

PROPERTIES OF NGAANG AND
THE SYNTAX OF VERBAL PARTICLES IN CANTONESE*

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ABSTRACT

This article explores various grammatical properties of the postverbal particle *ngaang* ‘must’ in Cantonese. It is shown that the existence of *ngaang* ‘must’ is subject to the telicity requirement, the aspectual requirement, and the monosyllabic requirement. Furthermore, it is argued that *ngaang* ‘must’ should not be analyzed as a resultative verb. By virtue of their grammatical similarities, *ngaang* ‘must’ can be treated on a par with two postverbal particles in Cantonese, namely *saai* ‘all’ and *dak* ‘only’. These three verbal particles are overt realizations of a functional category associated with modality, distributivity, and focus semantically, whose projection dominates the verb phrase in the clausal structure.

1. INTRODUCTION

The particle discussed in this article is the postverbal particle *ngaang* (硬), which is a new and colloquial expression in Hong Kong Cantonese.¹ Morphologically, it is attached to verbs, as shown in (1).

(1) 佢做硬。

Keoi zou-ngaang.

he do-must

‘He must do.’

The postverbal particle *ngaang* denotes a modality meaning. The particle

ngaang in (1) can be glossed as ‘must’ in English. The interpretation of *ngaang* ‘must’ in (1) is ambiguous. One reading of (1) is the reading of ‘subject-oriented’ (root) modality. The particle *ngaang* ‘must’ expresses the actor’s determination to do the action, according to which the subject has determined to do something. Another reading of (1) is the reading of ‘speaker-oriented’ (epistemic) modality, according to which the presence of *ngaang* ‘must’ is concerned with an opinion of the speaker. It is the speaker rather than the subject’s evaluation on the necessity of doing something. His doing something may be unavoidable, which seems to imply that such unavoidability is imposed externally.² If the subject is inanimate, such as *titlou* ‘railway’ in (2), the sentence is not ambiguous; only the reading of speaker-oriented modality is possible, which clearly contrasts with the reading of subject-oriented modality.

(2) 條鐵路起硬。

Tiu titlou hei-ngaang.

CI railway construct-must

‘The railway must be constructed.’

Ngaang ‘must’ cannot be in the complement clause of deontic verbs. For example, verbs like *zidou* ‘know’, *soengseon* ‘believe’, and *jiwai* ‘think’ are epistemic verbs whereas verbs like *jiukau* ‘require’, *mingling* ‘order’, and *haufui* ‘regret’ are deontic verbs in Cantonese.³ The contrast between (3) and (4) shows that *ngaang* ‘must’ occurs in the complement clause of epistemic verbs only.

(3) 我知道佢贏硬。

Ngo zidou keoi jeng-ngaang.

I know he win-must

‘I know that he must win.’

(4) *我要求佢贏硬。

**Ngo jiukau keoi jeng-ngaang.*

I require he win-must

‘I require that he must win.’

Literally, *ngaang* means ‘hard, stiff, tough’. It can be used as an adjective. For example, *ngaang* in (5) is an adjectival predicate and it does not have the modality interpretation.

(5) 呢條魚骨好硬。

Ni tiu jyugwat hou ngaang.
 this CI fish-bone very hard
 ‘This fish bone is very hard.’

The modality meaning of *ngaang* ‘must’ and its grammatical properties in Cantonese have not been discussed in detail in the literature. To the best of my knowledge, the only linguist who points out such a usage of *ngaang* ‘must’ in Cantonese is T.-A. Cheng (1997:259).⁴ According to him, *ngaang* ‘must’ is a ‘verbal complement’, i.e. *buyu* (補語), denoting a meaning of necessity. He seems to treat *ngaang* ‘must’ on a par with other ‘verbal complements’ in Cantonese, such as resultative verbs.⁵

The major focus of this article is to explore various grammatical properties of the postverbal particle *ngaang* ‘must’ in Cantonese. Based on the observations in this article, I will argue that *ngaang* ‘must’ shares some similarities with two verbal particles in Cantonese, namely *saai* ‘all’ and *dak* ‘only’. It will be proposed that these three particles are overt realizations of a functional category, whose projection dominates the verb phrase.

2. CONSTRAINTS OF THE OCCURRENCE OF *NGAANG*

2.1 Telicity Requirement

Eventualities can be classified into at least four types: accomplishments, achievements, activities, and states (Vendler 1967). These four types of eventualities can further be divided into two with respect to the existence of a natural endpoint: accomplishments and achievements are telic events, such as the predicates *maai ni zek gupiu* ‘buy this stock’ in (6) and *jeng* ‘win’ in (7) respectively, whereas activities and states are atelic events, such as the predicates *haang* ‘walk’ in (8) and *hai* ‘be’ in (9). The grammaticality judgments in (6) to (9) show that there is a dichotomy between telic predicates and atelic predicates. The

generalization is that the occurrence of *ngaang* 'must' is incompatible with atelic events.

