Cantonese Gendered Discourse
Sentence Final Particles and SaJiao

Grégoire Winterstein, Regine Lai, Zoe Luk, Eric McCready

gregoire@eduhk.hk
EdUHK – LML Department
LingLunch, 22 mai 2017

Today

• 
  Gendered discourse in Cantonese:
    – What are the differences between the speech of masculine and feminine speakers?
    – How to account for these differences?

• Why Cantonese?
  1. Cantonese is unusually rich in Sentence Final Particles.
     – SFP are (rather) easily observable: they form a small(ish) closed class.
     – SFP convey expressive meaning, which is likely to be linked to gender differences.
     – Stereotypes about gendered speech typically involve SFP.
  2. Cantonese speakers (and speakers of other Chinese languages) recognize SaJiao, a register associated with female speakers. SaJiao has a number of interesting linguistic correlates which deserve an explanation.
  3. Little has been done on the topic.

1 Gender and Sentence Final Particles

Cantonese Sentence Final Particles

• Sentence (or Utterance) Final Particles:
  – appear in sentence/utterance final positions
  – SFP can combine in clusters with various degrees of compositionality

• Convey a great range of functions:
  – Aspect (laa3) and Modality (gwaa3)
  – Speech act marking (mma5, me1)
  – Common Ground and QUD management (ge3, laa3, laak3, lo1)
  – Evidentiality (wo5), Mirativity (wo3, tim1)
  – Expressive meaning (lo1, lu3)
  – …
Common Stereotypes about Cantonese SFP

- SFP are colloquial, reserved for informal speech
- SFP are mostly used to convey emotions
- “I don’t really use them” (by various educated/linguist male speakers)
- SFP used more by women than by men; women “need to be more polite” \cite{Light1982, Erbaugh1985, Chan2000}, or just more prone to be emotional.

Stereotypical Chinese male speech is succinct, direct, confident, and definite, in contradistinction to stereotypical women’s speech. \cite{Shih1984, cited by Chan2000}

Previous work

- Chan \cite{1996, 2002} discusses a number of particles with a feminine bias: \textit{zek1, ho2, wo3, laa3, laa1, aa3} and \textit{aa5}.
  - Based on introspection and the transcripts of a few episodes of a mainland China Cantonese drama
  - No masculine particles are identified.
- Tam \cite{2012} discusses more particles \textit{(tim1, bo3, lu3)} and relate them to \textit{SaJiao} (cf. infra)
  - Based on questionnaires distributed to a few participants and introspection.
  - No masculine particles are identified.
- The literature on Mandarin is more extensive, but the Cantonese and Mandarin SFP are quite distinct.

1.1 Corpus study

- \textit{Goal}: substantiate claims about the gendered distribution of SFP
  - Get quantitative data about SFP usage
  - Identify SFP with a feminine or a masculine bias
- Two major problems:
  - how to observe SFP?
  - observe them in which corpus?

Finding SFP: the problems

1. There exists no fixed list of SFP.
2. Most corpora are transcribed in Chinese characters, but the literature on SFP discusses their romanized versions.
3. There is no 1-to-1 correspondence between a given SFP and a Chinese character, e.g.
   - 唔 can correspond to any of the particles \textit{wo3}, \textit{wo4} and \textit{wo5}
   - the particle \textit{laa1} can either be written 唔 or 啦
4. Some morphemes are ambiguous:
• ge3 is either a genitive marker or an SFP, and sentence position is not enough to disambiguate it.

⇒ we established a list of 49 different characters based on:
  – common usage
  – descriptions of SFP in the literature
  – those found in different corpora

• we identified characters which unambiguously correspond to an SFP and those who don’t.

