

Softness, assertiveness and their expression via Cantonese sentence final particles

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This paper examines the linguistic correlates of the notions of *assertiveness* and *softness* in Cantonese. Specifically, it focuses on a set of sentence final particles often described as conveying these two values: the particles *aa3*, *ge3* and *gaa3*. We argue that these elements do not directly encode assertiveness and softness, but rather that these come as side-effects of the conversational and dialogical nature of these particles. On one hand we argue that *aa3* encodes an explicit call on the addressee to mirror the content of the conversational move of the speaker, while on the other hand *ge3* indicates that the utterance of the speaker addresses (and is presented as solving) a salient decision problem in a way comparable to the Japanese particle *yo*. The particle *gaa3* combines the effects of *ge3* and *aa3*. It is then the competition between *ge3* and *gaa3* that explains the assertiveness attached to the former.

1. Introduction

In this paper we examine the notions of *assertiveness* and *softness* by looking at a set of Cantonese Sentence Final Particles (SFP) that have been described as conveying either assertiveness or softness.

The concepts of assertiveness and softness are frequently part of the discussions around *gendered discourse*: the study of the differences and similitudes between discourses produced by members of different genders. A typical claim is that softness is characteristic of female speech whereas assertiveness is more male oriented (see e.g. Lakoff 1975 for early examples). This has however been disputed: different authors showed that, depending on variables like context or the social status of the participants in the discourse, female participants can exhibit assertive characteristics and male speakers might be prone to softness (see e.g. Eckert & McConnell-Ginet 2013 for a critical discussion). Nevertheless, and rather unsurprisingly, it seems that subordinate groups (and therefore female speakers in many contexts) tend to opt for softness more often than dominating groups, while groups that hold power (such as male speakers) are more easily assertive.

On the other hand, softness and assertiveness are also part of the inventory of semantic primitives used to describe the contribution of natural language items, typically of discourse markers, in a variety of languages (e.g. English, Japanese, Chinese languages or Thai). In this perspective, particles of softness are related to a form of politeness: they are described as “smoothing” relationships between the speaker and addressee, making an utterance sound more natural, or less imposing on the addressee. Examples of particles described in this way include the Japanese particle *no* (especially in feminine speech, see McGloin 1986; Cook 1990, pace Rieser 2017), or Mandarin *a/ya* in questions (Li & Thompson 1989). Assertiveness, on the other hand, conveys a form of strong commitment or belief of the speaker regarding the content they are uttering. Again, such particles are frequently found in many languages such as English *man* (McCready 2008, 2012) or Japanese *yo* (Davis 2009; McCready 2012).

The picture painted here raises several issues about the status of softness and assertiveness in natural language. First, one needs to explicitly relate the description of discourses (e.g. feminine or masculine discourse) as being soft or assertive with the description of particles conveying these notions. A simple answer is that a discourse is made

to be soft or assertive by the very markers used in that discourse, e.g. a speaker is being soft if they use a softening marker. This is probably too simplificationary for several reasons. For one, a discourse can be made soft or assertive in many (possibly infinite) ways that depend on the situational contexts, i.e. there are factors beyond lexical choice that affect the soft/assertive dimension of a discourse.

Another issue is that there is no *a priori* reason to assume that particles are inherently soft or assertive. This is the main issue of the paper: that of knowing whether assertiveness and softness are best considered as semantic primitives that are encoded by certain markers, or rather as side effects that arise due to the use of the markers in question in specific contexts. Though much of the literature that uses softness and assertiveness as descriptors of the meaning of discourse markers might seem to opt for the former option, nothing prevents us from seeing these notions as practical proxies for more decomposable atomic meaning postulates. This is the approach we will adopt here, showing how the formal description of our SFP accounts for how contextual and social factors trigger or impede the soft and assertive readings of these particles. Thus, the soft/assertive nature of a discourse cannot be tied to the use of markers. Rather, it is mostly contextual matters that will determine the soft or assertive reading of some discourse elements.

A last issue has to do with the compatibility of the two notions under study. Intuitively, assertiveness and softness appear mutually exclusive since the former involves a degree of force that the latter precisely seeks to avoid or mitigate, at least according to most descriptions of the notion of softness. However, data show that what are described as assertive and softening markers can be used in combination, suggesting one of three options: (i) the notions are compatible (which would exclude the possibility that these markers bear on a single dimension with mutually exclusive readings), (ii) one notion is stronger than the other and supersedes it in case of conflict, or (iii) the soft/assertive nature of an utterance is conversational and inferentially based on the elements present in an utterance in a given context. We will argue for that latter option.

To investigate these different issues we focus on a subset of Cantonese SFP, namely the particles *ge3* (嘅), *aa3* (呀/啊) and *gaa3* (㗎) which is considered to be the fusion of the first two. This is done for several reasons. First, we choose SFP because these elements scope over whole utterances and thus only bear on utterance-level properties rather than on sentence-internal elements which somewhat simplifies the study of their meaning. Second, these particles are typically described as being either assertive or softening, and thus embody the notions we are interested in. Finally, these elements have interesting combinatorial properties which show how the two notions can interact (or not).

The outline of the paper is as follows. Section 2 gives a short overview of Cantonese, with a focus on SFP and the type of sentence types they modify, with a focus on the particles of interest and their treatment in the literature. In section 3, we argue for a dialogical treatment of the softness particle *aa3*, based on the idea that the particle encodes a symmetry between the speaker's commitment and the call on addressee. Section 4 deals with the assertive particle *ge3* and analyzes it in a way similar to how the Japanese particle *yo* is analyzed and then show how it combines with the particle *aa3*. The semantics of *gaa3* is then laid out in order to account for the assertive nature of *ge3*. We conclude in section 5.

2. Empirical domain and literature review

We begin this section by introducing Cantonese SFP and their general distribution and properties. In order to discuss and clarify the description of the semantic import of Cantonese SFP, we provide a summary overview of Cantonese sentence types, and discuss

whether SFP can modify the type of their host sentence. This section also serves to introduce some of the theoretical concepts we will use to formalize the meaning of the particles at hand. We then introduce the three particles of interest in this paper: *aa3*, *ge3*, and *gaa3*.

2.1 Cantonese Sentence Final Particles

Like most Chinese languages, Cantonese has a number of elements called sentence final particles that appear in the right periphery of discourse units (called sentences or utterances depending on authors, cf. Luke 1990) and whose functions range over a great number of semantic and pragmatic dimensions. In Cantonese, the inventory of SFP is unusually large with between 30 and 40 distinct monosyllabic elements being typically described (see a.o. Kwok 1984 or Matthews & Yip 2011). Besides their great number, another peculiar aspect of Cantonese SFP is their tendency to combine in sentence final clusters that routinely contain two or more distinct SFP. The order of SFP in those clusters is not free and rather constrained with at least four slots in which certain SFP can appear (Matthews & Yip 2011).

Many SFP convey information about the participants of the discourse: their “mood”, their assumed epistemic status, etc. and it is commonplace to classify SFP in terms of their meaning, e.g. distinguishing SFP that are evidential, those that are exclamatory or affective, etc. (Matthews & Yip 2011), though classifications based on the type of sentence they appear in have been proposed (Kwok 1984). Out of these, the SFP of most interest to us, and expanded upon below, are the particle *aa3*, often described as a softener, and the particle *ge3* described as assertive.