- (6) 佢買硬呢隻股票。 (Accomplishments)
Keoi maai-ngaang ni zek gupiu.
 he buy-must this CI stock
 'He must buy this stock.'
- (7) 我贏硬。 (Achievements)
Ngo jeng-ngaang.
 I win-must
 'I must win.'
- (8) *佢喺校園度慢慢行硬。 (Activities)
**Keoi hai haaujyun dou maanmaan haang-ngaang.*
 he in campus place slowly walk-must
 'He must walk in the campus slowly.'
- (9) *佢係硬總統。 (States)
**Keoi hai-ngaang zungtung.*
 he be-must president
 'He must be the president.'

However, there are apparently some counterexamples to the generalization that *ngaang* 'must' is subject to the telicity requirement. For example, some predicates that express activities can cooccur with *ngaang* 'must', such as *siu* 'laugh' in (10) and *haang* 'walk' in (11) (cf. (8)).⁶ In colloquial Cantonese, attaching *ngaang* 'must' to some predicates that presumably express activities, such as those in (12), can be found.

- (10) 呢齣戲咁有趣，佢地笑硬。
Ni ceot hei gam jauceoi, keoidei siu-ngaang.
 this CI movie so funny they laugh-must
 'This movie is so funny. They must laugh.'

- (11) 百萬行咁有意義，佢一定行硬。
Baakmaanhang gam jau jji, keoi jatding haang-ngaang.
 million-walk so have meaning he definitely walk-must
 ‘Million Walk is so meaningful. He definitely must walk.’
- (12) 衰硬，病硬
seoi-ngaang, beng-ngaang
 decline-must sick-must
 ‘must lose, must sick’

Furthermore, some apparent counterexamples come from semelfactives. Predicates such as *kat* ‘cough’ in (13) may express single-stage and instantaneous events with no result or outcome, consisting only in the occurrence, which are also known as ‘semelfactives’ (Smith 1997).⁷ In terms of telicity, semelfactives are atelic events. However, the occurrence of *ngaang* ‘must’ in (14) is perfectly acceptable.

- (13) 佢咳。
Keoi kat.
 he cough
 ‘He coughed.’
- (14) 佢咳硬。
Keoi kat-ngaang.
 he cough-must
 ‘He must cough.’

Notice that sentences such as (10) are acceptable when the predicate indicates an inchoative meaning, presenting a change into the state. For example, inchoatives allow an inference that the event has gone through a change of state, for instance, from a state of not laughing changing to a state of laughing in (10). The existence of the resultant state implies that the event is telic. In situation type inchoatives are either achievements or accomplishments (Smith 1997). The predicates in (10) to (12) are all derived inchoatives. It is expected that whenever a predicate can be interpreted as an inchoative, *ngaang* ‘must’ can occur.

Regarding the semelfactives, although they are atelic, they could be interpreted as derived inchoatives in some contexts. For example, the event of coughing is interpreted as an event having a change of state from not coughing to coughing in (14). *Ngaang* 'must' seems to focus on the occurrence of the event of coughing rather than the duration of coughing.

A major difference between semelfactive predicates and those predicates expressing achievements is that only the events expressed by the former can be interpreted as multiple-event activities. The multiple-event activities are atelic. For example, (13) is ambiguous; the event of coughing in (13) could be either a single-stage event having an inchoative meaning or a multiple-event activity. On the contrary, the multiple-event reading of (15) is the only possible reading which is triggered by the duration phrase *saam jat* 'three days'. As the multiple-event reading triggered by the duration phrase in (16) is interpreted as atelic, there is a conflict between that the atelic event and *ngaang* 'must'. The ungrammaticality of (16) further conforms to the telicity requirement of *ngaang* 'must' observed in this article.

(15) 佢咳咗三日。

Keoi kat-zo saam jat.
he cough-Perf three day
'He coughed for three days.'

(16) *佢咳硬三日。

**Keoi kat-ngaang saam jat.*
he cough-must three day
'He must cough for three days.'

2.2 Aspects

There are at least four aspect markers in Cantonese, namely the perfective aspect marker *zo*, the experiential aspect marker *gwo*, the progressive aspect marker *gan*, and the durative aspect marker *zyu*. Interestingly, when *ngaang* 'must' occurs, the existence of all these aspect markers is prohibited, as exemplified by the following examples.

