The indexical expressions *gam2* and *gam3* in Cantonese*

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1. Introduction

Indexical expressions are items whose contribution to propositional content depends on the context (Chierchia & McConnell-Ginet 1990). Languages employ different indexical items to make reference to different type of entities. Demonstratives are often used in noun phrases to refer to locations in space or time. In Cantonese, there exists an indexical element, *gam*, whose reference is neither located spatially nor temporally. *Gam* appears in two surface forms with variations in tones, *gam2* and *gam3*. *Gam2* refers generally to abstract entities like properties of events, properties of nominals and propositions. *Gam3* refers to degree of scalar adjectives. The goals of this paper are to: (i) provide an overview of the distribution and interpretation of *gam2* and *gam3*; (ii) provide a structural account for *gam2* and *gam3*.

The paper is organized as follows. In section 2, we discuss the properties of *gam2* in the verbal domain. In section 3, we discuss the properties of *gam2* in the nominal domain. In section 4, we discuss the properties of *gam2* when it is used alone. In section 5, we discuss a related element *gam3*, which is used exclusively to refer to degree. In section 6, we propose a structure for the *Gam* Phrase (GP). We present some loose ends in section 7.

2. *Gam2* in the verbal domain

2.1 Pre-VP position

When preceding a VP, *gam2* can either appear alone or appear with a preceding

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description. In the former case, it is either interpreted as deictic (with demonstration in the immediate non-linguistic environment) or anaphoric (referring back to the previous discourse), as in (1a). In the latter case, it refers to the description preceding it. We call this the *establishing* use, as in (1b).[1] In both cases, *gam2* refers to a particular manner of the event.

(1) *gam2* → deictic/anaphoric

a. Keoi5 **gam2** zou6-je5 m4 dak1 gaa3.
3SG GAM do-thing NEG possible SFP
'He/She working in **such a way** is not acceptable.'

description-*gam2* → establishing

b. Keoi5 maa1maa1fu1fu1 **gam2** zou6-je5 m4 dak1 gaa3.
3SG sloppily GAM do-thing NEG possible SFP
'He/She working in such a sloppy way is not acceptable.'

2.1.1 The manner reading of [X-*gam2*] adverbials

2.1.1.1 Clausal/manner ambiguity

In this section, we show that clausal/manner ambiguity of the type found in English does not exist in Cantonese. We claim that when an adverbial, X, is compatible with both a clausal reading and a manner reading in Cantonese, the adverbial that gives rise to the manner reading always has the form [X-*gam2*].

In English, some adverbials are compatible with both a clausal reading and a manner reading. When those adverbials are placed in the pre-verbal position, ambiguity arises. We will give a few examples. The first example is the adverbial *clearly*.

(2) Peter clearly saw the sign.
Clausal reading: It is obvious that Peter saw the sign.[2]
Manner reading: Peter saw the sign with clear vision.

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[1] We borrow the term 'establishing' from Hawkins (1978, pp.131). He uses the term 'referent-establishing relative clauses' to refer to relative clauses like *the woman he went out with last night*, where a definite referent is established at the point the noun phrase is uttered.

[2] For example (3), the clausal reading is more prominent than the manner reading. It is unclear to us why would that be the case.

In (2), *clearly* can be either construed as reflecting the speaker's opinions or as modifying the quality of the vision.

Some adverbials are ambiguous between a temporal reading and a manner reading. The adverbial *quickly* is a case in point. It can be interpreted as that the time between the reference time and the event time is very short or it can be interpreted as that the event is carried out in a very speedy manner. The two different readings are shown in (3).

(3) Peter quickly left.
Clausal reading: Peter did not stay for long.
Manner reading: Peter left in a speedy manner.

Some apparent clausal adverbials can also be construed as having a manner reading if provided with an appropriate context. Shaer (2003) provides a clausal and a manner contrast of the adverbial *intentionally*.

(4) a. You tripped me intentionally --- I could see you waiting for me (a kind of tripping).
b. You intentionally tripped me --- You blindfold didn't slip off (the attitude of the agent).

