

Chapter 4

The Basic Facts concerning Suffixal Quantifiers

1. Overview

In this chapter, I will present the basic facts about suffixal quantifiers, focusing on *-hoi1* ‘open’, *maai4* ‘add’ and *saai3* ‘all’. I will first show that none of the three suffixal quantifiers is a selective binder, with the relevant selectional restrictions determined by the semantics of the suffixal quantifier concerned. Secondly, I will argue that for those suffixal quantifiers which require plurality, their occurrence is governed by a generalized plurality condition. Thirdly, leaving aside the semantics of individual suffixal quantifiers, I will demonstrate that their quantification is governed by a common syntactic hierarchy, which explains the crucial role of syntactic constraints in determining the quantificational structures of suffixal quantifiers. Finally, I will illustrate three additional facts: the blockage of subject quantification in suffixal quantification by verbal operators, the failure of suffixal quantifiers to quantify over wh-indefinites and the interpretation of suffixal quantifiers toward indefinite numeral object NPs.

2. *-Hoi1* is an Unselective Binder

2.1 Does *-Hoi1* Require an Event or a Situation Variable?

In the case of affix quantification by *-hoi1*, since it is claimed to be a habitual marker in previous analyses, one would expect it to bind an event or a situation variable. However, an immediate question is “does *-hoi1* really require a situation or an event variable?” Consider the examples below.

Individual-level Stative Verbs

(1) *佢 有開 眼耳口鼻.

s/he have-HOI eye-ear-mouth-nose

(2) *佢 係開 學生.

s/he be-HOI students

(3) *佢 似開 佢老豆.

s/he resemble-HOI his/her-father

(4) *佢 姓開 李.

s/he surname-HOI Lee

(5) *我 識開 日文.

I know-HOI Japanese

(6) (a) *佢 鍾意開 “三國誌”.

I like-HOI “A Romance of the Three Kingdoms”

(b) *佢 鍾意開 名著.

I like-HOI classic-literature

The predicates 有眼耳口鼻 ‘have eyes, ears, mouths and noses’, 係學生 ‘is a student’ and 似佢老豆 ‘resembles his/her father’ in (1), (2) and (3), respectively, are individual-level statives which lack an event or a situation variable. At first sight, the ill-formedness of sentences (1) through (3) seems to suggest that *-hoil* is incompatible with predicates lacking an event or a situation variable. Examples like (4) and (5) suggest this. Since the properties denoted by 姓李 ‘surname Lee’ and 識日文 ‘know Japanese’ are relatively permanent, and there is no context in the sentence indicating there is a change of state, *-hoil* thus fails to co-occur with the individual-level statives in question. Besides, the ungrammaticality of (6a) and (6b) shows that the presence of an individual variable triggered by a bare noun 名著 ‘classic literature’ in (6b) fails to improve the grammaticality of (6a). (6a) and (6b) seem to provide further evidence

supporting the claim that *-hoil* selects a situation or an event variable.

Furthermore, the ungrammaticality of the above sentences can be improved by having the relevant situations interpreted temporally, as revealed in the examples below.

Individual-level Stative Verbs

(7) (a) 佢 一向 鍾意開 “三國誌”.

I for-long like-HOI “A Romance of the Three Kingdoms”

“I for long have been fond of ‘A Romance of Three Kingdoms’”.

(b) 佢 不嬲/一向 鍾意開 名著.

s/he used-to/for-long like-HOI classics

“S/he is used to fond of classics. S/he has long been fond of classics.”

(8) 佢 有 一段時間 似開 佢老豆,

s/he have one-CL-duration resemble-HOI his/her father

不過 後尾 個樣 越變越似 佢阿媽.

But later CL-face more-change-more-resemble his/her mother

“S/he used to resemble his/father for some time, but has now become more like his/her mother.”

(9) 我 不嬲 識開 阿明 㗎啦.

I for-long know-HOI Ah-Ming SFP-SFP

“I have known Ming for long.”