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- (17) 佢地去 (*咗) 硬 (*咗)。
Keoidei heoi(-zo)-ngaang(*-zo).*
 they go(-Perf)-must(-Perf)
 ‘They must have gone.’
- (18) 佢地去 (*過) 硬 (*過)。
Keoidei heoi(-gwo)-ngaang(*-gwo).*
 they go(-Exp)-must(-Exp)
 ‘They must have the experience of going.’
- (19) 佢地去 (*緊) 硬 (*緊)。
Keoidei heoi(-gan)-ngaang(*-gan).*
 they go(-Prog)-must(-Prog)
 ‘They must be going.’
- (20) 佢地拎 (*住) 硬 (*住) 份表。
Keoidei ling(-zyu)-ngaang(*-zyu) fan biu.*
 they hold(-Dur)-must(-Dur) CI form
 ‘They must be holding the form.’

2.3 Monosyllabic Requirement

Another requirement that constrains the attachment of *ngaang* ‘must’ in Cantonese is a phonological/morphological requirement.

Basically, the postverbal particle *ngaang* ‘must’ can be attached to intransitive verbs (=21), transitive verbs (=22), and ditransitive verbs (=23).

- (21) 佢地嚟硬。 (Intransitive verbs)
Keoidei lei-ngaang.
 they come-must
 ‘They must come.’
- (22) 佢買硬呢隻股票。 (Transitive verbs)
Keoi maai-ngaang ni zek gupiu.
 he buy-must this CI stock
 ‘He must buy this stock.’

- (23) 佢畀硬個 A 我。 (Ditransitive verbs)

Keoi bei-ngaang go A ngo.

he give-must CI A I

'He must give an A to me.'

Given that *ngaang* 'must' can be attached to transitive verbs, the ungrammaticality of (24) has nothing to do with the object. The contrast between (24) and (25) shows that the problem lies in the morphology of the verb: *ngaang* 'must' is attached to monosyllabic verbs only, such as *caa* 'investigate' in (25). Although *diucaa* 'investigate' and *caa* 'investigate' are synonymous, the disyllabic verb *diucaa* 'investigate' in (24) cannot be the host of *ngaang* 'must'.

- (24) *佢調查硬呢件事。

**Keoi diucaa-ngaang ni gin si.*

he investigate-must this CI matter

'He must investigate this matter.'

- (25) 佢查硬呢件事。

Keoi caa-ngaang ni gin si.

he investigate-must this CI matter

'He must investigate this matter.'

The monosyllabic requirement can also explain why *ngaang* 'must' cannot be attached to VV compounds, such as *ke-gui* 'ride-tired' in (26), and VO compounds, such as *ceot-baan* 'publish-print' in (27).

- (26) 佢騎 (*硬) 瘡 (*硬) 呢隻馬。

Keoi ke(-ngaang)-gui(-ngaang) ni zek maa.*

he ride(-must)-tired(-must) this CI horse

'He must ride this horse tired.'

- (27) 佢出 (*硬) 版 (*硬) 呢三本書。

Keoi ceot(-ngaang)-baan(*-ngaang) ni saam-bun syu.*

he publish(-must)-printing(-must) this three-CI book

'He must publish these three books.'

In Cantonese, *sing-zik* ‘promote (Lit.: rise-job)’ is analyzed as a VO compound. Although the perfective aspect marker *zo* can be inserted, as in (28), *ngaang* ‘must’ cannot do the same thing, as in (29). I assume that the unacceptability of (29) is due to the monosyllabic requirement. The whole VO compound should be treated as the host. As the host is not monosyllabic, the occurrence of *ngaang* ‘must’ becomes ungrammatical. If the ‘object’ of the VO compound is missing, as in (30), the judgment is one of acceptability.

- (28) 佢升咗職。
Keoi sing-zo-zik.
 he rise-Perf-job
 ‘He has been promoted.’
- (29) *佢升硬職。
 **Keoi sing-ngaang-zik.*
 he rise-must-job
 ‘He must be promoted.’
- (30) 佢升硬。
Keoi sing-ngaang.
 he rise-must
 ‘He must be promoted.’

Consequently, the monosyllabic requirement of *ngaang* shows that the ‘V + bare noun’ sequence in Cantonese should not be analyzed as a verb phrase. In other words, the bare nominal ‘object’ is part of the compound instead of the complement of the verb. Otherwise, the contrast between (29) and the examples, such as (25), in which the nominal object is the complement of the verb, cannot be distinguished.⁸

Notice that there are some examples that do not obey the monosyllabic requirement.⁹ Presumably, *caau-jan* ‘discharge (Lit.: fry-person)’ in (31) and *co-gaam* ‘in jail (Lit.: sit-jail)’ in (32) are VO compounds in Cantonese. The disyllabic verb *promote* in (33) is a loanword. The disyllabic verb *zungji* ‘like’ in (34) is a native Cantonese word.

- (31) 炒硬人

caau-ngaang-jan
 fry-must-person
 ‘must discharge someone’

- (32) 佢一定坐硬監。

Keoi jatding co-ngaang-gaam.
 he definitely sit-must-jail
 ‘He definitely must be in jail.’