Intentionally is by and large a subject-oriented adverbial. However, when it is placed post-verbally (a position reserved for manner adverbs only), a manner reading can also arise, if the context allows such a reading.

In this section, we replicate the ambiguous English examples, (2), (3), (4) into Cantonese, as (5), (6) and (7) respectively. What we aim to show is that in Cantonese, clausal/manner ambiguity does not arise because the manner adverbials always contain the element *gam2*.

(5) a. Keoi5 **hou2** **ming4hin2** bei6hoi1 nei5 laa1.
3 SG very clearly avoid you SFP
'He/She is clearly avoiding you.' (clausal reading)

b. Keoi5 **hou2 ming4hin2** **gam2** bei6hoi1 nei5 laa1.
3 SG very clearly GAM avoid you SFP
'He/She is avoiding you in a very clear manner.' (manner reading)

In (5), the lexical item *ming4hin2* 'clearly' is compatible with both a clausal and a manner

reading. When it is used to denote the manner of an event, the element *gam2* has to follow it, as in (5b). When *gam2* is absent, the reading is only clausal, as in (5a).

(6) a. Keoi5 **hou2** **faai3** zau2-zo2 laa3.
3SG very fast leave-ASP SFP
'He left early.' (clausal reading)

b. Keoi5 **hou2 faai3** **gam2** zau2-zo2 laa3.
3SG very fast GAM leave-ASP SFP
'He left in a speedy manner.' (manner reading)

In (6), *hou2 faai3* 'very quickly' is the adverbial that is in question. Just like its English counterpart, the 'quickness' can be interpreted as referring to the shortness of the period of time between the reference time and the event time (=6a), or it can be used to refer to the speediness of the action (=16b). Only in the latter case is *gam2* present.

(7) a. Keoi5 **dak6dang1** kik1 nei5 gaa3.
3SG intentionally trip 2 SG SFP
'He/She intentionally tripped you.' (the attitude of the agent)

b. Keoi5 **dak6dang1** **gam2** kik1 nei5 gaa3.
3SG intentionally GAM trip 2SG SFP
'He/She tripped you in an intentionally way.' (a type of tripping)

In (7a), *dak6dang1* 'intentionally' refers to the attitude of the agent. In (7b), with *gam2* following *dak6dang1*, the adverbial gives rise to a manner reading.

In view of the above, we conclude the following: if X is an adverbial that is semantically compatible with both a clausal reading and a manner reading, X will give rise to a clausal readying while [X-*gam2*] will give rise to a manner reading.

If [X-*gam2*] combinations are always manner in interpretation, then it is plausible that the combination of two adverbials that are contradictory in meanings would not lead to ungrammaticality as long as the two adverbials modify different things (e.g. one modifies the subject and one modifies the event). This is borne out. Imagine the following scenario: There is someone who really likes you but then he cannot get himself to talk to you in any normal way, so he tries to bump into you to get the conversation started. Your friend sees through his tricks and utters the following:

(8) Keoi5 dak6dang1 [m4-gok3ji3 gam2] zong6 nei5 gaa3.
3 SG intentionally NEG-intentionally GAM bump-into you SFP
'He purposefully bumped into you in an unintentional manner.'

The two adverbials *dak6dang1* 'intentionally' and *m4-gok3ji3* 'unintentionally' are contradicting in meaning. However, since the former modifies the mental state of the agent while the latter modifies the manner in which the action is carried out, as shown by the presence of *gam2* in the latter, the combination of two is understandable given the setting made explicit above. If *gam2* is absent, then the sentence would be pragmatically weird, as shown in (9):

(9) # Keoi5 dak6dang1 [m4-gok3-ji3] zong6 nei5 gaa3.
3SG intentionally unintentionally bump-into you SFP

2.1.1.2 Some predictions

In this section, we show some of the patterns that are predicted by the claim that all [X-*gam2*] combinations are manner adverbials. Firstly, we show that [X-*gam2*] combinations force a reading that involves physical manifestation of the predicate. They are not compatible with predicates that denote an event that has no physical manifestation. Secondly, we show that [X-*gam2*] combinations are located lower than speaker-oriented adverbs and subject oriented-adverbs.