Another cogent reason to group some particles together is their segmental similarities and distributional patterns. Law (1990) observed that some SFP that share their onset consonant also seem to share part of their meaning, and that such SFP cannot appear together in clusters. Later, Fung (2000) and Sybesma & Li (2007) refined and further formalized this analysis, decomposing a larger set of SFP by trying to characterize the semantic contribution of all the segmental information contained in a given SFP (i.e. onset, vowel, coda and tone) and claiming that these elements are compositional and account for all the meaning space covered by SFP. For example, the particles *ge2* and *gaa2* share their *g*-onset with the assertive SFP *ge3*, and the previous authors identify the root of the assertiveness component of *ge3* in that particular onset, meaning that it is also shared by all *g*-particles. Differences in how that component is conveyed by the three SFP thus depend on the meanings conveyed by the tone and rime of each particular SFP (which might for example mitigate and tone down the assertiveness). We will not discuss the well-foundedness of these claims, though we will occasionally refer to them when discussing differences between our SFP of interest and SFP that share some of their segmental characteristics (and thus, allegedly, part of their meaning).

2.2 Cantonese sentence types

Syntactically, Cantonese SFP attach to whole sentences. Some authors have argued that their precise sites of attachment differ between SFP (Law 2002), though these differences have little bearing on our discussions. Since SFP scope over full sentences, the semantic type of their argument thus correspond to those of sentences. In most approaches to grammar, it is customary to distinguish between at least four main different sentence (or clause) types: declaratives, interrogatives (closed and open), imperatives and exclamatives. There is however less consensus on how to define each type in a stable cross-linguistic manner. On one hand, these types have distinguishing syntactic features in languages like

English, suggesting a syntactic characterization of these types (see e.g. Huddleston 2002 for characterizations of each type). On the other hand, and on a rather intuitive level, these types can also be defined in terms of their meaning and the illocutionary acts they allow. Thus declaratives are used to convey assertions, interrogatives are used to ask questions etc.

The overall picture is however more complex. First, sentence types cannot be defined on their syntactic properties alone. For example, interrogatives vary wildly in terms of their syntactic properties (Huddleston 2002), but seem unified on a semantic basis, i.e. it would make little sense to bundle them up based on their sole syntactic profile, but the type of message they send is stable. Second, there is no one-to-one correspondence between illocutionary types and syntactic types. Thus, it is not true that all declarative sentences convey assertion, just like all questions are not necessarily conveyed using an interrogative sentence. This is the “Speech Act Assignment Problem”, discussed by Sadock (1974), Gazdar (1981) and in the literature they generated.

One way to clarify the matter is to follow authors like Ginzburg & Sag (2000) and assume that a sentence type is a *construction* that associates a family of syntactic types with a meaning of a certain type: a *message* that can be a proposition, a question, a fact or an outcome (in the typology of Ginzburg & Sag 2000). This helps preserve the idea that interrogatives have a semantic unity and a syntactic disparity (though they remain related at higher level of abstraction, see Ginzburg & Sag 2000 for extensive discussion). The assignment of the illocutionary force is yet another distinct matter, partly driven by the construction at hand (which naturally allows some illocutionary acts) and the use of markers that affect the illocutionary force (see *infra* for details).

In Cantonese, the situation is made somehow more difficult by the fact that there are less clear-cut criteria to distinguish between syntactic sentence types. While it is straightforward to characterize the declarative and interrogative types in syntactic terms or by the presence of lexical terms (e.g. *wh*-words), the imperative and exclamative types are not distinguished in this way. There exists some constructions which can be argued to denote some particular instances of these two types, e.g. the locution *m4hou2* “don’t” which marks negative imperatives, (Yang 2010), or some constructions that arguably have an exclamative character (see Zhu 1994 for Mandarin), but there is no general criterion which would mark a sentence as being of either type.

Since the point of this paper is not to establish a list of tests and characteristics of Cantonese sentence types, we will only briefly consider sentence types in relation with sentence final particles. The question we want to answer here is whether a SFP can change the message conveyed by its host (i.e. change its sentence type) or only act on its illocutionary force. In many cases, SFPs do not appear to affect the message anyway, and only add information to it, but some particles can, for example, turn declarative clauses into queries. For these latter SFPs, the question is relevant, and answering it is also relevant to the SFPs that are able to attach to different sentence types (without necessarily modifying them) because these could either shift all their compatible sentence types to a unique target type or leave all of them unchanged.

Here, we will only consider data relative to polar questions and show that SFP that mark polar questions cannot be treated as shifters of the sentence type of their host to an interrogative type. Instead, they take declarative sentences as their arguments and affect their illocutionary potential rather than change the nature of the message conveyed by the sentence. Our focus on polar questions is for several reasons:

1. polar questions can be conveyed by both a syntactically marked interrogative sen-

tence type pattern and through the use of SFP

2. the question SFP we look at (*aa4*) is similar to the softening SFP we deal with here, the only difference being one of tone (and of course meaning, but the analyses we mentioned above suggest that they should thus have much in common)

In Cantonese, polar questions can typically be conveyed by using the so-called *A-not-A* interrogative construction, where *A* is the first syllable of the main predicate of the clause (1).

- (1) nei5 zung1 m4 zung1ji3 ngo5 aa3?
you like NEG like me SFP?
‘Do you like me?’

Another way to convey a polar question is by the use of specific particles (see Hara, this volume for details about the range of possible SFP and their semantic differences). Among the available options, the SFP *aa4* is the most neutral one in that it does not necessarily convey any bias towards an answer (though it is compatible with situations that do) and thus attaches to a declarative of content *p* and the resulting utterance ends up conveying a polar question *?p*:

- (2) zi3ming4 jau5 fu6ceot1 gwo3 si4gaan3 aa4?
Jimmy have devote ASP time SFP
‘Has Jimmy spent time (on the project)?’

In spite of their illocutionary similarities, we will show that only questions as in (1) can be treated as interrogatives, and that a question as in (2) is best treated as a questioning declarative, meaning that its message type is a proposition. We use two observations to support this claim.

The first one is coordination, which is a routine test to show that two sentences share their types (or at least have compatible types). For example *A-not-A* questions can easily be coordinated together (3), or with *wh*-questions, in either direction (4), showing their type compatibility.

- (3) keoi5 leng3-m4-leng3 tung4maai4 jau5-mou5 cin2 aa3?
they.SG good-looking-NEG-good-looking and have-have.NEG money SFP
‘Are they pretty and do they have money?’
- (4) a. bin1go3 wui5 lai4 tung4maai4 keoi5dei6 wui5-m4-wui5 sik6zo2faan6 aa3?
who will come and they.PL will-NEG-will eaten SFP
‘Who will come, and will they have eaten?’
b. nei5 baau2-m4-baau2 tung4maai4 nei5 gan1zyu6 soeng2 heoi3 bin1dou6
you full-NEG-full and you next want go where
aa3?
SFP
‘Are you full, and where do you want to go next?’

Similarly, questions with the *aa4* SFP can also be coordinated together (5).

- (5) keoi5 leng3 aa4 tung4maai4 jau5 cin2 aa4?
they.SG good-looking SFP and have money SFP
‘They’re good-looking? and they have money?’