- (33) 佢表現咁好，實 promote 硬。

Keoi biujin gam hou, sat promote-ngaang.
 he performance so good definitely promote-must
 ‘As his performance is so good, he must be promoted.’

- (34) (?)我鍾意硬佢㗎嘍！

(?)Ngo zungji-ngaang keoi gaa laa!
 I like-must he SFP SFP
 ‘I definitely like/chase him/her!’

To explain why (31) and (32) are acceptable, one possibility is to assume that the bare nouns *jan* ‘person’ and *gaam* ‘jail’ are not part of the verb; instead they are complements of the verb.¹⁰ Consequently, the verbs *caau* ‘fry’ and *co* ‘sit’ are monosyllabic and thus attaching *ngaang* ‘must’ to these verbs does not violate the monosyllabic requirement.

Interestingly, if the context is ‘colloquial’ enough, *ngaang* ‘must’ can be attached to some disyllabic verbs, such as *promote* in (33) and *zungji* ‘like’ in (34).¹¹ Based on the acceptability of (33) and (34), I assume that the monosyllabic requirement is a stylistic rule, which could be overridden in some ‘marked’ contexts. As *ngaang* ‘must’ is a new and colloquial expression in Cantonese, it may be compatible with new and creative loanwords and colloquial native words and hence it can break some sound rules.

3. THE GRAMMATICAL STATUS OF *NGAANG*

3.1 A Resultative Verb?

Recall that T.-A. Cheng (1997) classifies *ngaang* ‘must’ as a ‘verbal complement’, i.e. *buyu*, on a par with resultative verbs in Cantonese. Is this classification correct?

There are some differences between canonical resultative verbs and *ngaang* ‘must’. First of all, in terms of meaning, *ngaang* ‘must’ does not denote a resultant state, departing from other resultative verbs in Cantonese.

Secondly, the following examples clearly show that resultative verbs, such as *jyun* ‘finish’, are not subject to the requirements that constrain the attachment of *ngaang* ‘must’. For example, the resultative verb *jyun* ‘finish’ can follow a verb that intrinsically denotes an atelic event, such as *haang* ‘walk’ in (35),¹² can cooccur with the perfective marker *zo* in (36), and can follow a disyllabic verb, such as *diucaa* ‘investigate’ in (37).

- | | | |
|------|--|--------------------|
| (35) | 佢行完。
<i>Keoi haang-jyun.</i>
he walk-finish
‘He finished walking.’ | (‘atelic’ events) |
| (36) | 佢睇完咗本書。
<i>Keoi tai-jyun-zo bun syu.</i>
he read-finish-Perf CI book
‘He finished reading the book.’ | (aspect markers) |
| (37) | 佢調查完呢件事。
<i>Keoi diucaa-jyun ni gin si.</i>
he investigate-finish this CI matter
‘He finished investigating this matter.’ | (disyllabic verbs) |

Thirdly, VV compounds can occur in the potential form, involving the insertion of *dak* ‘obtain’ and *m* ‘not’ between the verb and the resultative verb, as in (38a) and (38b). However, (39a) and (39b) are ungrammatical. The insertion of *dak* ‘obtain’ and *m* ‘not’ distinguishes *ngaang* ‘must’ from resultative verbs in Cantonese.

- (38) a. 行得完。
Haang-dak-jyun.
 walk-obtain-finish
 ‘(Someone) can finish walking.’
- b. 行唔完。
Haang-m-jyun.
 walk-not-finish
 ‘(Someone) cannot finish walking.’
- (39) a. *行得硬。
 **Haang-dak-ngaang.*
 walk-obtain-must
 ‘(Someone) can/must walk.’
- b. *行唔硬。
 **Haang-m-ngaang.*
 walk-not-must
 ‘(Someone) cannot/must not walk.’

The differences between *ngaang* ‘must’ and resultative verbs, such as *jyun* ‘finish’, can be summarized in (40).

(40) Differences between *ngaang* and resultative verbs in Cantonese

	<i>ngaang</i>	resultative verbs
Atelic events	*	OK
Aspect markers	*	OK
Disyllabic verbs	*	OK
Potential form	*	OK

Based on the above discussion, I conclude that *ngaang* ‘must’ should not be analyzed as a ‘verbal complement’ or a resultative verb in Cantonese.

3.2 *Ngaang* as a Member of the Verbal Particle Family

I have shown that *ngaang* ‘must’ is incompatible with all aspect markers in

Cantonese. In addition to such an aspectual requirement, the existence of some verbal particles is not allowed when *ngaang* ‘must’ is attached to the verb. These particles include *saai* ‘all’ and *dak* ‘only’. Before proceeding, let me introduce some properties of these two particles.