In (10), *m4 zung1ji3* 'not pleased' is a predicate that denotes a mental state, which may or may not carry any overt manifestation. In (10), the adverb *hou2 ming4hin2* 'very clearly' carries a speaker-oriented reading and the interpretation of the predicate *m4 zung1ji3* 'not pleased' is compatible with whether or not the 'disliking' is overtly displayed. In (11), the interpretation of the predicate *m4 zung1ji3* 'not pleased' has to be interpreted as physically realized because the adverbial [clearly *gam2*] gives rise to a manner reading of the predicate.

(10) Keoi5 **hou2** **ming4hin2** m4 zung1ji3 laa1.
3 SG very clearly NEG like SFP
'He/She will clearly be displeased'

(11) Keoi5 **hou2** **ming4hin2** **gam2** m4 zung1ji3 laa1.
3 SG very clearly GAM NEG like SFP
'He/She will show his/her dislike in a very clear manner.'

Along the same line, it is also predicted that a predicate that involves no physical manifestation is not compatible with [X-*gam2*] combinations. Consider the following examples:

(12) a. Keoi5 **dak6dang1** juk1 gaa3.
3 SG intentionally move SFP

b. Keoi5 **dak6dang1** m4 juk1 gaa3.
3 SG intentionally NEG move SFP

c. Keoi5 **dak6dang1** **gam2** juk1 gaa3.
3SG intentionally GAM move SFP

d. ?? Keoi5 **dak6dang1** **gam2** m4 juk1 gaa3.
3SG intentionally GAM NEG move SFP

The oddness of (12d) can be explained in the following way. [intentionally-*gam2*] is a manner adverbial and it states how an action is carried out. It, thus, is compatible with *juk1*, which just means 'move' in general. However, *m4 juk1* 'not move' is a 'non-action' in the sense that it does not contain any physical manifestation. As a result, *m4 juk1* 'not move' is not compatible with [intentionally-*gam2*], which is a manner adverbial.

If [X-*gam2*] combinations are all manner adverbials, it is also predicted that [X-*gam2*] adverbials are located lower than speaker-oriented adverbials and subject-oriented adverbials. This seems to be the case. *Hou ming hin* 'clearly' is a speaker-oriented adverbial. It can appear to the left of the modal *wui5* 'will', as in (14), but not to the right of the modal *wui5* 'will', as in (15). When *gam2* is added, the pattern is reversed, as shown in (16) and (17).

(13) Ngo5 **wui5** daa2 keoi5.
I will hit 3SG
'I will hit him/her.'

(14) Ngo5 [hou2 ming4hin2] **wui5** daa2 keoi5.
1SG very clearly will hit 3SG

(15) ?? Ngo5 **wui5** [hou2 ming4hin2] daa2 keoi5.
1SG will very clearly hit 3SG

(16) ?? Ngo5 [hou2 ming4hin2 gam2] **wui5** daa2 keoi5.
1SG very clearly GAM will hit 3SG

(17) Ngo5 **wui5** [hou2 ming4hin2 gam2] daa2 keoi5.
1SG will very clearly GAM hit 3SG

When *gam2* is added, the speaker-oriented adverbial becomes a manner adverbial. Then, the contrast is expected as [very clearly *gam2*], being a manner adverbial, should be located lower than modals and speaker-oriented adverbials.

There is also evidence to show that an [X-*gam2*] adverbial has to be placed below a subject-oriented adverbial like *dak6dang1* 'intentionally'. In (18), the *gam2*-containing adverbial is lower than *dak6dang1* 'intentionally', the sentence is good. In (19), the *gam2*-containing adverbial is placed higher than *dak6dang1* 'intentionally', the sentence is bad.

(18) Keoi5 [**dak6dang1**] [ceot1-lik6 gam2] zong6 nei5 gaa3.
3 SG intentionally out-force GAM bump-into 2SG SFP
'He/She intentionally bumped into you with a big force.'

(19) ?? Keoi5 [ceot1-lik6 gam2] [**dak6dang1**] zong6 nei5 gaa3.
3 SG out-force GAM intentionally bump-into 2SG SFP
Intended reading: 'He/She intentionally bumped into you with a big force.'