An utterance of (5) is made up of two discourse units, as indicated by the use of an SFP in

each unit, but the conjunction *tung4maai4* ('and') imposes the usual similarity constraints on its two arguments. Indeed, questions with the *aa4* SFP cannot be coordinated with either *A-not-A* or *wh*-questions (6), suggesting they are of different types.

- (6) a. *nei5 m4hoi1sam1 aa4 tung4maai4 ji4gaa1 jiu3 zou6 mat1je5?
 you unhappy SFP and now want do what
 (int.) 'You're unhappy? and what do you want to do?'
 b. *zi3ming4 wui5 lai4 aa4 tung4maai4 keoi5 wui5m4wui5 sik6zo2je5?
 Jimmy will come SFP and they.SG will-not-will eaten
 (int.) 'Jimmy will come? and will he have eaten?'
 c. *bin1go3 wui5 lai4 tung4maai4 ngo5dei6 wui5 zeon2si4 hoi1ci2 aa4?
 who will come and we will on-time start SFP
 (int.) 'Who will come and we will start on time?'
 d. *keoi5 leng3-m4-leng3 tung4maai4 jau5 cin2 aa4?
 they.SG good-looking-SG-good-looking and have money SFP
 (int.) 'Are they pretty and they are rich?'

Note that the degraded nature of the above examples cannot be attributed to the lack of an SFP in the first conjunct. This can be seen with example (7), in which the SFP *aa3* has been added to the first conjunct, without improvement to the acceptability of the resulting utterance.

- (7) *keoi5 leng3-m4-leng3 aa3 tung4maai4 jau5 cin2 aa4?
 they.SG good-looking-SG-good-looking SFP and have money SFP
 (int.) 'Are they pretty and they are rich?'

Another test that distinguishes *A-not-A* questions from their *aa4* counterparts is their licensing of negative polarity items (NPI). One such element in Cantonese is the expression *jam6ho4jan4* 'anyone' which we will consider close to its Mandarin counterpart *renhe* 'any' (Wang & Hsieh 1996). As shown in (8), the use of *jam6ho4jan4* is felicitous with *A-not-A* questions (8-a), but not in *aa4* questions (8-b), again pointing at a difference in the type of the two sentences.

- (8) a. jau5-mou5 jam6ho4jan4 bong1dou2 ngo5dei6?
 have-have.NEG anyone help us
 'Is there anyone who can help us?'
 b. #jau5 jam6ho4jan4 bong1dou2 ngo5dei6 aa4?
 have anyone help us SFP
 'There's anyone who can help us?'

Therefore, we will consider that SFP like *aa4* do not change the semantic type of their host. Rather they convey additional material that affects the illocutionary value of their host in a way comparable to, for example, question tags in English. We elaborate on the nature of this additional material when discussing the semantics of the particle *aa3* below. We now turn to this particle and the particle *ge3*.

2.3 The softness particle *aa3*

The SFP *aa3* appears to be the most frequent SFP of all. In the Hong Kong Cantonese Corpus (HKCanCor, Luke & Wong 2015), that sole particle accounts for nearly 27% of all the SFP tokens in the corpus and appears in about 25% of all the utterances in the corpus. This last figure jumps to nearly 37% if one adds to it the occurrences of the

particle *gaa3* (which is analyzed as the combination of *aa3* and *ge3*).

The following data shows the use of *aa3* in a declarative (9), interrogative (10) and imperative sentence (11).

- (9) cin4min6 jau5 hou2do1 jan4 aa3.
in-front have a-lot person SFP
‘There are lots of people in front’ (Fung 2000)
- (10) nei5 hoi1-m4-hoilsam1 aa3?
you happy-NEG-happy SFP
‘Are you happy?’
- (11) m4hou2 jam2 piu3baak6seoi2 aa3.
don’t drink bleach SFP
‘Don’t drink bleach!’

In all these cases, the use of *aa3* does not seem to drastically affect the message conveyed by its host utterance, and the general intuition is that it adds a sense of “naturalness” to all examples.

Possibly because of its high frequency and elusive meaning, *aa3* has often been described as an element without any contribution in terms of meaning. Thus, Kwok (1984:45–46) claims that “*aa3* does not appear to carry much semantic content” and that its function is “to make the sentence sound less abrupt”, noting that it can attach to declaratives, interrogatives and imperatives. Similarly, Matthews & Yip (2011:398) mention that *aa3* can be used in questions if no other SFP is present and that it “softens” the force of statements and confirmations. Law (1990:4.2.2.3) echoes Kwok (1984) in considering that *aa3* lacks semantic content and that its main function is “to make an utterance sound more natural”.

Sybesma & Li (2007) choose a slightly different route and describe it as conveying a value of “smooth alert” by which they mean that *aa3* “makes the utterance fit more smoothly in the conversation”, though they never elaborate on how it manages to do so. The same authors also note the versatility of *aa3* which can combine with all sentence types.¹

There thus seems to be few constraints on the use of *aa3*, be it in terms of the type of message it can affect, or in the semantic effects it conveys. Nevertheless, *aa3* cannot be taken as a semantically vacuous SFP. Example (12) shows a clear case in which the use of *aa3* is anomalous (under the most probable interpretation) and where the particle *ge3* is instead preferred.

- (12) A: m4hou2 ci4dou3
don’t late
‘Don’t be late!’
- B: hai6 ge3/# aa3.
COP SFP
‘I understand. / # Yeah, right?’

¹ Sybesma & Li (2007) actually claim that *aa3* attaches to exclamatives and imperatives, but all their examples are restricted to declarative and interrogative sentences. This is most likely because there is no clear exclamative sentence type in Cantonese and because clearly imperative sentence types in Cantonese are scarce (cf. our discussion above).

In (12), B’s acknowledgment of A’s command cannot be expressed by using *aa3*. Using *aa3* there would convey a sort of cheekiness and detachment regarding the order, in a way very similar to what the use of a question tag would in English (as reflected in the choice of translation). If *aa3* was all about helping fit its host in the conversation, one would expect it to be felicitous in (12) where B offers the preferred sort of reply to an order, i.e. acknowledgement. We deal with this case and the semantic import of *aa3* in section 3.

2.4 The assertive particle *ge3*

Compared to *aa3*, the SFP *ge3* is much less frequent, being ranked as the 16th most frequent SFP in HKCanCor, and appearing in slightly more than 1% of the utterances. That number increases to 12.3% if one adds the occurrences of the SFP *gaa3* in the picture (which comes as the fusion of *ge3* and *aa3*). A common description of *ge3* is as a marker of the epistemic status of the speaker, used when the speaker is fully committed to the content of their utterance. For example, *ge3* in B’s answer in (13) is consistent with the assumption that the speaker is maximally sure of their place of birth.

- (13) a. nei5 hai2 bin1dou6 ceot1sai3 gaa3?
 you at where born SFP
 ‘Where were you born?’
 b. ngo5 hai2 hoeng1gong2 ceot1sai3 ge3.
 I in Hong Kong born SFP
 ‘I was born in Hong Kong.’

Thus, Kwok (1984:42–43) described *ge3* as expressing “certainty” and “determination”, along the same lines as the Chinese Mandarin particle *de/的*². She further characterizes *ge3* by asserting that “the [host] sentence is a factual statement expressing what the speaker regards as true. It is used to strengthen the force of the assertion, and is like prefacing the sentence with ‘It is a fact...’”, a description that is later adopted by Law (1990).

