20) *Sojaujan (dou)/(jau) jatdijan sik gwai geoifaat Everyone all have someone know ghost syntax 'Everyone/Someone (here) doesn't goddamn know syntax.'
- Quantificational adverbs: sengjat, housiu
- (21) *Gaaming sengjat/housiu sik gwai geoifaat

 Kaming always/seldom know ghost syntax

 'Usually/Rarely, Kaming doesn't goddamn know syntax.'

Remarks I

- No minimality is observed for temporal/locative adverbials
- (22) Gaaming jicin sik gwai geoifaat (Temporal)

 Kaming past know ghost syntax

 Intended: 'Kaming didn't goddamn know syntax in the past.'
- (23) Gaaming hai meigwok sai gwai hok geoifaat (Locative) Kaming in US need ghost study syntax Intended: 'Kaming needn't goddamn study syntax in the US.'

Remarks II

- For typical negative markers m, minimality effects do not occur
- (24) Dak gaaming m sik geoifaat (**focus**, cf.(17)) only Kaming not know syntax
- (25) Gaaming jatding/ganghai m sik geoifaat (**Epi mod**, cf. (18))
 - Kaming certainly not know syntax
- (26) Sojaujan (dou)/(jau) jatdijan m sik gwai geoifaat Everyone all have someone not know ghost syntax
 - (Quantifiers, cf. (19))
- (27) Gaaming sengjat/housiu m sik geoifaat (**Qu adv**, cf.(20)) Kaming always/seldom not know syntax
- → Gwai triggers minimality effects

Predictions #2: Root requirement

- Gwai Agrees with top-most SpkP/AdrP/ComP
- If SpkP/AdrP/ComP does not exist, the uninterpretable features of *gwai* remain undeleted and the derivation crashes
- → Root sensitivity is expected
- Gwai resists all kinds of subordinate clauses: strongly root sensitive
- Relative clause
- (28) *Sik gwai geoifaat ge jan jinggoi hou hoisam know ghost syntax PRT person may very happy Intended: 'Those who doesn't goddamn know syntax may be very happy.'

Root requirement

- Adverbial clause
- (29) *Janwai gaamingsik gwai geoifaat,soji keoi hou hoisam Because Kaming know ghost syntax so he very happy Intended: 'Kaming is happy because he doesn't goddamn know syntax.'
- Embedded clause
- (30) *Gaaming waa ngo sik gwai geoifaat
 Kaming say I know ghost syntax
 Intended: 'Kaming said that I don't goddamn know syntax.'
- Complement clause of noun
- *Gaaming (31)sik gwai geoifaat ge jiujin hai CO ge syntax PRT Kaming know ghost PRT false rumor Intended: 'The rumor that Kaming doesn't goddamn know syntax is false.'

Root requirement

Remark I

- Embeddability of gwai: all non-root context is prohibited
- Type A verb in Hooper & Thompson (1973): say
- (32) Taroo-wa Hanako-ga ki-mas-u to itta
 Taro-TOP Hanako-NOM come-MAS-PRS C said
 'Taro said that Hanako will come.' (Miyagawa 2022:48)

 *Gaming was no sile gwie gwifaet (=(29))
- (33) *Gaaming waa ngo sik gwai geoifaat (=(29))

 Kaming say I know ghost syntax

 Intended: 'Kaming said that I don't goddamn know syntax.'
- -mas-: states politeness, marks the Adr
- Gwai: encodes strong subjectivity, marks the Spk as well
- Subjectivity Hypothesis (Pan 2015): † subjectiveness † difficulty to be embedded

Root requirement

Remark II

• Pseudo example of gwai being embedded

(34)	ngo	gokdak		keoi	sik	gwai	geoifaat		me	
	I	think		s/he	know	ghost	syntax		SFP	
(35)	*ngo	m gokdak		k	keoi	sik	gwai	geoifaat		me
	I	not	think		s/he	know	ghost	syntax		SFP
(36)	*Nei	gokdak	X	keoi	sik	gwai	geoifa	at	me	
	you	think		s/he	know	ghost	syntax		SFP	

- Ngo gokdak: a fixed performative expression (Tang 2022a)
- Ngo gokdak as a grammaticalized adverbial adjoined to SpkP

Implications #1: Regarding RQs

- RQs are not completely a pragmatic issue
- $[_{SpkP} L\%_{[Assert]} [_{AdrP} \varnothing_{[colloquial]} [_{ComP} me/aa/Op_{[Neg]} ... [_{TP} [_{vP} V-gwai]]]]]$
- Syntactic realizations for RQs
- Existence of S-AP and ComP

- Some forms of RQs being a part of (narrow) syntax (Agree, Minimality...)
- Expressive component within language faculty for communication

Implications #2: Further extensions

- Different types of RQs
- 1. Negative wh-constructions (Cheung 2008, 2009)
- (37) Gaaming bindou sik geoifaat Kaming where know syntax Intended: 'Kaming doesn't know syntax.'
- Adjoins to TP or even lower than TP in Cantonese: Gaaming where.../*where Gaaming...
- 2. Negative what (shenme in Mandarin and matje in Cantonese) (Tang 2022b)
- (38) Gaaming hok-matje geoifaat

 Kaming study-what syntax

 Intended: 'Kaming should not/does not study syntax.'
- Affix of the main verb

Further extensions

Matje in Cantonese

- Similar properties: subjectivity, informal register, negative meaning...
- Interaction with SFPs
- (39) Gaaming hok-matje geoifaat aa3/ne/wo...

 Kaming study-what syntax SFP

 What kinds of syntax does Kaming study?' (more preferable reading)

 OR Intended: 'Kaming should not/does not study syntax.'
- (40) Gaaming hok-matje geoifaat aa1
 Kaming study-what syntax SFP
 Intended: 'Kaming should not/does not study syntax.' (RQ reading only)

Further extensions

Matje in Cantonese

- Minimality effects
- (41) *Sojaujan hok-matje geoifaat aa1

 Everyone study-what syntax SFP

 Intended: 'Everyone (here) should not/does not study syntax.'
- Root requirement
- (42) *Ngo m gokdak Gaaming hok-matje geoifaat aa1
 I not think Kaming study-what syntax SFP
 Intended: 'I don't think that Kaming should not/does not study syntax.'

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Implications #3: Me in Cantonese

- High-fall tone me and high-level tone me
- Only high-fall tone me is compatible with gwai (see (13))
- Gwai forces the falling intonation to present independently
- (43) Gaaming sik gwai maahaktou**wan** *(L%) (=(14))

 Kaming know ghost Mark Twain SFP

 Intended: 'Kaming doesn't goddamn know Mark Twain.'
- Lends supports to the superimposition of the falling tone on *me* (cf. Lee 2021)
- Interaction between SFP, tone and intonation

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Thank you. Comments and questions are welcome!

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