2.1.2 [X-*gam2*]/*gam2* adverbials are always restrictive

2.1.2.1 [X-*gam2*]

In the discussion above, we have established that [X-*gam2*] combinations are all manner adverbials. The question arises whether the reverse also holds. In other words, is the following true?

(20) Manner adverbials → [X-*gam2*] combinations

The answer is negative. Some adverbials are inherently manner-like, so in the absence of *gam2,* the reading is still manner. For such adverbs, it is also possible to put *gam2* after them. Witness the following minimal pair:

(21) Keoi5 **sai3-seng1** coeng3-go1.
3SG small-noise sing-song
'He/She sings softly.'

(22) Keoi5 **sai6-seng1** **gam2** coeng3-go1.
3SG small-noise GAM sing-song
'He/She sings softly.'

With respect to the absence of *gam2* in (21), one possibility is that *gam2* is also present in (22) but is covert. However, if *gam2* is allowed to be covert, we would expect clausal/manner ambiguity in Cantonese with adverbials that are compatible with both readings. As shown earlier on, for such adverbials to give rise to a manner reading, *gam2* must be overtly present. Another possibility is that (21) and (22) in fact differ in meaning. We believe such is the case and the difference is in restrictiveness. We would like to argue that manner adverbials without *gam2* are compatible with both a restrictive and a non-restrictive reading, while adverbials with *gam2* are obligatorily restrictive. Consider the following contrast:

(23) Joanna jan1wai6 **sai3-sai3-seng1** coeng3-go1 bei2 jan4 laau6.
Joanna because small-small-noise sing-song PASS people scold
'Joanna was scolded by the others because she sang softly.'

(24) Joanna jan1wai6 **sai3-sai3-seng1** **gam2** coeng3-go1.
Joanna because small-small-noise GAM sing-song
bei2 jan4 laau6
PASS people scold
'Joanna was scolded by the others because she sang softly.'

Imagine the following scenario. There is a performance on stage. For the people on stage, they have to sing very loudly, or else, they would be scolded. For the people who are back-stage, they cannot make noise at all, or else they would be scolded. If Joanna is on stage and she sings softly, she will be scolded. In such a situation, both (23) and (24) can

be used to comment on the situation. If Joanna is off-stage and she sings, softly or otherwise, she will be scolded. In such a situation, only (23) can be used to comment on the situation. Using (24) would imply that if Joanna would have sung loudly, she won't be scolded, which is not true, being off-stage. In other words, in (23), *sai3-sai3-seng1* 'softly' can be interpreted either restrictively or non-restrictively. In (24), *sai3-sai3-seng1 gam2* can only be used restrictively. Another minimal pair to show the restrictive/non-restrictive contrast in the following:

(25) Keoi5 **ceot1-seng1** gong2-je5.
3SG produce-noise say-thing
'He/She is speaking.'

(26) #Keoi5 **ceot1-seng1** **gam2** gong2-je5.
3SG produce-noise GAM say-thing
'He speaks in the way that produces noise.'

(25) is fine while (26) sounds odd. The contrast between (25) and (26) can be explained along the same line. When one has to speak, the only way is to produce noise. Since *gam2*-containing adverbials are always restrictive and restriction presupposes a set of more than one choice, the restrictive reading is at odd with the adverbial that denotes the only way the event can be carried out.

2.1.2.2 *Gam2*

When there is no modifier preceding *gam2*, *gam2* is also restrictive. Consider the following contrast:

(27) (Hai2 lei1-dou6), **gam2** jau4-seoi2 m4 dak1 gaa3.
at this-place GAM swim-water NEG possible SFP
'You can't swim in such a way (here)?'

(28) (Hai2 lei1-dou6), jau4-seoi2 m4 dak1 gaa3.
at this-place swim-water NEG possible SFP
'You can't swim here.'

In (27), *gam2* refers to a manner of swimming which is not allowed in the location given. (27) can not mean swimming is not allowed in general. In other words, (27) can never mean (28). This shows that *gam2* can never have a non-restrictive interpretation.