This “factuality” of *ge3* and its similarities with some English *it*-clefts are frequently noted in the literature. For example, Matthews & Yip (2011:401) note that *ge3* is used for assertions of facts, often marking focus or emphasis, then observe that *ge3* enters the emphatic construction *hai6 ...ge3*, where *hai6* is the Cantonese copula.

Similarly, Fung (2000) argues that *ge3*’s major function is to “mark a high level of commitment on the part of the speaker to the proposition conveyed by the utterance, asserting the certainty of the proposition without any doubts”. To back up this claim, Fung uses the incompatibility of *ge3* with epistemic markers expressing values below certainty such as *daai6koi3* (‘probably’) cf. (14) (her (31’)), where *daai6koi3* contrasts with the felicitous *jat1ding6* (‘surely/definitely’).

- (14) aa3-ji6 suk1 jat1ding6/?daai6koi3 wui3 luk6zuk6 gei3-faan1lei4 ge3.
 second-uncle sure/probably will continue mail-back SFP
 ‘Second uncle surely/?probably will continue to send (them to us).’

Later, Sybesma & Li (2007:fn. 12) summarize several descriptions of *ge3* and describe it as an “actuality marker”, i.e. as “asserting that the statement to which it is added is highly

² This parallel between Mandarin *de* and Cantonese *ge3* is often noted and probably not accidental given how both also work as genitive markers and enter parallel constructions involving the copula. We will not investigate these issues.

relevant to the current conversation”. They continue by stating that the factuality of *ge3* “seem[s] to us to be side-effects”, though they remain silent about how these are actually derived, or about how relevance is to be defined.

In terms of compatibility with sentence types, *ge3* appears to be more restricted than *aa3* and is mostly considered in declaratives as in (13). However, beyond declaratives, *ge3* is also compatible with wh-interrogatives as in (15).

- (15) bin1go3 se2 ge3?
 who write SFP
 ‘Who wrote that?’

The contribution of *ge3* in interrogatives is again difficult to characterize precisely. Its function appears to indicate a form of assertiveness about the question having a (true) resolving answer, e.g. excluding that the answer to (15) is “nobody” (rather than being assertive about a particular answer which would amount to a form of biased question).

While intuitive enough, these descriptions of the semantics of *ge3* are problematic on several accounts.

First, contrary to the claim of Fung (2000), *ge3* cannot be seen as an epistemic marker, or at least not one bearing on the same dimension as epistemic adverbs. To see it, we observe that in Fung’s example, the allegedly problematic epistemic adverb *daai6koi3* can be replaced by either *ho2nang4* or *waak6ze2* which both express epistemic uncertainty and are felicitous with *ge3* (16).

- (16) aa3-ji6 suk1 waak6ze2/ho2nang4 wui3 luk6zuk6 gei3-faan1lei4 ge3.
 second-uncle maybe/probably will continue mail-back SFP
 ‘Second uncle might continue to send (them to us).’

The most prominent reading of (16) is that the speaker is certain that there is a possibility of receiving mail from their second uncle. Under that reading, the use of *daai6koi3* is actually also judged natural.

Second, the description of *ge3* as indicating factivity is potentially misleading. Typical treatments of factivity treat it as the (usually presupposed) indication that a piece of information is true in all possible worlds and cannot thus be otherwise. Factive information is therefore not open to refutation (see i.a. the case of factive verbs that trigger presuppositions: Karttunen 2016, or that of exclamatives Zanuttini & Portner 2003). For example, if one replies *No* to (17), they are refuting the regrets of Cameron, not the oversleeping (which is the factive part of the utterance).

- (17) Cameron regrets oversleeping.

The information conveyed in a *ge3*-declarative can however easily be refuted as in (18) where B’s reply directly targets the content of *ge3*’s prejacent, suggesting that labelling *ge3* as a factive element, or comparing it to the English construction *It is a fact that...* is ill-advised.

- (18) A: keoi5 hai2 hoeng1gong2 ceot1sai3 ge3.
 they.SG in Hong-Kong born SFP
 ‘They were born in Hong Kong.’
 B: m4 hai6 aak3.
 NEG COP SFP
 ‘No they were not.’

Another piece of data is the fact that *ge3* can be used in the antecedent of conditionals (19).

- (19) jyu4gwo2 jau5 jan4 sung3 tiu4 hou2 gwai3 ge3 kwan4 bei2 nei5,
 if there.is person give CL very expensive GEN dress DAT you
 daan6hai6 tiu4 kwan4 hou2 wat6dat6 ge3, gam2 nei5 jiu3m4jiu3 aa3?
 but CL dress very ugly SFP then you want.NEG.want SFP
 ‘If someone gave you an expensive dress but the dress is ugly, will you still want it?’

If *ge3* did convey factivity about its prejacent in the way presupposition triggers do, one would expect that contribution to actually clash with the semantics of the conditional which precisely indicate that its antecedent is not true in all possible worlds (Heim 1983). However, in an example like (19), there is no such sense of factivity that comes with the use of *ge3*, nor one of contradiction with the conditional construction. Note that in (19), whatever contribution *ge3* is having is modalized: the intuitive understanding is that the speaker is being forceful about the ugliness of the putative dress in the fictional world introduced by the conditional. Therefore a non-factive description of it seems warranted, though it has to be one that salvages the intuition that *ge3* indicates a form of assertiveness of the speaker.

Finally, Sybesma & Li’s claim about *ge3* as a marker of relevance needs to be made more precise. Example (20) shows that *ge3* is compatible with *gong2hoi1jau6gong2* (‘by the way’) which is routinely taken to indicate that the speaker is introducing an element which is not relevant to the current conversation.

- (20) gong2hoi1jau6gong2 ngo5 hai4 m4tung4ji3 keoi5 ge3
 by-the-way I am disagree them.SG SFP
 ‘By the way, I disagree with them.’

Thus, if relevance is to be the key notion behind *ge3*, we need a precise description of what it is exactly that makes the host of *ge3* relevant. This will be the topic of section 4 where we show that a notion of relevance borrowed from analyses of Japanese *yo* is applicable to the case of *ge3* and accounts for the way it indicates the authority of the speaker.

2.5 The merged particle *gaa3*

As previously mentioned, the SFP *gaa3* combines *ge3* and *aa3* together in a single particle. The main reasons for this claim is that the sequence of *ge3* and *aa3* is never observed in Cantonese, and that particle merging is a rather common phenomenon (Matthews & Yip 2011). *gaa3* is the second most common SFP in HKCanCor (after *aa3*) and appears in 11.24% of all the utterances in the corpus.

The merged status of *gaa3* partly explains that unlike *aa3* and *ge3*, its meaning is not discussed in all the works dealing with Cantonese SFP. The particle is not discussed by Kwok (1984), nor by Law (1990), Fung (2000) or Matthews & Yip (2011) who all mostly list it as the combination of *ge3* and *aa3*, without discussing the semantics of the combination in details (or at all).

Sybesma & Li (2007) discuss *gaa3* to a greater extent since in their account *gaa3* does not come as the fusion of two distinct SFP, but as the combination of more basic elements that are also found in *ge3* and *aa3*. This is summarized in Table 1 where one can see that all the meaningful elements in *gaa3* (i.e. those that are neither defaults or empty) are the sum of those in *ge3* and *aa3*.