Adverbials like 不嬲 ‘has always been’ and 一向 ‘for long’ in (7) and (9) give the relevant sentences a temporal interpretation, indicating a duration from some time in the past to speech time (ST) by default. Hence, with the introduction of the temporal adverbial, the relevant predicates become stage-level, explaining the well-formedness of (7) and (9). Notice that contrasting (7ab) with (6ab), we can see that while the introduction of an individual variable in (6b) cannot improve the grammaticality of (6a),

the introduction of durative adverbials like 不鬻 and 一向 in (7ab) can. On the other hand, the second clause in (8) 不過後尾個樣越變越似佢阿媽 ‘but later becomes more like his/her mother’ indicates that the individual is not in the state of ‘in resemblance of his/her father’, making the relevant reading stage-level and thus become compatible with *-hoi1*.

So far, the case of individual-level stative verbs above seems to suggest that *-hoi1* selects an event or a situation variable, and making the relevant predicate stage-level can improve the grammaticality of the ungrammatical sentences. However, consider the examples of adjectival statives below.

Adjectival Statives

(10) (a) *佢 叻開. / (b) 佢 叻咗過.

(a) s/he smart-HOI / (b) s/he smart-Perf/-Exp

(11) (a) *佢 靚開. / (b) 佢 靚咗過.

(a) s/he pretty-HOI / (b) s/he pretty-Perf/-Exp

(12) (a) *佢 高開. / (b) 佢 高咗過.

(a) s/he tall-HOI / (b) s/he tall-Perf/-Exp

(13) (a) *佢 肥開. / (b) 佢 肥咗過.

(a) s/he fat-HOI / (b) s/he fat-Perf/-Exp

The above adjectival predicates can occur with perfective marker *-zo2* and experiential marker *-gwo3*, thus suggesting that they contain situation variables, since both *-zo2* and *-gwo3* require an event or a situation variable. Then what is the reason causing the ill-formedness of the (a)-sentences in (10) to (13). These adjectival statives are bare adjectival predicates, and a tentative solution is that *-hoi1* is not compatible with bare adjectival statives, and since these predicates contain situation variables, the lack of situation variables is not the crucial reason causing the ill-formedness here.

A closer examination reveals that the occurrence of *-hoil* with adjectival predicates is possible when a restrictive clause can be triggered, and thus it is the lack of a restrictive domain that causes the failure of *-hoil* to occur in (10) to (13). Such a restrictive domain can be introduced by time, location, situations, etc., as long as it is there for *-hoil* to quantify over. This is illustrated in the examples below.

(14) 佢 前排 靚開 㗎, 最近 咁恐怖 嘅.

s/he some-time-ago pretty-HOI SFP recently that-horrible SFP

“Some time ago, s/he was pretty. S/he looks destroyed recently.”

(15) 我 對佢 客氣開.¹

I to-him/her courteous-HOI

“When I treat someone courteously, it is him/her.”

(16) 女人 喺外面 不孬 比男人 叻開.

women in-outside always allow men proud-HOI

“When they are outside, women always let men be the smarter ones.”

(17) 農村嘅人 一向 大隻開 㗎, 多勞動 呀嘛.

Villagers for-long muscular-HOI SFP SFP more-work SFP-SFP

“Villagers are used to be muscular. They do a lot of labor work.”

A restrictive domain is triggered under each case in (14) through (17), making the occurrence of *-hoil* in these sentences possible. A temporal domain is included by the temporal adverbial 前排 ‘some time ago’ in (14), and hence, the interpretation is restricted to a particular time span in the past. As I will show later, the syntactic hierarchy will predict that *-hoil* quantifies over the preverbal PP 對佢 ‘to him/her’ in (15), thus giving a restrictive domain containing individuals who are treated courteously by me. Similarly, the interpretation of *-hoil* in (16) is restricted to a set of locations

¹ This example is provided by Tang Sze-wing.

triggered by the locative adverbial 喺外面 ‘outside’, making a tripartite structure² possible. Finally, the introduction of the durative adverbial 一向 ‘for long’ gives a stage-level reading to (17). Since the durative adverbial introduces a time span starting from some time in the past to ST, this makes the relevant sentence anchored to the time axis. Hence, the temporal variable triggered can constitute the restrictor of the tripartite structure triggered by *-hoil*.