Cantonese *saai* ‘all’ is a postverbal particle. Its semantic effect is similar to universal quantification (Lee 1994). It functions as an anti-quantifier, which marks the event as the distributee having a scope under the distributor (Tang 1996). For example, in (41) *go di pinggwo* ‘those apples’ is regarded as the distributor and the event of eating is regarded as the distributee. The numeric interpretation of the event of eating, i.e. the distributee, is dependent on the numeric interpretation of *go di pinggwo* ‘those apples’, i.e. the distributor. If there were five apples, there could be at least five (minimal) events of eating.

(41) 我食晒嗰啲蘋果。

Ngo sik-saai go di pinggwo.

I eat-all that CI apple

‘I ate up those apples.’

The postverbal particle *dak* ‘only’ is a focus operator in Cantonese, which has scope over the elements following it (Lee 1995 and Tang 2001). For example, it is the direct object *jat-zoeng toi* ‘one table’ that is focalized by *dak* in (42).

(42) 佢買得一張枱。

Keoi maai-dak jat-zoeng toi.

he buy-only one-CI table

‘He bought only one table.’

Both *saai* ‘all’ and *dak* ‘only’ are verbal particles. The grammaticality judgments of the examples in (43), (44), and (45) seem to suggest that *ngaang* ‘must’, *saai* ‘all’, and *dak* ‘only’ are filling the same postverbal slot.

- (43) 佢買 (*晒) 硬 (*晒) 呢啲書。
Keoi maai(-saai)-ngaang(*-saai) ni di syu.*
he buy(-all)-must(-all) this CI book
'He must buy (*all) these books.'
- (44) 佢買 (*得) 硬 (*得) 呢啲書。
Keoi maai(-dak)-ngaang(*-dak) ni di syu.*
he buy(-only)-must(-only) this CI book
'He must buy (*only) these books.'
- (45) 佢買 (*晒) 得 (*晒) 呢啲書。
Keoi maai(-saai)-dak(*-saai) ni di syu.*
he buy(-all)-only(-all) this CI book
'He only bought (*all) these book.'

Do these three particles belong to the same category? There seem to be some similarities that *ngaang* 'must', *saai* 'all', and *dak* 'only' share.

Firstly, both *saai* 'all' and *dak* 'only' are subject to the telicity requirement. The predicate to which these particles are attached must denote a telic event, as shown in (46) and (47).

Predicates expressing telic events

- (46) 佢買晒啲書。
Keoi maai-saai di syu.
he buy-all CI book
'He bought all the books.'
- (47) 佢買得兩本書。
Keoi maai-dak loeng-bun syu.
he buy-only two-CI book
'He bought only two books.'

Predicates expressing atelic events

(48) *我驚晒佢地。

**Ngo geng-saai keoidei.*

I afraid-all they

‘I am afraid of all of them.’

(49) *我驚得一個人。

**Ngo geng-dak jat-go jan.*

I afraid-only one-Cl person

‘I am only afraid of one person.’

Secondly, similar to *ngaang* ‘must’, the focus operator *dak* ‘only’ cannot cooccur with any aspect markers, as illustrated in (50).

(50) *佢寫咗/過/緊得兩篇文。

**Keoi se-zo/gwo/gan-dak loeng-pin man.*

he write-Perf/Exp/Prog-only two-Cl article

‘He wrote/has written/is writing only two articles.’

However, the performance of *saai* ‘all’ is somewhat different from *ngaang* ‘must’ and *dak* ‘only’. The grammaticality judgment of (51) shows that *saai* ‘all’ can cooccur with aspect markers. However, the only aspect marker that *saai* ‘all’ can cooccur with is the experiential aspect marker *gwo*.

(51) 佢地去*咗/過/*緊晒美國。

*Keoidei heoi-*zo/gwo/*gan-saai Meigwok.*

they go-Perf/Exp/Prog-all America

‘All of them visited/have visited/are visiting America.’

Thirdly, similar to *ngaang* ‘must’, the judgment of attaching the postverbal focus operator *dak* ‘only’ to disyllabic verbs seems to be one of deviancy (Lee 1995). Such a constraint does not hold for *saai* ‘all’.

(52) 我照顧晒佢地。

Ngo ziugu-saai keoidei.

I take care-all they

'I take care of all of them.'

(53) ??我照顧得兩個人。

??*Ngo ziugu-dak loeng-go jan.*

I take care-only two-CI person

'I only take care of two people.'

Based on the discussion above, the characteristics that *ngaang* 'must', *saai* 'all', and *dak* 'only' share can be summarized in table (54).

(54) Similarities and differences among *ngaang* 'must', *saai* 'all', and *dak* 'only' in Cantonese

	<i>ngaang</i>	<i>saai</i>	<i>dak</i>
Telic events	OK	OK	OK
Atelic events	*	*	*
Aspect markers	*	OK	*
Disyllabic verbs	*	OK	*

By virtue of the fact that the three postverbal particles, namely *ngaang* 'must', *saai* 'all', and *dak* 'only', share some grammatical similarities, I assume that they are members of the same family. However, how to account for their differences? A syntactic solution will be proposed in the next section.