Table 1. The structure of *aa3*, *ge3* and *gaa3* according to Sybesma & Li (2007)

<i>SFP</i>	<i>Onset</i>	<i>Vowel</i>	<i>Coda</i>	<i>Tone</i>
<i>aa3</i>	∅	/a/	∅	3 (default)
<i>ge3</i>	/k/	/ɛ/ or /ə/ (default)	∅	3 (default)
<i>gaa3</i>	/k/	/a/	∅	3 (default)

Sybesma & Li describe *gaa3* as “essentially the same as *ge3*; it may be seen as softening *ge3* a bit in the sense that by using *gaa3*, the speaker says ‘it is a relevant fact that...but I don’t mind that you don’t know or forgot.’ ”

Again, while the description might have some intuitive weight, the details of its formal implementation are not crystal clear.

The case of *gaa3* also shows that it felicitously combines the values of *ge3* and *aa3*. This means that the two SFP are anything but incompatible (given the frequency of *gaa3*, they are even the two SFP that combine the most frequently). This rules out simple descriptions of *aa3* as downtoning a conversational move and *ge3* as strengthening it. There is thus a need for a more precise description of the effects of *ge3* and *aa3* that allows both to co-exist while conveying seemingly antagonist conversational contributions.

2.6 Taking stock

The above overview of the particles shows that even though these elements have received some attention on the syntactic level, the precise description of their meaning remains an open issue. On one hand, the conversational softness conveyed by *aa3* has to be qualified in a way that makes it compatible with all sentence types and accounts for the fact that in certain contexts using *aa3* is not interpreted as indicating softness. On the other hand, the case of *ge3* requires the identification of the dimension on which *ge3* bears. As we have seen, this is probably not a scale of epistemic certainty, and if it marks relevance, this notion has to be properly defined. Finally, we need to ensure that each of the description we come up with are compatible with each other to account for the semantics of *gaa3*, and have to describe the ways in which all these elements convey softness or assertiveness.

3. Softness from symmetry: the SFP *aa3*

3.1 Theoretical background: dialogue

To account for the semantic contribution of *aa3* we will adopt a dialogical perspective, inspired among others by the KoS³ model proposed by Ginzburg (2012) (whose elements can all be traced to earlier work in different perspectives). Specifically, we will distinguish the effect of an utterance in terms of *speaker’s commitment* (SC) and *call on addressee* (CoA). These elements are the constituents of *conversational moves* which explicate the illocutionary force of an utterance.

To represent the content of SC and CoA (and deal with other phenomena), KoS uses a structured Dialogue Gameboard (DGB) for each conversation participant. Each participant keeps track of their and other participant’s conversational moves on their DGB, for example by incrementing the set of propositions shared with other participants (the Shared Ground, dubbed FACTS in KoS), the list of questions under discussion (QUD),

³ Note that KoS is a name rather than an acronym, and does not stand for any particular phrase.

the last question that was asked, the formal properties of the last utterance in the conversation etc. A conversational move is then analyzed in terms of its effects on the DGB of all the participants in the conversation. For example, in the case of cooperative querying between two participants, the following protocol is proposed by Ginzburg (2012) (with the horizontal dimension representing temporal succession for A and B, meaning that the moves that appear in parallel lines are temporally aligned).

```
LatestMove.Cont = Ask(A,q): IllocProp
A: push q onto QUD; release turn
B: push q onto QUD; take turn;   make q-specific-utterance
```

This is to be read as meaning that if the latest conversational move was a case of participant *A* asking a question *q* (an element of the type `IllocProp`), then both *A* and *B* are expected to push *q* on their QUD stack, which will be followed by *A* releasing the floor which will be taken by participant *B*, who will then make some utterance related to *q* (thus instantiating a general conversational constraint stating that if *q* is the QUD-maximal element, then any participant can make a move relevant to *q*). That protocol is not binding: participants can choose to ignore it, and for example reject or ignore the question instead of addressing it. That will however correspond to a different, non-cooperative, protocol.

In general, there seems to be a default for having a match between the SC and the CoA (Stalnaker 1978), which is visible in the above script: both speaker and addressee are expected to treat the content of the latest move in the same way, in that case by pushing it on their QUD stack.

The case of assertion is given a more complex treatment ; which might come as surprising given how assertion is often thought as the most basic discourse move. This is linked to the observation that, from a dialogic point of view, assertions need to be *grounded* before they can enter the shared ground between speaker and addressee (Clark 1996). This is captured by considering that an assertion of a content *p* by a speaker *A* first opens an issue about whether *p* is the case, which is pushed on all participants' QUD stacks. After taking the floor, the other participant *B* then has the option of either discussing the issue or accepting it.

```
LatestMove.Cont = Assert(A, p): IllocProp
A: push p? onto QUD, release turn
B: push p? onto QUD, take turn; Option 1: Discuss p?,
                               Option 2: Accept p
```

Should *B* decide to accept the content *p*, the corresponding script states that *p* is added to all participants' FACTS set and that the question *?p* is removed from their QUD stacks, effectively *grounding* the content *p*.

```
LatestMove.Cont = Accept(B,p) : IllocProp
B: increment FACTS with p; pop p? from QUD;
A: increment FACTS with p; pop p? from QUD;
```

These scripts are exemplified in (21) where *A*'s move is analyzed as involving a script which puts a question *p? = Has Cameron left for Thailand?* on both *A* and *B*'s QUD, and expecting *B*'s to take the turn with either a discussion about the content of *p?* or indicate their acceptance of *p* (which *B* does with their assertion, thus grounding the content between *A* and *B*).

- (21) A: Cameron has left for Thailand.
B: Yeah.

We have given a rough presentation of how various interactions proceed in dialogue, described in terms of their import on the participants DGB and general constraints on the elements of these DGB.

Another piece of the puzzle we need to consider is how these conversational moves are tied to the linguistic structure and content of the utterances used to perform these moves. As mentioned above, while there is no simple solution to this so-called speech act assignment problem, it has been argued that the conversational moves allowed by an utterance (partly) come from a combination of the semantic type of the message it denotes and the presence of some markers that signal specific moves.

One example is the case of English question tags which explicitly signal a request for confirmation which is then analyzed as a check move that forces a response about the issue, rather than a tacit acceptance. This is what accounts for the difference in (22), where *I see* indicates acceptance rather than explicit confirmation (and is thus infelicitous after a check-move).

- (22) a. A: Bo is leaving. B: I see.
b. A: Bo is leaving, isn't he? B: # I see.

3.2 aa3: a marker of dialogical symmetry

In section 2.3, we showed how the SFP *aa3* is seemingly compatible with all sentence types, and seems to have a very elusive semantic contribution. Here, we analyze it as a marker of conversational move. Precisely, we argue that *aa3* enforces the symmetry of the moves on the speaker and addressee's DGB.

We have mentioned above that this symmetry requirement has been considered to be a default in human communication (Stalnaker 1978). However it can, and is often, overridden by specific markers. For example, Beyssade & Marandin (2006) analyze rising declaratives as utterances that involve a mismatch between the SC and the CoA. Specifically, the speaker of a rising declarative adds the content of their assertion to the set of their publicly shared beliefs but asks their addressee to add an issue about that content to their QUD stack instead. The corresponding script is thus one where only the addressee is adding (and then resolving) a question to their QUD.