2.2 Post-VP position

As we have just shown, in the majority of cases, *gam2* gives rise to a manner reading when it precedes a VP. It can in fact also follow a VP, in which case, it is more natural to interpret *gam2* as referring to an evaluation of the event. Compare the two sentences below, pay attention to the position of *gam2* with respect to the VP *coeng2-go1*:

(29) Keoi5 **gam2** coeng3-go1 ge2
3SG GAM sing-song SFP
'How come she sings in such a way!'
Possible interpretations of *gam2*: with her throat, with two microphones, etc. (manner)

(30) Keoi5 coeng3-go1 (coeng3-sing4) **gam2** ge2
3SG sing-song sing-RES GAM SFP
'How come she sings like that!'
Possible interpretations of *gam2*: too loud, too much of a creaky voice, etc. (evaluation)

The position-interpretation co-relate observed above is also manifested in the question-counterpart of *gam2*, *dim2*. The position and interpretation of *dim2* show the same co-relation. Consider (31) and (32) below:

(31) Peter **dim2** jau4-seoi2 gaa3?
Peter DIM swim-water QP
'In what way does Peter swim?'
Answers: e.g. with his head up, swim naked, etc.

(32) Peter jau4-seoi2 (jau4-seng4) **dim2** aa3?
Peter swim-water swim-RES DIM QP
'How does Peter swim?'
Answers: e.g. very good, very fast, etc.

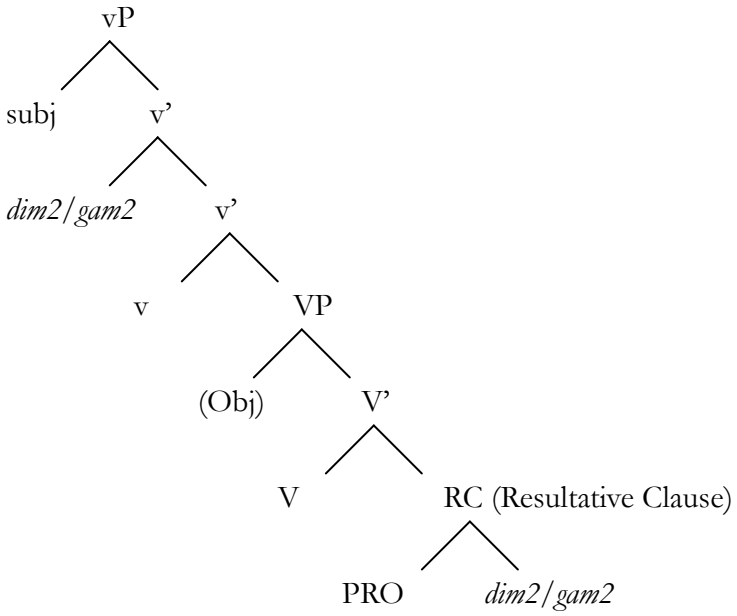
Tsai (1999) makes a similar observation based on the Mandarin counterpart of *dim2*, *zenme yang*, which he glosses as 'how-manner'. Consider the following contrast, taken from Tsai (1999), pay attention to the position of *zenme-yang* with respect to the verb *chang* 'sing':

(33) Akiu shang-ci **zenme-yang** chang-ge?
Akiu last-time how-manner sing-song
'How did Akiu sing last time?'
Answers: a. you houlong 'with throat' (method)
b. hen dasheng 'very loudly'(style of action)

(34) Ge, Akiu shang-ci chang-de **zenme-yang**?
song Akiu last-time sing-RES how-manner?
'How did Akiu perform in singing last time?'
Answer: a. bu zenme-yang 'not so (good)' (resultative)
b. tai dasheng 'too loud' (style of resultant state)

Tsai (1999) treats pre-verbal *zenme-yang* 'how-manner' as a pre-verbal modifier and the post-verbal *zenme-yang* as a complement. In particular, he takes pre-verbal *zenme-yang* to be modifying v', giving rise to either method or style of action reading. He postulates a result clause headed by the post-verbal *zenme-yang*, which predicates upon a resultative event/state introduced by the resultative marker *de*. If the subject of the resultative clause is an event, then the resultative reading arises. If the subject of the resultative clause is a state, the style (of state) reading arises. We suggest that the same structure can be applied to the Cantonese *gam2* and *dim2*. Following Tsai (1999), we adopt the following structure for Cantonese:

(35)



The higher *gam2/dim2* gives rise to a manner reading (method, style of action) and the lower *gam2/dim2* gives rise to an evaluation reading (resultative, style of resultant state).