Choice of Corpus

• Use of the Hong Kong Cantonese Corpus (HKCanCorp) [Luke & Wong (2015)]
  – the “Conversation” part of the corpus (12,491 utterances, 116,648 tokens): spontaneous conversations with friends, family or close ones
  – Segmented and PoS tagged (no specific SFP tag, but a 語氣詞/Modal Particle which covers SFP and other discursive elements)
  – Indication of the gender of the speaker (most likely “biological sex”)

• Procedure to identify an SFP
  – Chinese character unambiguously correspond to a SFP
  – or character + PoS point to a SFP

• We observed:
  – the proportion of utterances with / without any SFP
  – the usage of a given SFP per speaker (per utterance)

Results: overall usage of SFP

<table>
<thead>
<tr>
<th></th>
<th>No SFP</th>
<th>At least one SFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feminine Utt.</td>
<td>1961 (26.6%)</td>
<td>5413 (73.4%)</td>
</tr>
<tr>
<td>Masculine Utt.</td>
<td>1593 (34%)</td>
<td>3082 (66%)</td>
</tr>
</tbody>
</table>

Table 1: Gendered Distribution of SFP in HKCanCorp

• On average, it is true that women use significantly more SFP than men, even though the effect is rather weak ($\chi^2 = 77.006; df = 1; p < 0.001; \varphi = 0.079$).

• The claim that “men do not use SFP” appears quite unfounded.

Results: gendered distribution of SFP

Results: gendered distribution of SFP (II)

• We then fitted GLMM with optimized random structures to measure how well the relative frequency of use of a particle predicts the gender of the speaker.

• The effects of SFP were assessed by model comparison via likelihood ratio tests against a baseline model using normalized utterance counts as sole predictor and against a maximal model using the baseline and all SFP as predictors.

• Final results:
1.2 Discussion

- Some of the particles mentioned by [Chan (2002)] do not appear: *ho2* and *zek1*
  - we will ignore *ho2*
  - and deal with *zek1* in the next section

- Here, we give a brief description of the semantics of the other SFP mostly based on [Kwok (1984)] and [Matthews & Yip (2011)].
  - Each SFP would probably deserve a full hour of its own...

The feminine assertive particles (I)

- *aa3* is the most frequent SFP (it represents 26.7% of the SFP tokens in the corpus). Its usual description is as a “softener” of assertions and questions.

(1) a. Wong4 FeiHung4 hai2 bin1dou6 (aa3)?
   Wong Fei Hung is where SFP

Table 2: SFP with a significant gender bias

<table>
<thead>
<tr>
<th>Feminine Bias</th>
<th>Masculine Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>aa3</td>
<td>ge3</td>
</tr>
<tr>
<td>laa1</td>
<td>laa3 (laak3)</td>
</tr>
<tr>
<td>lo1</td>
<td>ze1</td>
</tr>
<tr>
<td>me1</td>
<td></td>
</tr>
<tr>
<td>wo3</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Pearson Residuals of a fit of the contingency table of the frequencies of each SFP by gender (*vcd* package for R [Zeileis et al. 2007])
Where is Wong Fei Hung?

b. keoi5 m4hai2dou6 (aa3).
   he is not here  SFP
   He's not here.

– aa3 in declaratives seems to also have an evidential value (cf. infra).

(2) Trump wui6 bei2taan4haat4 aa3.
   Trump will be impeached  SFP
   Trump will be impeached (and the speaker has some evidence for it)/

The feminine assertive particles (II)

- [Hara & McCready in press] argue that wo3 and lo1 form a dual pair marking the unexpectedness/expectedness of a content or the current discourse move.

(3) Why is the laundry wet?
   a. (ho2nang4) lok6gwo3yu5 wo3.
      probably rain-EXP  SFP
      It (probably) rained (unexpectedly).
   b. lok6gwo3yu5 lo1.
      rain-EXP  SFP
      It rained (obviously).

- lo1 is less severe than lo4, its stronger variant, in that it encourages agreement, cooperation and sympathy. [Luke (1990)] describes it as a marker used to negotiate successful conversation endings.

- lo1 is getting typical of teenager’s speech as a mark of annoyance. This usage does not seem to be reflected in our corpus.

Other feminine particles

- laa1 marks invitations and mild commands.