Rather than indicating a mismatch, we argue that the role of *aa3* is to signal that the speaker expects the addressee to deal with the content they uttered in the same way as they do. Roughly, this means the following for assertions, questions and imperatives⁴ (Beyssade & Marandin 2006):

- Committing to discussing or accepting a proposition in the case of the assertion of a content *p*. Formally speaking, this means that the speaker signals that they wish the addressee to follow the standard script for assertion described above (i.e. first adding an issue *?p* to the QUD before either grounding it or discussing it, where grounding is the preferred and expected option).
- Committing to a question in the case of an interrogative of content *q*, which formally means adding *q* to the QUD stack.

⁴ We omit the case of exclamatives whose status is unclear in Cantonese, and whose formal treatment is also unclear.

- Committing to an outcome *o* in the case imperatives, i.e. to the future actualization of some situation, possibly carried out by an agent. While we do not go in the details of how to formally represent outcomes, we will follow Beyssade & Marandin 2006 and assume a To-Do-List (TDL) component in the DGB which is a set that keeps track of the outcomes. So adding *o* to the TDL means that the speaker considers that *o* will happen in the future, under the responsibility of the addressee. The use of *aa3* then explicitly asks the addressee to commit to that same future actualization.

Our proposal explains the versatility of *aa3* with different sentence types: it marks the symmetry of what the speaker and addressee are doing, but is not tied to any peculiarity of the type of message. It also helps to account for the fact that the particle is by far the most frequent, since it seems reasonable that interrogatives are mostly used for questions, declaratives for assertions etc.

One can wonder about the need for an SFP that enforces what appears to be a conversational default. We can think of several reasons for which such an SFP might exist. First, discourse particles that semantically mark conversational defaults are routinely found in all languages. For example the English adverb *then* indicates temporal succession, which is a conversational default, that, for example, can be inferred on the basis of Gricean maxims Grice (1989). Second, and somehow more speculatively, we have seen that Cantonese has less clear-cut syntactic criteria that define sentences types and that SFP seem to carry a lot of the information that constrains the conversational move associated with an utterance. Therefore, it does not seem that outlandish to have an element which semantically enforces that the conversational import of an utterance matches its type. Finally, the existence of other options, namely other SFP that enter into competition with *aa3*, makes it look even more plausible to have a particle that marks the default interpretation and strengthens the norm. This also helps to explain some of the pragmatic effects that come with the use of competitors, as we shall discuss below.

3.3 Applications

We now show how our proposal applies to two different cases in which *aa3* is either not licensed or clashes with other information present in the utterance. As we already mentioned, such observations are unexpected if one assumes, with most of the existing literature, that *aa3* is semantically vacuous or simply serves to make things more natural.

The first case is the impossibility of using *aa3* in rising declaratives. Cantonese does allow the use of prosody to indicate questioning, as in many other languages, cf. (23) (where the use of a question mark indicates the rising intonation).

- (23) keoi5 lai4?
 they.SG come
 'They're coming?'

While (23) is possible without an SFP, adding *aa3* to it makes it infelicitous with a question reading (24).

- (24) *keoi5 lai4 aa3?
 they.SG come SFP
 'They're coming?'

Rising declaratives can be analyzed as involving a mismatch between the SC and CoA (Beyssade & Marandin 2006). These constructions involve a declarative sentence type,

meaning that the speaker commitment is to a proposition p (via the prototypical script of assertion). But the effect of the rising declaratives is to ask the addressee to commit to a question instead, which involves a different script than that of assertion. Therefore we explain the infelicity of *aa3*: its symmetric semantic clashes with the asymmetric one of the rising declarative. Similarly, *aa3* is not compatible with rhetorical questions as in (25) (adapted from Ginzburg 2012).

- (25) A: gam1maan1 gin3-m4-dou2 lou5sai3 ge3?
 tonight see-NEG-PRT boss SFP
 'I can't see the boss here tonight.'
 B: nei5 gok3dak1 keoi3 hai2 bin1 aa1 (# aa3)?
 you think they.SG at where SFP
 'Where do you think he is?'
 A: zing3 puk1gaai1
 exactly jerk
 'What a jerk.'

A case like (25) is analyzed as a reassertion (Ginzburg 2012), that is as an interrogative that already has a resolving answer in the FACTS set. Here, the situation is in a way opposite to that of rising declaratives: the speaker's commitment is to a question, but the CoA is to add (or activate) a proposition in the shared ground that resolves the question. This asymmetry prevents the felicitous use of *aa3*.

The second case is that of (12), already introduced in Sec. 2.3, where *aa3* appears incompatible with a response acknowledging a command, unlike the SFP *ge3*, or a simple mark of acceptance such as *o4* 'right/I see'.⁵

- (12) A: m4hou2 ci4dou3
 don't late
 'Don't be late!'
 B: hai6 (ge3/# aa3) / o4.
 COP SFP fine
 'I understand. / # Yeah, right? / Right.'

To account for what happens in the above example we need some measure of understanding of how commands work from a dialogical perspective and of the contribution of the copula *hai6*.

Starting with the latter, we argue that *hai6* is best seen as a marker of confirmation. This can be seen in a simple interaction as in (26).

- (26) A: Aa3-Mei5 kam4jat6 heoi3zo2 jat6bun2.
 A-Mei yesterday go:PFV Japan
 'A-Mei left for Japan yesterday.'
 B: hai6 aa3.
 COP SFP
 'Yes, she did.'

Though felicitous, B's reply in (26) does not convey mere acceptance, but indicates that

⁵ Note that if the order is issued to a third person C, different from B, B's contribution with *aa3* in (12) is felicitous and signals the endorsement by B of the command to C.

B is already aware of the information stated by A and wishes to confirm it. If the news of A-Mei leaving for Japan were new to B, the reply in question would be infelicitous. Thus *hai6* conveys a confirmation by B, and adding *aa3* to it basically entails the expectation that A will mirror B’s contribution, namely register that the information was known to B.

Turning now to the case of commands we can see why replying to a command with a confirmation in the form of *hai6 aa3* is infelicitous. The use of *hai6* in the reply by B basically mimics the content of A’s command which means that B wishes to signal either that they add the outcome *o* denoted by A’s command to their TDL, or that *o* is already in their TDL. Thus, should B use *aa3* in their reply, they would trigger a mirror CoA on A to have *o* in their TDL. Thus, the utterance is problematic for two reasons. First, asking A to add *o* to their TDL matches the SC of A’s own move when giving the order and is thus dialogically redundant (and the likely source of the “cheekiness” and detachment associated with the reply). Second, signalling that *o* is already in B’s TDL would clash with the felicity conditions of directives that typically state that the person receiving the order should not be expected to act as indicated in the order if that order had not been given (Austin 1962). However, as we will argue in Sec. 4.2, when the same move is performed with the SFP *ge3*, no symmetry requirement is involved, and the import of the confirmation solely bears on B’s DGB, which explains why it felicitously functions as a signal for accepting the command.

3.4 *aa3* and softness

To conclude about *aa3*, we can now retrace the root of its “soft” nature. It is essentially tied to the fact that instead of inflicting content on the addressee, it is an explicit signal by the speaker to the addressee that they desire the addressee to act according to the script of normal conversation. In doing so, the speaker ensures that their contribution will be integrated in conversation as they intend, with the explicit approval of the addressee. That desire of approval by the addressee thus minimizes the potential for conflict, which we argue is precisely at the core of the notion of softness.