4. SYNTAX OF THE VERBAL PARTICLES IN CANTONESE

I have argued that *ngaang* 'must', *saai* 'all', and *dak* 'only' are verbal particles in Cantonese. To some extent, they can be substituted for each other, filling the same syntactic slot in the postverbal position. By virtue of the fact that these three particles share some grammatical similarities, it seems plausible to assume that they belong to the same type of category occupying the same syntactic position.

In terms of syntax, I propose that these particles, namely *ngaang* 'must',

Due to the affixal property of X and Asp, both X and Asp trigger movement. The verb will undergo movement to X via Asp, as in (56). After the verb moves to X, a new verbal cluster is formed. According to the Linear Correspondence Axiom (Kayne 1994), the word order of the verbal cluster will become 'V-Asp-X' in which the verb precedes the aspect marker and the aspect marker precedes X. The derivation in (56) accounts for the fact that the particles *ngaang* 'must', *saai* 'all', and *dak* 'only' must follow the verb. Furthermore, if there is an aspect marker, it must be between the verb and the particle (see the discussion on *saai* 'all' in (51)).

Secondly, there exists a selectional relationship between X and Asp. Whether X selects Asp is determined by the subcategorization frame of X. The differences among *ngaang* 'must', *saai* 'all', and *dak* 'only' with respect to the aspectual requirement should be analyzed as variations of the subcategorization frames of these particles. For example, *saai* 'all' may subcategorize for AspP in the argument structure, whose head is overtly realized as the experiential marker *gwo*. Given the fact that the occurrence of the aspect markers is prohibited when *ngaang* 'must' and *dak* 'only' are attached to the verb, I assume that these two particles do not subcategorize for AspP in the argument structure. Hence, the functional category Asp is simply missing. If there is no Asp in the structure, X subcategorizes for VP directly. The partial structure can be represented in (57).

$$\begin{array}{rcc}
 (57) & \dots XP & \dots XP \\
 & \quad \downarrow & \quad \downarrow \\
 & X & X \\
 & \quad \downarrow & \quad \downarrow \\
 & X & VP \\
 & \quad \downarrow & \quad \downarrow \\
 & \dots V \dots & V \quad X \quad \dots t_V \dots
 \end{array}$$

Thirdly, the monosyllabic requirement of *ngaang* 'must' and *dak* 'only' may be associated with the prohibition of the aspect markers of these two particles. Unlike *saai* 'all', both *ngaang* 'must' and *dak* 'only' subcategorize for the verb directly. In other words, VP is the complement of *ngaang* 'must' and *dak* 'only'. It is not implausible to assume that these two particles impose some specific constraints on the verb if they subcategorize for the verb directly. Along

these lines, the monosyllabic requirement of *ngaang* ‘must’ and *dak* ‘only’ follows from the nonexistence of Asp in the argument structure.

Based on the discussion in this section, we may observe that there are some postverbal ‘slots’ between the main verb and the object, as summarized in (58). The final postverbal slot contains the particles that denote modality ‘Modal’, quantification ‘Quant’, and focus ‘Focus’.¹⁴

(58) ... V Resultative Aspect Modal/Quant/Focus Object ...

5. CONCLUDING REMARKS

In this article, I have discussed various properties of the postverbal particle *ngaang* ‘must’ in Cantonese, which have not yet been discussed in the literature. It has been shown that *ngaang* ‘must’ is subject to three constraints, such as the telicity requirement, the aspectual requirement, and the monosyllabic requirement.

T.-A. Cheng (1997) classifies *ngaang* ‘must’ as a ‘verbal complement’, on a par with resultative verbs in Cantonese. I have argued against this classification and pointed out that *ngaang* ‘must’ should not be treated as a resultative verb.

Based on the similarities among *ngaang* ‘must’, *saai* ‘all’, and *dak* ‘only’, I have argued that all of these elements belong to the same verbal particle family. In terms of syntax, they are overt realizations of a functional category, whose projection is above the verb phrase. It has been shown that the proposed clausal structure coupled with the ideas of verb movement and subcategorization can account for a number of facts observed in this article. I hope that the discussion in this article may shed some light on the grammatical properties of Cantonese verbal particles and the architecture of clausal structure in Cantonese.

6. APPENDIX: *NGAANG* VS. *GANG*

The postverbal particle *ngaang* ‘must’ and *gang* (梗) ‘must’ seem to share some similarities in Cantonese. For example, both of them are postverbal particles and are almost synonymous, having a literal meaning of ‘hard, stiff’. Furthermore, both of them may denote a modality reading. Basically, *gang* ‘must’ may substitute for *ngaang* ‘must’ in most of the examples I have shown,

deriving a more or less similar meaning. Consider (59) (cf. (7)).