- (4) a. sik6 do1di1 sung3 laa1!
      eat more dish  SFP
      Eat more!
   b. #m4hou2 jam2 piu3baak6seoi2 laa1.
      don’t drink bleach  SFP
      Don’t drink bleach.

- me1 is a question marker, which indicates that the speaker has a very low belief in the proposition it attaches to.

- (5) a. keoi5 m4hai2dou6 me1?
      he is not here  SFP
      He is not here?
   b. keoi5 m4haidou6 aa4?
      he is not here  SFP
      Is he not here?
The masculine assertive SFP

- **ge3** indicates the speaker is unwilling to modify their beliefs.
  - (6) a. Who do you think will win?
    b. Trump *wu6 jing4 ge3.*
    Trump will win SFP
    Trump will win.
  - Compare with **aa3** which requires some evidence:
  - (7) a. How do things look for the election?
    b. Trump *wu6 jing4 aa3.*
    Trump will win SFP
    Trump will win.

- **laa3** indicates a (conversationally relevant) change of state
  - (8) *zi6 cong4 ngo5 zou6 zo2 ba4 ba1 zi1 hau6 ngo5 mou5 ceot1 heoi3 jam2 zau2 laa3.*
  since I became father after I no go out drink SFP
  Since I became a father, I don’t go out drinking anymore.

Downplaying: **ze1**

- **ze1** is often glossed as *only*, but mostly carries an adversative reading which downplays a previous statement.
  - (9) *Ngo5 soeng2 heoi3 ge2. bat1 gwo3 m4 dakan1 haan4 ze1.*
    I want go SFP but not free-time SFP
    I want to go, but/only I’m not free.
  - (10) *gaan2 nguk1 hou2 daai6 ze1.*
    CL house very big SFP
    The flat is very big (not as small as reported/expected)

Taking stock

- Feminine SFP:
  - Question + low belief (*me1*).
  - Expectedness / Unexpectedness (*lo1/wo3*).
  - Mild commands and invitations (*lau1*).
  - Soft assertion with evidential value (*aa3*)

- Masculine SFP:
  - Assert high belief (*ge3*)
  - State relevant facts (*lau3*)
  - Adversative downplay (*ze1*)

- Previous work explain gendered differences in terms of politeness, but don’t justify why female speakers are under pressure to be more polite. [Light 1982, Erbaugh 1985, Chan 2000, Yueh 2013].

- We propose to explain these differences in terms of *epistemic authority*. 
1.3 Epistemic Authority

Reliability and epistemic authority

- McCready (2015): an agent’s judgement about the reliability of a speaker is arrived at on the basis of two factors:
  1. the history of interaction between the agent and the speaker: the more communications of the speaker that properly convey accurate information, the higher the degree of reliability the agent will assign.
  2. the baseline likelihood that the speaker is reliable at all will be assigned on the basis of heuristics about the kinds of agents that are reliable.
    - Fricker (2007): speakers make judgements about people’s epistemic authority based on stereotypical information, e.g. their gender, race, occupation, grooming, ...
    - the overt or covert primary position of males in society, and their consequent authority, can lead to differences in epistemic authority as well.
    - in general, men have a higher degree of authority than women

Gender and epistemic authority

- McCready & Winterstein (2017) extend the theory to the case of gendered speech in particular.
- Series of experiment (English, Cantonese, Japanese):
  - women are generally, on a heuristic and stereotypical basis, assigned a lower degree of reliability than men
  - feminine speakers appear to lack credibility compared to masculine speakers outside of what is considered to be their domain of expertise
    * A male source is credible on female topics, e.g. sewing machines
    * A female source is not credible on male topics, e.g. power drills
- Bayesian treatment
  - Epistemic authority is equated to reliability
  - Biases about reliability is captured via likelihood

Bayesian view: example

- Consider scenarios like:

(11) I have a friend who says he knows a lot about power tools, and he says this model is really powerful.