Note that this soft reading of *aa3* is tied to the conversational rules at play at a given point in a dialogue and is thus an inference rather than part of the semantics of the SFP. When the dialogical setting forbids a symmetry of moves between speaker and addressee (as in (12)), *aa3* cannot be used to add softness to a conversational move.

To go even further, in certain circumstances using *aa3* will even convey aspects at odds with the notion of softness. For example, in the case of assertions, we claimed that *aa3* encodes the standard script for assertion. Because that script involves putting the prejacent *p* of *aa3* as a polar question *?p* in the QUD, it also entails that *p* is presented as not being part of the facts shared by the discourse participants, and that the addressee is expected to explicitly endorse *p*. Thus, using *aa3* for potentially offensive or unpleasant content for the addressee can give rise to situations in which the content pushed by the speaker might not smoothly be validated by the other party.⁶ Consider the dialogue in (27).

- (27) A: dim2gaai2 nei5 m4 tung4 ngo5 ceot1gaai1 aa3?
 why you NEG with me go.out SFP
 ‘Why won’t you go out with me?’

⁶ We thank a reviewer for suggesting this possibility.

B: jan1wai6 nei5 taai3 joeng2seoi1 aa3.
 because you too.much ugly SFP
 ‘Because you’re too ugly.’

In (27), the use of *aa3* in B’s answer is understood to mean that the ugliness of A is the objective, real, reason for which B does not wish to go out with A. That information is presented as new by B, and A is explicitly asked to endorse it as such, which A might in turn find unpleasant. A somewhat more natural version of B’s answer would rely on the SFP *lo1* (囉) instead of *aa3*. The SFP *lo1* has been analyzed as indicating information that is expected by all parties (Hara & McCready 2017), which means that using *lo1* will not require the addressee to explicitly endorse that information as with *aa3*. Thus, in a somewhat paradoxical way, presenting unpleasant information as information that is expected by all parties is less threatening than using a marker that indicates prototypical assertion.

4. Assertiveness from relevance: the SFP *ge3*

In Sec. 2.4, we rejected previous claims that the SFP *ge3* bears on a dimension of epistemicity, indicating a maximally high belief of the speaker in the content of their utterance. Furthermore, we also observed that *ge3* is compatible with interrogative utterances calling for a more abstract description of its content than one only involving matters of truth and belief. In this section, we first review proposals made to describe the particle *yo* in Japanese which appears similar to *ge3* in many respects, notably about its alleged assertive character. We then show how to apply these insights to the case *ge3* in a way that combines with our proposal for *aa3* in order to yield the meaning of the SFP *gaa3*.

4.1 Another assertive SFP: Japanese *yo*

At first sight, the Japanese SFP *yo* seems to bear great resemblance to *ge3*: both are intuitively described as assertive markers that convey a form of certainty of the speaker. McCready (2012) summarizes two trend of approaches to *yo*, that treat it either as a speech act strengthening operator, analogous to English sentence-final *man* (McCready 2008), or as a marker of Gricean relevance (Davis 2009). The first analysis basically entails that any sentence used with the SFP *yo* updates the shared ground with its prejacent, possibly discarding previously established information that is not compatible with that prejacent. The second one strips *yo* of its assertive nature, instead analyzing it as indicating that its prejacent is relevant (in a Gricean sense), because it resolves a contextually salient problem. Davis argues that the strengthening force of *yo* is a matter of intonation: *yo* is assertive only when uttered with falling intonation. With a rising intonation, *yo* still conveys relevance, but without that assertive component. In that regard, one could imagine that Davis’s proposal is a formal implementation of how Sybesma & Li (2007) describe the content of *ge3* (cf. Sec. 2.4).

A first piece of data, and one that supports the analysis of *yo* as a marker of “strong assertion”, involves explicit denials as in (28).⁷ Note that in that example, *yo* is uttered with falling intonation (indicated with ↓).

(28) (Japanese)
 A: saki Jon-ga kaetta.
 just.now John-NOM went.home

⁷ All Japanese examples are quoted from McCready (2012).

- ‘John just went home’
 B: uso!
 lie
 ‘No way!’
 A: kaetta **yo**↓.
 went.home SFP
 ‘He DID go home.’

An example like (29) shows how *yo* can indicate a resolution to a salient decision problem (in that case deciding which sushi to get). In (29), the intonation on *yo* is rising (indicated with ↑), and its contribution is not felt to be as forceful as in (28).

- (29) (Japanese)
 A: dono sushi-ni shi-yoo kana?
 which sushi-DAT do-HORT PRT
 ‘Which sushi should I get?’
 B: koko-no maguro-wa umai **yo**↑.
 here-DAT tuna-TOP good SFP
 ‘The tuna here is good.’

To account for these examples, Davis (2009) proposes to tease apart the contribution of *yo* and intonation. Thus in (28), the forcefulness of A’s denial in their second utterance is a consequence of the falling intonation on *yo* which conveys that the speaker requires some information to be downdated before updating the shared ground with the prejacent of *yo* (pretty much along the lines of what McCready 2012 proposes for *yo*). This accounts for the fact that using a falling intonation on *yo* in (29) would be odd, unless one assumes some extra reasons for the speakers to be in conflict.

To account for the contribution of *yo*, Davis then proposes to rely on the existence of a salient decision problem associated with the conversation. Such a problem can be related to the motivation behind QUD-approaches to discourse structure (Roberts 1996), and also to the goal the speaker is arguing for in their discourse (Winterstein & Schaden 2011), meaning it represents an important part of what makes up the interpretation of a discourse. It thus makes sense that some natural language items would refer to it. Minimally, a decision problem can be conceived as involving a set of possible actions, with some related payoffs for the discourse participants. The payoffs do not solely depend on the actions, but also on which world the participants are. So for example in (29), the decision problem is which sushi to get, the related actions are picking up salmon, tuna etc. and the payoffs for these actions depend on the actual quality of each fish at that particular tuna place. The role of *yo* is to indicate that grounding its prejacent (which might entail different actions depending on the nature of the prejacent) will single out one action associated with the decision problem as being optimal. Thus, in (29), by mentioning that the tuna is good, the speaker singles out one particular action (choosing tuna) as yielding a good (and guaranteed) outcome.

4.2 *ge3* and relevance

The various contexts of use we exemplified for *yo* do not all license *ge3*, but the two SFP enjoy a degree of similarity which we show in this section. This supports an analysis of *ge3* along the same lines as that of *yo*, i.e. as a marker of relevance, where relevance is defined relative to a decision problem.

To begin, contexts that involve a denial, as in the dialogue (28), do license *ge3* in

Cantonese, though to maximize its felicity *ge3* should be followed by the SFP *laa3* (30).

- (30) A: Aa3-Mei5 faan1zo2 uk1kei2.
 A-Mei back-PFV home
 ‘A-Mei went home’
 B: m4hai6 maa5.
 NEG-COP SFP
 ‘No way.’
 A: keoi5 hai6 faan1zo2 uk1kei2 **ge3** laa3.
 they.SG COP back PFV home SFP SFP
 ‘She DID.’

Furthermore, in scenarios such as (29), while the use of *ge3* is not licensed on its own, using *gaa3* is felicitous (31).