3. *Gam2* in the nominal domain

Similar to the verbal domain, *gam2* can be interpreted deictically, anaphorically and establishingly in the nominal domain. Just like most other nominal modifiers, *gam2* has to be followed by the modification marker *ge3*.

(36) *gam2ge3*→ deictic/anaphoric

a. **gam2** **ge3** naam4jan2
GAM GE man
'men like this'

description-*gam2ge3* → establishing

b. **faa1faa1fit1fit1** **gam2** **ge3** naam4jan2
flashy GAM GE man
'flashy type of boys'

3.1 The reference of *gam2ge3*

In the verbal domain, *gam2* refers to a property of the event. In the nominal domain, naturally, *gam2* refers to some nominal property. However, there are still restrictions as to what kind of nominal property it can refer to. *Gam2* can only refer to individual-level properties. It cannot refer to stage-level properties. The contrast is illustrated below:

(37)* **gam1jat6** **wu1wu1we5we5** **gam2** **ge3** naam4jan2
today grubby GAM GE man
Intended reading: 'men of the type those are grubby today'

(38) **wu1wu1we5we5** **gam2** **ge3** naam4jan2
grubby GAM2 GE man
'men of the grubby type'

However, not all modifiers denoting individual-level properties are legitimate pre-*gam2* modifiers in the nominal. For instance, modifiers that denote physical attributes are marginal, if not ungrammatical, when appearing with *gam2*. This is illustrated with the following two examples:

(39) ***saam1** **mai5** **gou1** **gam2** **ge3** naam4jan2
three meter tall GAM GE man
Intended reading: 'men of the type that are 3-meters tall'

(40) * **daai3** **ngaan5-geng3gam3** **ge3** naam4jan2
wear glasses GAM GE man
Intended reading: 'men of the type that wear glasses'

Modifiers that denote external properties which are not physical attributes are also illegitimate pre-*gam2* modifiers.

(41) *hai2 **Johnson and Johnson** **zou6je5** **gam2** **ge3** naam4jan2
at Johnson and Johnson work GAM GE man
Intended reading: 'men of the type that work in Johnson and Johnson'

These restrictions are placed by *gam2*. If *gam2* is absent in (37), (39), (40) and (41), the phrases would be grammatical.

To recapitulate, legitimate pre-*gam2* modifiers are those that denote properties that are individual-level and internal to the nominal. The same restriction on possible reference also applies to when *gam2* appears without a preceding description in the nominal.

3.2 *Gam2* and restrictiveness

In the verbal domain, *gam2* is always restrictive. In the nominal, *gam2* is generally restrictive, though not always. We discuss the relation between restrictiveness and the position of *gam2ge3* within the nominal below.

3.2.1 Phrase-initial

When *gam2* (with or without a preceding description) appears in a phrase-initial position, the interpretation of *gam2* is always restrictive.

(42) **Gam2** **ge2** naam4jan2 zeoi3 maa4faan4
GAM GE man most troublesome
'This kind of men is the most troublesome.'

(43) Naam4jan2 zeoi3 maa4faan4
man most troublesome
'Men are the most troublesome.'

(42) can never have a non-restrictive reading in which it has the same interpretation as (43). This also applies when there is a description preceding *gam2*.

Gam2ge3, with or without a preceding description, cannot appear in front of a proper name.

(44) * (faa1faa1fit1fit1) **gam2** ge3 Peter
flashy GAM GE Peter

Gam2ge3 with a preceding description can appear naturally to the left of a demonstrative. The interpretation is restrictive. When there is no preceding description, the phrase degrades drastically and only the deictic reading is marginally possible.