Two distinct pieces of information are given:
  - the friend is male: \( i \in T_{\text{male}} \)
  - the friend knows about power tools: \( i \in K_{\text{power tools}} \)

- When observing that \( i \) is of type \( T_{\text{male}} \) we have (via Bayes’ rule, with \( P(R_i,D) \) the probability that \( i \) is reliable in domain \( D \)):

\[
P(R_i,D|i \in T_{\text{male}}) = \frac{P(i\in T_{\text{male}}|R_i,D)\times P(R_i,D)}{P(i\in T_{\text{male}})}
\]

\( P(i\in T_{\text{male}}|R_i,D) \) is the likelihood of being of type \( T_{\text{male}} \) if the agent is assumed to be reliable. This can be seen as a measure of personal biases (“if the person is reliable, he/she must be a man/woman”), which might be linked to the gender of the respondent.
Bayesian view (II)

- If we consider both pieces of information given in the target arguments:

\[
P(R_i, D | i \in K_{\text{powertools}}, i \in T_{\text{male}}) = \frac{P(i \in K_{\text{powertools}} | R_i, D, i \in T_{\text{male}}) \times P(i \in T_{\text{male}} | R_i, D) \times P(R_i, D)}{P(i \in K_{\text{powertools}}, i \in T_{\text{male}})}
\]

- This expresses the posterior probability that \(i\) is reliable in domain \(D\), knowing that \(i\) is of type \(T_{\text{male}}\) and has property \(K_{\text{powertools}}\).

- If \(K_{\text{powertools}}\) is a property that is typical of type \(T_{\text{male}}\), this quantity is very close to the one in \([12]\), the limit case being: \(T_{\text{male}} \subset K_{\text{powertools}}\) (e.g. all males are knowledgeable about power tools).

Back to SFP

- What happens when one is deemed to have/lack authority in a social situation?

- If one has authority, one is able to push one’s judgements, and see to their realization, even at the expense of other conflicting possibilities, e.g. one can:
  - expect his assertions will be believed (ge3)
  - downplay or reject the assertions of others (ze1, direct denial)
  - to some extent dictate the topic of conversation (laa3)

- If one does not have authority, they should
  - Soften a statement by suggesting that one has evidence for it (aa3)
  - Indicate low belief via interrogative, or unexpectedness rather than outright rejection (me1, wo3)
  - Seek out common ground for propositions with high belief (lo1)

Example

- (14) If this student don’t come to this meeting, we will give him a warning letter.
  - a. ceot1 ging2gou3seon3 keoi5 wui3 geng1 me1? issue warning letter he will scare SFP Will a warning letter scare him?
  - b. ging2gou3seon3 ze1, keoi5 m4wui3 geng1 ge3. warning letter SFP he will not scare SFP Just a warning letter, he won’t be scared.

- \([14-a]\) is a milder rejection than \([14-b]\)
- Both convey that the speaker has a low belief about the relevant proposition
- but \([14-a]\) does not “inflict” the denial on the addressee.

Taking stock

- SFP are used by both genders in the corpus.
- Some particles have a gendered bias, i.e. are used more frequently by male or female speakers.
- We argue the difference is linked to the perceived epistemic authority of the speaker.
- Future work: examine the gender distribution of SFP in other registers
– distinguish by gender of the addressee
– transcriptions of the meetings of the HK Legislative Council (currently underway).
  * Highly formal setting, yet SFP are still used
  * Distribution seems to differ with the one presented here.
  * Plan: look at their distribution across: gender, political alignment (localist, pro-Beijing...),
    communicative situation (planned, unplanned)
– more modern corpora (Cantonese MapTask corpus, currently being transcribed, Lai & Winterstein
  2016)
  * New uses of particles (e.g. lo1, lu3).
  * Some control on the familiarity between speakers.

Note that these observations are found in actual speech, i.e. most likely reflect the actual status of feminine
speakers more than stereotypes about them. It is to these stereotypes we now turn.