Based on the above, I claim that the occurrence of *-hoil* is constrained by the following requirement.

(18) A Quantificational Requirement for *Hoil*

-Hoil is a proportional quantifier. It requires a tripartite structure, and gives an obligatory binary interpretation relating the set in the restrictor to that in the nuclear scope.

(18) will predict that what *-hoil* requires is a restrictive domain, and such a domain is not necessarily provided by events or situations. Hence, *-hoil* is not a selective binder of event/situation variables. Such a claim is further supported by the fact that a “single-event” reading is possible in *hoil*-sentences. Such a reading is found in *hoil*-sentences with adverbials describing a very short duration, as shown below.

(19) 佢 啱啱/淨話 用開 嗰部機 㗎.

s/he just-now use-HOI that-CL-computer SFP

“S/he had been using that computer just now.”

(20) 我 頭先 飲開 呢隻杯 㗎.

I just-now drink-HOI that-CL-cup SFP

“I have been using that cup just now.”

² For tripartite structures, please see Chapter 2 for the introduction.

- (21) 佢 琴日 用開 嗰部機。
 s/he yesterday use-HOI that-CL-computer
 “S/he had been using that computer yesterday.”

In (19) and (20), with the introduction of adverbials like 啱啱 ‘just now’, 淨話 ‘just now’ and 頭先 ‘just now’, the duration denoted is very short. Hence, the occurrence of the relevant event is likely to be one only, and this is in fact the natural reading of (19) and (20). Such an existential reading of the event or situation is referred to as “single-event” reading in previous analyses of Cantonese. The existential or “single-reading” reading in (19) and (20) is due to the binding of the event or the situation variable by the existential operator, as if the event/situation variable is bound by *-hoi1*, the relevant reading should be a generic reading not an existential one.

Since an existential reading is possible in sentences like (19) and (20), this shows that the binding of the event/situation variable is not obligatory for *-hoi1*. What constitutes the restrictive domain in both sentences is the time span denoted by the temporal adverbial, and the relevant reading becomes “during the duration denoted by the temporal adverbial, there exists (at least) one event or one situation making the relevant sentence true”.

The role of the durative adverbials in deriving the “single-event” reading is more obvious when we consider (21). Two readings are possible for (21), which are (i) the existential reading of the event “using the computer”, and (ii) the reading of multiple occurrences of the event. However, owing to the longer duration indicated by the temporal adverbial 琴日 ‘yesterday’ with respect to 啱啱 and 頭先, the reading of (ii) is more prominent than the reading of (i). The meaning of (21) is “During yesterday, when s/he uses computers, it is that one”, with “the use of the computer” possible to occur once or more than once.

From the above, we can see that the crucial factor determining the grammaticality

of *hoil*-sentences is whether the semantics of *-hoil* as a proportional quantifier described in (12) is satisfied or not. The “single-event” reading of *-hoil* is in fact derived by an existential closure over the event or the situation in the nuclear scope.

I have discussed the individual-level predicates above. Concerning stage-level stative verbs and eventives, *-hoil* goes well with them. Relevant examples are given below.

Stage-level Stative Verbs

(22) 本書 擺開 喺張枱度.

CL-book put-HOI at-CL-table-there

“When the book is put somewhere, it is on the table.”

(23) 我 呢幾個月 都 病開.

I these-several-CL-months all sick-HOI

“I have been sick during these months.”

Activities/Multi-event Activities

(24) 佢 踢開 波 嘅.

s/he kick-HOI ball SFP

“S/he plays football.”

(25) 佢 呢幾日 都 咳開 嚟啦.

s/he these-few-days all cough-HOI SFP-SFP

“S/he has been coughing these few days.”