(45) maa4maa4faan4faan4 **gam2** **ge3** go2 go3 naam4jan2 le1?
troublesome GAM GE that CL man QP

(46) **Gam2** **ge3** go2 go3 naam4jan2 le1?
GAM GE that CL man QP

In other words, in a phrase-initial position, *gam2ge3* is always restrictive.

3.2.2 Non-phrase initial

When *gam2* is between a classifier and a noun, it can be interpreted as either restrictive or non-restrictive, depending on two factors: (i) whether the proximal or the distal demonstrative is used; (ii) whether there is a description preceding *gam2*.

When the proximal demonstrative is used, *gam2* (with or without the preceding description) is always non-restrictive:

(47) lei1 go3 (faa1faa1fit1fit) **gam2 ge3** naam4jan2
this CL flashy GAM GE man
'this flashy guy' (non-restrictive)

When the proximal demonstrative is not used and there is no preceding description, the interpretation of *gam2ge3* is only non-restrictive (see B's response in 48). When there is a preceding description, it can be either non-restrictive (see C's response in 48) or restrictive (see 49).

(48) A: Are you talking about Peter?

B: (Sigh) (Go2) go3 **gam2** **ge3** naam4jan2
that CL GAM GE man

C: (Sigh) (Go2) go3 faa1faa1fit1fit1 **gam2** **ge3** naam4jan2
that CL flashy GAM GE man

(49) go2 go3 faa1faa1fit1fit1 **gam2** **ge3** naam4jan2 hai6 Peter
that CL flashy GAM GE man BE Peter
'That flashy guy is Peter.'

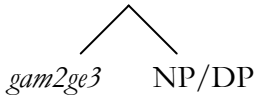
3.3 Post-copular position

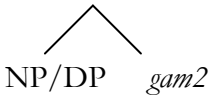
Although *gam2* cannot appear in front of proper names, it can ascribe a property to a proper name in a predicative sentence:

(50) ***gam2** ge3 Peter
GAM GE Peter

(51) Peter hai6 **gam2** gaa3
Peter BE GAM SFP
'Peter is like that.'

The grammaticality contrast between (50) and (51) suggests that *gam2* gives rise to different interpretations depending on its position. In a phrase-initial position, *gam2* is a pre-nominal modifier and is only restrictive. Thus it can't appear with proper names, which have rigid designations. When *gam2* acts as a predicate, we treat it as the predicate of a Small Clause (SC) with NP/DP as the subject. *Gam2* in this case is attributive in nature, and is thus compatible with proper names. The relevant structural differences are shown in (52a) and (52b).

(52) a.


b.


4. Propositional use

When *gam2* is not followed or preceded by anything, it refers to a proposition. In (53), *gam2* refers to the situation that A has got no cash. It is interpreted anaphorically. *Gam2* can also be interpreted deictically if A, instead of saying he has no money, shows an empty wallet to B. *Gam2* is not used establishingly when referring to the property of a situation.

(53) A: ngo5 mou5 daai3 cin2 tim1 B: **gam2** aa4, ngo5 bei2 sin1 laa1
1SG NEG bring money SFP GAM SFP, 1sg give first SFP
'I forgot to bring any cash.' 'In that case, I will pay first.'

When referring to a proposition, *gam2* is not used establishingly.

5. *Gam3*

There is another indexical element that is related to *gam2*, *gam3*. Different from *gam2*, *gam3* is always followed by a gradable adjective. Let X be the adjective, [*gam3*-X] refers to a degree of X-ness. It combines equally well with open-scale and closed-scale adjectives. It can be used deictically, with demonstration accompanying the utterance as in (54). It can also be used establishingly, as in (55, A). It is used anaphorically in (55, B). When *gam3* is combined with a non-gradable adjective, it is uninterpretable, as in (56).

(54) **Gam3** mun5 laa1 (closed-scale adjective)
GAM full SFP
'This full' (with the index finger touching the side of a beer glass)

(55) A: Tiu4 sing2 jau5 saam1 mai5 **gam3** coeng4 (open-scale adjective)
CL rope have threemeter GAM long
'The rope is three meters long.'

B: **Gam3** coeng4 dou1 m4 gau3 bo3
GAM long still NEG enough SFP
'That is still not long enough.'