2 Fictionalized speech, zek1 and SaJiao

2.1 Zek1

The case of zek1

• The most detailed work on a gendered Cantonese SFP deals with the particle zek1 (Chan, 2002).
• Generally speaking, many native speakers agree that this SFP can have some feminine overtones.
• Yet, the particle did not come out in our corpus (if anything, male speakers seem to use it more often)
• Why?

zek1 in corpora

• Chan (2002) relies on transcripts of a few episodes of a TV drama.
• A probe of the Mid-20th Century Cantonese Corpus (Chin, 2015) gives comparable results.
  – feminine speakers use zek1 on average in 1.75% of their utterances, significantly more than male
    speakers who use it ($\chi^2 = 141.59; df = 1; p < 0.001$).
• All sources of data involve situations which overall resemble those in HKCanCorp: conversation between
  close friends/family/colleagues.
• Main difference: one is authentic, the others are fictionalized speech
  – Fiction data probably reflects stereotypes and preconceptions about how women speak
  – These only partially overlap with the way female speakers actually speak

The meaning of zek1

• Chan (2002), Matthews & Yip (2011): zek1 marks intimacy between speakers
• Fung (2000): the particle is distinct, though related, to ze1
  – its distinctive feature is its “high affective value”
  – its “coquettish/feminine” features has recently diminished
– rather it marks impatience or dismay

(15) a. ngo5dei6 gei2si4 heoi3 hoi2jeong4gung1jyun2 zek1?
    we when go Ocean Park SFP
    When do we go to Ocean Park?

b. nei5 ngaai3 je5sik6 mei6 zek1?
    you call food yet SFP
    Are you going to order?

• Most instances of zek1 are found in interrogatives where ze1 is usually not felicitous.
  – There, it sounds more direct than aa3

Zek1 between truth and fiction

• We consider zek1 to mark the eagerness of the speaker in interrogatives (e.g. by clearing the QUD?)
• The speech act is more direct than standard interrogation.
• It is thus not compatible with a speaker with low epistemic authority, which is why we did not observe it in our study.
• In fiction, we argue that the use of zek1 is related to Sajiao, an artificial register frequently associated with female speakers.

2.2 Sajiao

• Sajiao (撒嬌, Cantonese saat3giu1, now SJ) is a communicative style used to wheedle one’s audience.
• Frequently discussed in popular media and fiction [Yueh 2013]
• Blurry definition:
  – supposed to be child-like
  – but children are also described as doing SJ
• Everyone agrees it is strongly associated with female speakers.

SJ: a definition

• SJ is a communicative strategy aiming at getting some benefit from a potentially unwilling addressee.
• The speaker presents themselves as being unable to obtain by themselves whatever they want, i.e. they display an “absence of power” (de Certeau, 1984).

• SJ is signaled via the use of child-like features, in a way meant to be recognized by the addressee (in a way that can be handled, e.g., via Burnett Accepted SMG)

• Definition more restrictive than others:
  – Does not characterize SJ by form
  – Excludes many cases analyzed as SJ, e.g. Yueh (2013) about Sales Assistants’ speech

Features of SJ
The most cited linguistic features of SJ are:

• Specific phonetic features: syllable lengthening, higher pitch, nasalization in Mandarin Chan (1998), and rounding in Cantonese

• The use of hypocoristic reduplication.

• A specific use of some expressions, among which Cantonese jan4dei6 (Mandarin Renjia, lit. “someone else”) to refer to the speaker.

• The use of certain SFP: Mandarin ma, and Cantonese zek1 Chan (2002)

• Using more direct speech acts Yueh (2013)

SJ Strategy

• The strategy works by lifting certain societal stereotypes to attention.
  – Men hold societal power in traditional Chinese culture (hereafter CGI for ‘Chinese Gender Ideology’), and are expected to be providers.
  – Women are lacking in power and dependent on men for various things required for life.

• These roles are only normative:
  – They’re flawed ideologies Stanley (2015): they offer an organizing framework for thinking about social relations which systematically subordinates women.

• Ideologies are like other sorts of ideas and social frameworks in that they can be deployed strategically.