(59) 我贏梗。

Ngo jeng-gang.

I win-must

‘I must win.’

Similar to *ngaang* ‘must’, *gang* ‘must’ is also subject to the telicity requirement (=60), the aspectual requirement (=61), and the monosyllabic requirement (=62).

(60) *佢喺校園度慢慢行梗。

**Keoi hai haaujyun dou maanmaan haang-gang.*

he in campus place slowly walk-must

‘He must walk in the campus slowly.’

(61) *佢地贏梗咗/過。

**Keoidei jeng-gang-zo/gwo.*

they win-must-Perf/Exp

‘They must have won.’

(62) *佢調查梗呢件事。

**Keoi diucaa-gang ni gin si.*

he investigate-must this CI matter

‘He must investigate this matter.’

The difference between *ngaang* ‘must’ and *gang* ‘must’ with respect to their modality interpretation is very subtle. Perhaps the only difference is stylistic: *ngaang* ‘must’ is more colloquial than *gang* ‘must’.

Interestingly, I notice that it seems that *gang* ‘must’ tends to cooccur with the predicates that express achievements only. Using *gang* ‘must’ in (63) is not very natural. Compare the examples in (63) and (64).

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- (63) 政府拆硬/??梗呢啲舊樓。 (accomplishments)
Zingfu caak-ngaang/??gang nidi gau lau.
government demolish-must/must these old building
'The government must demolish these old buildings.'
- (64) 食咁多煙，你死硬/梗！ (achievements)
Sik gam do jin, nei sei-ngaang/gang!
eat so many cigarette you die-must/must
'As you smoke so much, you must die!'

I propose that the unnaturalness of using *gang* 'must' in (63) is due to the confusion about the interpretation of the postverbal element. As *gang* 'must' and the progressive aspect marker *gan* sound very similar phonologically and *gan* is used more frequently than *gang* 'must' in daily conversations, speakers of Cantonese might wrongly interpret the postverbal element in (63) as the progressive aspect marker *gan* and interpret (63) as (65). Hence, the use of *gang* 'must' is avoided in such contexts lest there is confusion.

- (65) 政府拆緊呢啲舊樓。
Zingfu caak-gan nidi gau lau.
government demolish-Prog these old building
'The government is demolishing these old buildings.'

Why is *gang* 'must' in (64) acceptable? In principle, achievements cannot be viewed by the progressive aspect (Smith 1997). It is less likely that *gang* 'must' will be interpreted as the progressive aspect marker *gan* when it follows a verb that expresses achievements. Hence, the use of *gang* 'must' in (64) is natural.

NOTES

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¹ As pointed out to me by Ben Au Yeung, *ngaang* 'must' and *gang* 'must' could be allomorphs in Cantonese. The comparison between two particles will be discussed in the appendix of this article.

² Thanks to Carine Yiu for useful discussion on these issues.

³ The classification of verbs is based on Man (1998). See her paper for the discussion of epistemic vs. deontic predicates in Cantonese.

⁴ Comparatively, the modality meaning of the postverbal particle *gang* 'must' is noted by more people in the literature, for instance, Zeng (1989), Wu (1991), T.-A. Cheng (1997), and Zhang and Nie (1999).

⁵ According to Chinese grammarians, *buyu* 'verbal complement' is a term used to refer to the second verbal element in the VV compound in Chinese, particularly the resultative verb. 'Verbal complement' should not be confused with the 'complement' of verbs that is mainly used to refer to the internal argument of verbs.

⁶ Thanks to Ben Au Yeung for drawing my attention to the verb *siu* 'laugh'.

⁷ Such kind of events could be analyzed as a special atelic subclass of achievements (Vendler 1967, Dowty 1979).

⁸ The interpretation of *saai* 'all' in Cantonese VO compounds also suggests that the bare noun in the VO sequence in Cantonese should be part of a compound (Tang 1996).

⁹ (31), (33), and (34) are provided by Carine Yiu, Ben Au Yeung, and Tommy Leung, respectively. (32) is recorded from a radio conversation.

¹⁰ Notice that *gaam* 'jail' in (32) could be analyzed as a locative phrase. How to differentiate the bare nouns in VO compounds from those that are complements of the verb is beyond the scope of this article. One way is to rely on the referentiality of the nouns. For example, *baan* 'print' in (27) is nonreferential while *jan* 'person' in (31) could be referential.

¹¹ There is still a contrast between (34) and (i). The latter is definitely more natural than the former.

(i) 我追硬佢㗎嘞！

Ngo zeoi-ngaang keoi gaa laa!