- (31) A: ngaai3 mat1je5 sik6 hou2 le1?
 order what eat good SFP
 ‘What should I/we order?’
 B: ni1dou6 ge3 gu1lou1juk6 hou2 hou2sik6 (**gaa3/# ge3**).
 here GEN sweet.sour.pork very good.eat SFP
 ‘The sweet and sour pork here is delicious.’

In sum, the sort of examples that justify an analysis of *yo* also license *ge3*, though they usually require the use of some other SFP.

Therefore, we will argue that the semantics of *ge3* is basically the same as that of *yo*. The observations about the need for extra SFP come from external factors, which in Japanese are regulated by intonation, but in Cantonese mostly come from the use of other SFP.

Specifically, the use of *aa3* can be likened to that of rising intonation in Japanese. Though we did not analyze *aa3* in the same way as Davis analyzes rising intonation, their general effects are comparable: both entail grounding information in the standard way associated with the type of their preajacent. Thus, the natural character of *gaa3* in (31) follows along the same lines as that of *yo* with rising intonation in (29).

Why then is the use of bare *ge3* degraded in (31)? Our discussion of example (12) above suggested that when *ge3* is used, there is no CoA that comes along with it. And indeed when used on its own, *ge3* does not seem to allow the speaker to call on the addressee, e.g. *ge3* is not felicitous in refusals, or more generally in dispreferred replies (which typically involve calling on the addressee to endorse one’s unexpected move):

- (32) A: ngo5 gam1maan5 dak1haan4. ngo5dei6 hou2m4hou2 ceot1heoi3
 I tonight free we good.NEG.good go.out
 haang4haa5?
 walk.a.bit
 ‘I’m free tonight, should we go out?’
 B: nei5 gam1maan5 jiu3 zou6je5 gaa3/? ge3.
 you tonight need work SFP
 ‘You have to work tonight.’

However, we do not want to directly put a constraint of “no CoA” in the semantics of *ge3* since the existence of the SFP *gaa3* shows that the content of *ge3* is compatible with the

symmetry constraint of *aa3* (which in turn can entail a CoA). Rather, we propose that this feature of *ge3* is an effect of Gricean-like pragmatic blocking. Because there exists a form that is equally complex (and even more frequent) as *ge3* that encodes the same thing as *ge3* plus an explicit CoA (namely the SFP *gaa3*), then the use of *ge3* can be taken as a signal that the hearer does not wish to use *gaa3*, which in turn means that the speaker does not wish to call on the addressee.⁸ So in a case like (32), if the speaker uses *ge3*, the most likely explanation for their choice is that they did not want to use *gaa3*. Since the only difference between the two is the contribution of *aa3*, the inference is that they do not have particular expectations the addressee to add the content of their utterance to the common ground which clashes with the content of the discours move.

Explaining the preference for adding *laa3* in (30) would require a proper analysis of the SFP *laa3* which is beyond the aims of the present work. The SFP *laa3* is often introduced as indicating some change of state (Kwok 1984; Fung 2000; Sybesma & Li 2007) which does not directly account for its meaning in (30). Other authors mention that *laa3* can have an “adhortative/directive” reading (Fang 2003, cited by Sybesma & Li) which might more closely match its effect in (30). Whatever that effect, it comes as an addition to the contribution of *ge3*, just like in the case of *gaa3* the effect of *aa3* is added to that of *ge3*.

A last point about *ge3* has to do with its role in questions. As already mentioned, *ge3* is felicitous in questions as in (15) where its addition suggests that the speaker considers that their question does have a true resolving answer.

- (15) bin1go3 se2 ge3?
 who write SFP
 ‘Who wrote that?’

First, our description of *ge3* does not prevent it from being used in questions. This is because one question can help resolve another one (see discussions in Merin 1999 among others). Using the concepts introduced above, a question *q* addresses a decision problem *d* if answering *q* help pick out an optimal action in *d*. This means that the set of answers to *q* must be such that for any particular answer in *q* there is an associated optimal action in *d*. If the question has no resolving answer, then the relevance condition of *ge3* is not met. This, we argue, is what gives rise to its interpretation in questions.

Thus, in the case of (15) *ge3* entails that somebody did write “that” and that their identity can be recovered. A context that would make this question felicitous is one in which a teacher sees some offensive writing on a board and wishes to punish the author. Asking (15) indicates that the teacher assumes the culprit is in the room, and identifying them will help the teacher solve their decision problem, for example identifying who should be punished.

4.3 *ge3* and assertiveness

Having laid out the semantics of *ge3*, we can see how to account for its alleged assertive nature. The explanation has already been outlined in the discussion about *gaa3*. We

⁸ A reviewer suggests that this competition could be addressed via the *Maximize Presupposition!* (MP!) principle due to Heim (1990). Involving MP! might indeed be a good solution, but would necessitate to show that the difference between *ge3* and *gaa3* is presuppositional in nature. Precisely, this would mean showing that the adherence to norm marked by *aa3* is a presupposition. Proving it is not straightforward since most of the usual tests for presupposition (such as projection) cannot really apply to the content of SFP. We thus wish to remain noncommittal about that particular issue, simply noting that MP! might indeed end up being relevant to the matter.

argue that the assertive character of *ge3* corresponds to the Gricean inference that comes with its competition with *gaa3*. In the case of assertions, and in a context that would have licensed *gaa3*, using *ge3* instead can be interpreted as a signal that the speaker is not explicitly asking the addressee to indicate their acceptance of the assertion of the speaker. A very likely explanation for this is to assume the speaker is maximally certain of their claim, and not presenting as susceptible to refutation. This predicts that the assertiveness inference disappears in contexts that disallow the use of a marker like *aa3*, which is precisely what we observed for examples such as (12).

5. Conclusion

Our study of Cantonese SFP shows that we can do away with semantic primitives like softness and assertiveness and instead treat them as derived effects based on the conversational and dialogical properties of SFP. An utterance is thus assertive or soft based not on the presence of either assertive or soft markers, but because of the inferences one can draw based on the choice of certain lexical items in a given dialogical setting. In that, our treatment of the semantics of SFP matches that advocated by Luke (1990) who defends an approach to SFP that is conversational in nature. Our analysis therefore predicts that the SFP we study are not necessarily soft or assertive. Accordingly, we showed examples of *aa3* that are not soft and examples of *ge3* that are not particularly assertive.

Another aspect of our core SFP, not mentioned in this study, is their relation with the gender of the speaker. As reported by Winterstein et al. (2018) there are significant gender differences in their usage. While all SFP are used by all speakers, corpus data shows that *aa3* has a stronger tendency to be used by female speakers and *ge3* by male speakers (in casual conversations). The usual route to account for that situation would be to consider that the use of such particles is somehow gendered, for example because they explicitly indicate a feminine register that is socially required to be softer (see a.o. Erbaugh 1985; Chan 2000; Yueh 2016).

Our analysis suggests another explanation for these gender differences. Instead of seeing them as signals that are compatible with the stereotypes associated with a certain gender, their conversational content suggests that the speaker can use them strategically to achieve certain ends. For example, the use of *aa3* explicitly involves the addressee in the grounding process of an information. In doing so, it also “borrows” the authority of the addressee to ground the information, which can help overcome various forms of epistemic injustice which minimize the authority of a speaker (for example because they are female Fricker 2007; McCready & Winterstein 2018). The details of these proposals shall form the body of future work.

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