⇒ Game-theoretic treatment

The mechanisms of SJ

• SJ offers the addressee a chance to assume the role of a provider.

• For male speakers: this is aligned with the societal stereotype assigned to them (stereotype: holders of societal power, heads of household, etc.)

• If the addressee endorses the stereotypes present in CGI, they will be likely to yield to the speaker’s desires after the stereotypes enter attention.

• In turn, as long as a female speaker is willing to tacitly endorse CGI, it is a good strategic move to make use of SJ, as it gives an increased likelihood of satisfying other demands in the right situation.
Game Theoretic SJ

- Concretely: use Quinley (2012) work on politeness as a starting point.
  - requests are “trust games” in which one player makes a request and the other chooses whether not to honor it based in part on the form of the request
  - a more polite request gives the speaker additional positive face (Brown & Levinson, 1987)
  - a sufficiently polite request (over a sufficient number of game iterations, in a repeated game setting) gives incentive to satisfy the request in order to gain face.
- SJ is a special kind of positive politeness, by emphasizing her subordinate status, a (female) speaker:
  - can give positive face to her (male) interlocutor
  - but simultaneously lowers her status

Sajiao Game

- a a (female) speaker wants to make a request to b (male)
- Speaker Payoffs:
  - higher in the case of direct request
  - penalty if doing SJ
- Addressee Payoffs:
  - higher if they deny the request
  - benefits if speaker is doing SJ

\[
\begin{array}{c|cc|c|cc}
& \neg A & A & b & \neg A & A \\
\hline
\neg SJ & 2, 4 & 4, 2.5 & & & \\
SJ & & & 1, 5 & 3, 3 & \\
\end{array}
\]

Figure 2: Sajiao speech

Is SJ rational?

- The use of SJ is a rational, strategic move, with two caveats:
  1. it’s rational for b to reject the request in a one-off setting, meaning that repeated games are required (as already pointed out by Quinley (2012) for the non-SJ case; see also McCready (2015) for the general issue of cooperation)
  2. if b doesn’t subscribe to CGI, or even opposes it, negative consequences ensue for a
- SJ is not gender specific, but
  - one’s status should be compatible with presenting oneself as powerless
  - the status of the addressee should be compatible with being presented as a “provider”
  $\Rightarrow$ the existence of CGI that makes SJ effective, which in turn accounts for why SJ is mostly used by women and children and targeted at men or parents.
SJ: Future work

- Meta-game about coordinating ideologies
  - one should avoid SJ with someone not subscribing to CGI
  - and one might be more penalized for doing SJ if they are not sincere/don’t subscribe to CGI

- Investigate the linguistic features of SJ:
  - Signals of SJ?
  - Or consequences of the persona the speaker is assuming?

- **Example:** the case of *jan4dei6*
  - Literally means “someone different from the speaker”
  - In SJ, it is used to refer to the speaker:

  (16) Nei5 zung1m4zung1 ji3 jan4dei6 a3?
       You like-not-like JD SFP
       Do you like other people/me?

  - [Shih (1984)] explains it by saying that women avoid the 1st person pronoun because it’s too direct
  - but does not fit with our analysis and probably untrue (corpus probe shows more feminine 1P pronouns) …

Conclusion

- We looked at two registers related to feminine speech in Cantonese:
  - *Sajiao* was analyzed as a strategic use of cultural ideologies
  - The other register was studied through the distribution of SFP and more closely corresponds to authentic feminine speech

- Authentic speech does not exploit ideologies for strategic benefit, but reveals cultural gender biases (low epistemic authority) and how feminine speakers use linguistic means to deal with

- We also argued that SJ is more widely present in fiction and in people’s representation of feminine speech than in natural contexts.

- This naturally follows if one sees SJ as a conscious communicative strategy which speakers, and thus producers of fiction, are sensitive to.

- This also further underlines the importance of the nature of the corpus when studying social meaning.

Bibliography


Heather Burnett (Accepted). “Signalling Games, Sociolinguistic Variation and the Construction of Style”. In: *Linguistics and Philosophy*.