(56)# Peter **Gam3** daan1san1 gaa3
Peter GAM single SFP
Lit. 'He is that single.'

6. Analysis

Gam2 and *gam3* are similar in that both indexical elements can be used deictically, anaphorically and establishingly. Furthermore, both of them make reference to abstract entities (manner, nominal properties, propositions and degree). With respect to their differences, *gam2* can appear in many different environments while *gam3* can only precede an adjective. The difference in the reference is not only reflected in their tones. *Gam2* can always optionally be followed by an associative noun *joeng2* 'appearance' while *gam3* cannot.

(57) a. gam2 (joeng2)
GAM appearance

b. gam3 (*joeng2)

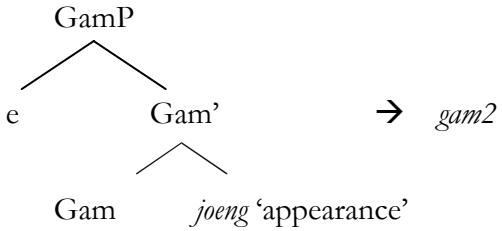
In other words, the modification relation between *gam2* and the 'modifiee' (e.g. VP, NP, etc.) is not direct. *Gam2* ascribes a property to *joeng2* 'appearance' and *gam2 joeng2* as a whole ascribes a property to the event, the nominal or a situation, depending on its environment. We take it that *joeng2* acts as a restriction on *gam2*, though the lexical realization of the restriction can be optional.

Is there any hidden restriction behind *gam3*? The null hypothesis is that there is. We suggest that there is always a hidden restriction 'degree' after *gam3*, which is never realized as a separate lexical item. When one utters [*gam3*-adjective], what one is actually saying is [*gam3*-'degree'-adjective].

The proposal is the following. We assume that the indexical *gam* has its own projection. We call it *Gam*P (GP) for explicitness, though the name matters very little. *Gam* heads the projection, and it takes two arguments. The internal argument is the restriction, which is either *joeng2* 'appearance' or 'degree'. In the former case, it surfaces as *gam2*; in the latter case, it surfaces as *gam3*. The external argument is a variable, which can be bounded by three different things: an overt description (the establishing use), the immediate context (the deictic use) or a reference in the previous discourse (the anaphoric use). For *gam2*, the structure is the following:[3]

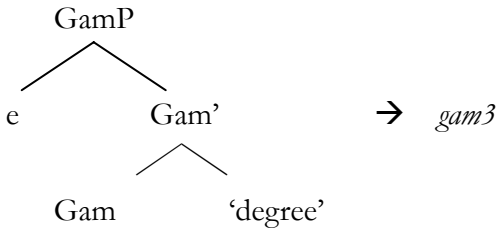
[3] *Gam3*, in its anaphoric use and its deictic use, can also have an additional intensifying reading, see Sio & Tang (to appear).

(59)



Gam3 has the following structure:

(60)



7. Loose ends

In this paper, we have discussed the properties of the indexical element *gam* (*gam2* and *gam3*). Having one and the same indexical element to refer to nominal/verbal/propositional properties and degree is not merely a Cantonese idiosyncrasy. In fact, many languages use identical indexical elements to refer to nominal/verbal/propositional properties and degree, for instance, the Czech *tak*, the Dutch *zo*, etc. (see Landman & Morzycki 2003).[4] In this paper, we show that the core meaning of the indexical *gam* is to refer to abstract entities. The referents of abstract entities differ from the referents of noun phrases or events, for instance, in that abstract entities are neither anchored spatially nor temporally. The deeper question to be asked is how the process in making reference to abstract entities is related to the emergence of a

[4] Some illustrative examples are provided below:

(a) tak tančí.
TAK dance.3SG.PRES
'dance in such a way'

(b) takový muž
TAK-M.NOM man.M.NOM
'such a man'

(c) tak
TAK
'It is the case.'

(d) tak (hle) velký
TAK(see) big.M.NOM
'this big' (with demonstration)

(e) tak velký
TAK big.M.NOM
'so big' (exclamation)

particular indexical item carrying such function. A related question would be whether such indexical element can be decomposed further functionally. We leave these questions open for now.

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