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

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Outline

• Introduction
• Proposal
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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 geofaat
     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 geofaat 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 *vP* 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) 

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[SpkP [AdrP [ComP ... [TP [vP gwai]]]]]
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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

  \[\text{(9) Gaaming sik gwai geofaat me/aa/*maa/*o ho…} \]
  \[\text{Kaming know ghost syntax SFP} \]
  \[\text{Intended: ‘Kaming doesn’t goddamn know syntax.’}\]

- *me*: negatively biased, encoding negative expectations (Lam 2014)

  \[\text{(10) Gaaming duk geofaat me} \]
  \[\text{Kaming study syntax SFP} \]
  \[\text{‘Kaming doesn’t study syntax, am I right?’} \]
  \[\rightarrow \text{The speaker commits to the proposition that Kaming doesn’t study syntax.}\]

- *aa*: can be both neutral/negatively biased (Hara 2014)
SFPs and intonations

• *Gwai* Agrees with *me/aa* (or a null negative operator that *me/aa* induced, cf. Choi 2022)

• Agree: [*Comp NEG*] … [*vP V-gwai*]

• Negative concord

• *maa/o bo*: neutral/positively biased
  → Does not induce any negative operator
SFPs and intonations

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]]
SFPs and intonations

• *Me* in sentences with *gwai*: ✓ high-fall tone    ✗ 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    ✗ high-level tone

(14) Gaaming sik gwai maahaktouwan *(L%)/*H%
Kaming know ghost Mark Twain SFP

Intended: ‘Kaming doesn’t goddamn know Mark Twain.’
SFPs and intonations

• 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: \[\text{SpkP L\% [Assert]} \ldots [\text{VP V-gwai}]\]
Supporting evidence #3: Scopal interaction

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

(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

Intended: ‘It is not the case that when s/he is doing something, s/he is able to multi-task.’

OK ~ > Ɑ / * Ɑ > ~
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 ~ > ∃ / * ∃ > ~

• 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*: \([\text{ComP} \text{NEG}_{[\text{Qu}]}] \ldots (*Z_{[\text{Qu}]}) \ldots [\text{vP} \text{V-gwai}_{[\text{Qu}]辜}]\)
Minimality effects

• 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.’
Minimality effects

• 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.’
Minimality effects

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.’
Minimality effects

Remarks II

• For typical negative markers $m$, minimality effects do not occur
(24) Dak gaaming $m$ sik geoifaat \textbf{(focus, cf. (17))}
only Kaming not know syntax

(25) Gaaming jatding/ganghai $m$ sik geoifaat \textbf{(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
\textbf{(Quantifiers, cf. (19))}

(27) Gaaming sengjat/housiu $m$ sik geoifaat \textbf{(Qu adv, cf. (20))}
Kaming always/seldom not know syntax

$\rightarrow$ \textit{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 geisaat 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
(31) *Gaaming sik gwai geoifaat ge jiujin hai co ge
    Kaming know ghost syntax PRT rumor be false PRT
    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)

(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  keoi  sik  gwai  geoifaat  me
      I  not  think  s/he  know  ghost  syntax  SFP

(36)  *Nei  gokdak  keoi  sik  gwai  geoifaat  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

• \([\text{SpkP } L^\% \text{[Assert]} \text{[AdrP } \emptyset \text{[colloquial]} \text{[ComP } \text{me/aa/Op}[\text{Neg}] \cdots \text{[TP } \nu P \text{ 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 geofaat
         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 geofaat
       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  geoiafaat  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  geoiafaat  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 geofaat aa1
Everyone study-what syntax SFP

Intended: ‘Everyone (here) should not/does not study syntax.’

• Root requirement

(42)  *Ngo m gokdak Gaaming hok-matje geofaat aa1
I not think Kaming study-what syntax SFP

Intended: ‘I don’t think that Kaming should not/does not study syntax.’

……
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 maahaktouwan *(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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