I chase-must s/he SFP SFP

'I must chase him/her!'

¹² Notice that after attaching *jyun* 'finish' to *haang* 'walk', the VV compound *haang-jyun* 'walk-finish' denotes a telic event.

¹³ The idea that there are some functional projections associated with modality, distributivity, and focus above the verb phrase and aspect phrase has been proposed by Beghelli and Stowell (1997) and Cinque (1999) based on different considerations. Notice that 'X' in this article could be a cover term for a richer array of functional categories.

¹⁴ Whether resultative verbs are derived in syntax is beyond the scope of this article. See Huang (1992), L. Cheng (1997), and Tang (1997) for detailed discussion along these lines.

REFERENCES

- BAKER, Mark C. 1985. The Mirror Principle and morphosyntactic explanation. *Linguistic Inquiry* 16, 373-416.
- BEGHELLI, Filippo, and Tim STOWELL. 1997. Distributivity and negation: the syntax of *each* and *every*. In *Ways of scope taking*, ed. Anna Szabolcsi, 71-107. Dordrecht: Kluwer Academic Publishers.
- CHENG, Lisa L.-S. 1997. Resultative compounds and lexical relational structures. In *Chinese Languages and Linguistics 3*, ed. Feng-fu Tsao and H. Samuel Wang. Taipei: Academic Sinica.
- CHENG, Ting-Au. 1997. *Xianggang Yueyu cidian* [Hong Kong Cantonese dictionary]. Jiangsu Jiaoyu Chubanshe.
- CINQUE, Guglielmo. 1999. *Adverbs and functional heads: a cross-linguistic perspective*. New York and Oxford: Oxford University Press.
- DOWTY, David. 1979. *Word meaning and Montague grammar*. Dordrecht:

Reidel.

- HUANG, C.-T. James. 1992. Complex predicates in control. In *Control and grammar*, ed. Richard K. Larson, Sabine Iatridou, Utpal Lahiri, and James Higginbotham, 109-147. Dordrecht: Kluwer Academic Publishers.
- KAYNE, Richard S. 1994. *The antisymmetry of syntax*. Cambridge, Mass.: The MIT Press.
- LEE, Thomas Hun-tak. 1994. Yueyu 'saai' de luoji tedian [The logical properties of Cantonese *saai*]. In *Proceedings of the First International Conference on Cantonese and Other Yue Dialects*, ed. Chow-Yiu Sin, 131-138. Hong Kong: Modern Educational Research Society, Ltd.
- _____. 1995. Postverbal quantifiers in Cantonese. Ms., The Chinese University of Hong Kong.
- MAN, Patricia Yuk-Hing. 1998. Postverbal KEOI as a marker for nonasserted bounded clauses. In *Studies in Cantonese linguistics*, ed. Stephen Matthews, 53-62. Hong Kong: The Linguistic Society of Hong Kong.
- SMITH, Carlota S. 1997. *The parameter of aspect (second edition)*. Dordrecht: Kluwer Academic Publishers.
- TANG, Sze-Wing. 1996. A role of lexical quantifiers. *Studies in the Linguistic Sciences* 26(1/2), 307-323.
- _____. 1997. The parametric approach to the resultative construction in Chinese and English. In *UCI Working Papers in Linguistics 3*, ed. Luther C.-S. Liu and Kazue Takeda, 203-226. Irvine: Irvine Linguistics Students Association.
- _____. 2001. Focus and *dak* in Cantonese. Ms., The Hong Kong Polytechnic University. To appear in *Journal of Chinese Linguistics*.
- VENDLER, Zeno. 1967. *Linguistics in philosophy*. Ithaca: Cornell University Press.
- WU, Kaibin. 1991. *Jianming Xianggang fangyan cidian* [A concise dictionary of Hong Kong dialect]. Guangzhou: Huacheng Chubanshe.
- ZENG, Zifan. 1989. *Guangzhouhua-Putonghua kouyuci duiyi shouce* [Colloquial Cantonese and Putonghua equivalents]. Hong Kong: Joint Publishing (H.K.) C., Ltd.
- ZHANG, Liyan, and Liehuai Nie. 1999. *Gangshi Guangzhouhua cidian* [Hong

Kong Cantonese dictionary]. Hong Kong: Wanli.

粵語“硬”的特點和動詞助詞的句法

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這篇文章探討粵語動後助詞“硬”的語法特點。本文發現“硬”的出現受到事件結構條件、體貌標誌的出現和單音節條件的限制。此外，本文指出“硬”不能分析為一個結果補語。由於他們在語法上的相似性，“硬”應該與“晒”和“得”這兩個粵語動後助詞歸為同一類。這三個動後助詞同屬於一個功能性詞類。在句法結構上，這個功能性詞類位於動詞短語之上；至於在意義上，它與情態、量化和焦點有關。