Accomplishments

(26) 佢 寫開 幾篇論文.

s/he write-HOI those-few-CL-papers

“When s/he wrote something, it is those papers.”

(27) 佢 一餐 食開 五碗飯.

s/he one-meal eat-HOI five-CL-rice

“S/he eats five bowls of rice every meal.”

(28) 佢 起開 個新屋邨.

s/he build-HOI CL-new-estate

“S/he is building a new estate.”

Achievements

(29) 佢條鎖匙 不撈 唔見開 㗎啦.

his/her-CL-key always not-see-HOI SFP-SFP

“His/her key has always been missing.”

(30) 呢度 死開 好多人.

here die-HOI many-people

“When people die here, they die in a large number.”

(31) 佢 爬開 上山頂, 唔會肯 一半 停低.

s/he climb-HOI to-peak not-will-willing one-half stop

“When s/he climbs (the mountain), it is to the peak. S/he won’t stop somewhere in the middle.”

Sentences (22) through (31) are examples of stage-level stative verbs, activities or multi-event activities formed by iteration of semelfactives, accomplishments formed by quantized objects and accomplishment verbs, and achievements. The well-formedness of these sentences shows that *-hoil* is compatible with all these predicates. The reason is that these predicates all contain some kind of variables which can contribute to the restrictive domain of the sentence.

The requirement of *-hoil* as a proportional quantifier argued above makes the occurrence of a restrictive domain obligatory. Hence, in simple sentences like (24) below, it is unclear what should count as the restrictor. (24) involves a VO compound, and as I will show later, the syntactic hierarchy will predict *-hoil* in (24) to quantify over the verbal/adjectival predicates.

(24) 佢 踢開 波 嘅.

s/he kick-HOI ball SFP

“S/he plays football.”

In (24), since there is no durative adverbial or any other explicit time adverbial, it is reasonable to claim that *-hoi1* quantifies over the predicate denoted by the VO 踢波 ‘play ballgames’. What is in the restrictor is in fact a set of properties related to the subject 佢 ‘s/he’. This gives rise to the following representation.

(24’) HOI<P> [P(s/he)] [P = Play-football]

-Hoi1 triggers a tripartite structure in (24’), with all the properties related to the subject constituting the restrictor of the tripartite structure. Therefore, *-hoi1* still maintains its semantics as a proportional quantifier which relates two sets of properties, with the restrictive set being those properties related to the subject and the nuclear set being the property “playing football”.

2.2 A Plurality Condition for Suffixal Quantifiers

-Hoi1 imposes a selectional restriction on its co-occurring predicate, which requires the relevant predicate denote plurality. Such a plurality condition can be satisfied by one of the followings: (i) plural events/situations; (ii) events or situations which can be divided into parts, that is, subevents; and (iii) the binding of temporal variables introduced by durative or temporal adverbials, or the binding of variables triggered by a degree predicate. They will be discussed one by one in the following sections.

2.2.1 Plural Events or Situations

The plurality requirement of *-hoil* can be satisfied if the situation in question demonstrates a sub-interval property or has multiple occurrences. Dowty (1979) defines “sub-interval property” as follows:

(32) A situation $\alpha(x)$ is said to demonstrate a sub-interval property if $\alpha(x)$ is true at I, then $\alpha(x)$ is true for all subintervals of I which are larger than a moment.

(32) means that the same kind of property must be acquired for each interval during which the verb is true of an individual. In fact, this can be explained by the property of universal quantification of *-hoi*. If a certain property P is true at I, the sub-interval property entails that the same property P also holds at ALL intervals i which are a sub-interval of I. Hence, such a sub-interval property can be understood as demonstrating a universal quantification over all sub-intervals of a larger interval I.

Moreover, the sub-interval property makes *-hoil* demonstrate a property of homogeneity. Atelic situations, like activities and statives, are regarded as homogeneous, since they demonstrate the sub-interval property as defined in (32). On the other hand, multiple occurrences of heterogeneous and instantaneous situations, like semelfactives, accomplishments and achievements, can also be viewed as demonstrating sub-interval properties, since the iteration of the situation in question makes each occurrence have the same property, and each occurrence can be considered as a sub-part of the multiple occurrences. Since *-hoil* requires predicates with the sub-interval property, for a predicate to be compatible with *-hoil* it must either demonstrate a sub-interval property, if it is a homogeneous situation, or be able to have multiple occurrences, if it is a heterogeneous or instantaneous situation. The sub-interval property of *-hoil* is demonstrated by sentences (33) through (37) below.

- (33) 我 喺度 撞開 佢.
 I at-here bump-into-HOI him
 “When I bump into somebody here, it is hm/her.”
- (34) 佢 琴日 用開 嗰部機.
 s/he yesterday use-HOI that-CL-computer
 “S/he used that computer yesterday.”
- (35) *佢 琴日 去開 美國.
 s/he yesterday go-HOI US
- (36) 呢間醫院 死開 好多人.
 this-CL-hospital die-HOI many-person
 “When patients die in this hospital, they die in a large number.”
- (37) *呢間醫院 死開 小明.
 this-CL-hospital die-HOI Siuming

In (34), 用嗰部機 ‘use-that-CL-computer’ belongs to the activity type of situation which is characterized by its homogeneity, since for an interval I, if an individual has a property P of “using that computer” at I, then the same property P also holds for each sub-interval within this larger interval I. Hence, *-hoil* is compatible with such a homogeneous situation. Contrasted with (34), the predicate 去美國 ‘go-US’ in (35) belongs to an accomplishment type of situation, and is characterized by its heterogeneity. Hence, the only way for such a predicate to be compatible with *-hoil* is to have a reading of multiple occurrences. However, with the inclusion of a temporal boundary by 琴日 ‘yesterday’, there is no way that the event 去美國 in (35) can have multiple occurrences, and (35) is thus ungrammatical. Compared with (35), (33) is grammatical. This is because, although the predicate 撞佢 ‘bump-into-him’ in (33) is an achievement type of situation which is heterogeneous, it can co-occur with *-hoil* with the reading of multiple occurrences of the relevant situation, making the co-occurrence

incompatible with *-hoi1*.

(38a) and (38b) show that the specificity of the NPs makes the achievement verb 死 ‘die’ fail to have multiple occurrences, and thus, the relevant predicates fail to demonstrate the required sub-interval property. Since this violates the plurality condition of *-hoi1*, these predicates are incompatible with *-hoi1*.

In fact, verbal arguments play a significant role in determining the plurality of events and situations, since they can make a singular event or situation plural. When an “once-only” predicate occurs, its incompatibility with *-hoi1* would be predicted, since *-hoi1* requires a plural predicate. However, the introduction of a plural NP, an indefinite NP and a bare noun will make the occurrence of these suffixes with the “once-only” predicates possible, which are exemplified below.

(39) (a) *呢間醫院 死開 阿明.

this-CL-hospital die-HOI Ah Ming

(b) 呢間醫院 死開人.

this-CL-hospital die-HOI people

“People die in this hospital.”

(c) 呢間醫院 死開 好多人.

this-CL-hospital die-HOI many-person

“When patients die in this hospital, they die in a large number.”

(40) (a) *佢爆開 嗰個杯.

s/he break-HOI that-CL-cup

(b) 佢爆開 杯.

s/he break-HOI cups

“S/he breaks cups.”

(c) 佢爆開 成咋杯.

s/he break-HOI those-chunk-cups

“When s/he breaks cups, s/he breaks them in a chunk.”

The (a)-sentences above demonstrate the incompatibility between *-hoi1* and the “once-only” predicates, while the introduction of a bare noun and a plural NP in the (b)- and (c)-sentences make the ill-formed (a)-sentences well-formed. The ill-formedness of the (a)-sentences is improved by the introduction of individual variables by the bare nouns, making the occurrences of the situation plural, and the plurality condition of *-hoi1* is thus satisfied. Apart from the introduction of a bare noun, a singular event can be made plural with the introduction of a plural NP. The (c)-sentences show that the role of the individual variables can be taken up by plural NPs, that is, the plural NP can also make the relevant singular situation plural. Hence, plural NPs and bare nouns perform a similar function of making a single situation plural.

Besides *-hoi1*, *saai3* is also constrained by the plurality condition, which is the natural consequence of it being a universal quantifier (cf. Chapter 5). The *saai3*-examples below illustrate that apart from verbal arguments, verbs also play a significant role in determining the plurality of events or situations.

(41) (a) *佢 買晒 呢本書.

s/he buy-SAAI this-CL-book

(b) 佢 睇晒 呢本書.

s/he read-SAAI this-CL-book

“S/he has read the entire book.”

(c) 我哋 買晒 呢本書.

we buy-SAAI this-CL-book

“All of us have bought this book.”

(41a) is ill-formed, since the relevant situation is made into a unique one by the

co-occurrence of a delimitative and punctual verb with both the subject and the object being singular. Since *saai3* requires plurality, this makes (41a) ill-formed. Contrasting (41a) with (41b) which only differ in the verb used, we can see that the event involved in (41b) can be divided into subevents, with reading pages of the book being a part of the event “reading that book”, while that of (41a) constitutes no subevent property. Hence, the non-uniqueness of the event in (41b) makes the sentence satisfy the plurality condition of *saai3*. Finally, as predicted by the syntactic hierarchy which will be shown later, *saai3* will quantify over the plural subject in (41c), making the relevant event, that is, “the purchase of the book”, recur. Notice that although the object is interpreted as having more than one copy under such a case, it is derived from the quantification of *saai3* over the plural subject. The reason is that if it is the object that is directly quantified over by *saai3*, the reading of the sentence becomes “we have bought all the copies of this book, and there is no copy left”, which is not the desired reading of (41c). (41c) only requires each one of us has bought a copy of the book, and whether we have bought all copies in the stock or not is not at issue here.

Finally, we come to see how the plurality condition is observed in predicates with proper names. Consider the sentences below.

(42) (a) *我 去晒 日本.

I go-SAAI Japan

(b) 我哋 去晒 日本.

we go-SAAI Japan

“All of us have gone to Japan.”

(c) 我 去晒 成個日本.

I go-SAAI whole-CL-Japan

“I have traveled the entire Japan.”

(43) (a) *呢間醫院 死開 阿明.

this-CL-hospital die-HOI Ah-Ming

(b) 呢間醫院 死開 啲叫阿明嘅男仔.

this-CL-hospital die-HOI those-call-Ah-Ming-Poss-boys

“When people die in this hospital, they have the name ‘Ah Ming’.”

Contrast the ill-formedness of (42a) with the well-formedness of (42b) and (42c). In (42a), with no plural NP in the sentence, the event of “going to Japan” is interpreted as once-only, and hence, failing the plurality condition of *saai3*, leading to the ill-formedness of (42a). On the other hand, in (42b), *saai3* associates with the subject, and the presence of a proper name does not hinder the relevant event from recurring with different individuals denoted by the plural subject NP. Although a proper name is like a singular noun in its number feature, the relevant event in (42b) is not unique, since the action denoted by the verb 去 ‘go’ is able to recur, the plurality condition can thus be satisfied. Contrasted with (42a), the introduction of the pre-modifier 成個 ‘the whole’ in (42c) gives a distributive sense to the head noun 日本 ‘Japan’. This provides a part interpretation to the object 日本, making (42c) satisfy the plurality condition of *saai3*.

On the other hand, (43a) is ill-formed, since the death of an individual is unique and is not able to recur, violating the plurality condition of *-hoi1*. The grammaticality of (43a) can be improved if the object NP is made into a non-unique one, as in (43b), where we have the object NP having a non-unique reference, thus, plural in meaning. The plurality condition of *-hoi1* is thus satisfied in (43b). Hence, we can see that proper names, functioning like singular nouns in their number feature, will be compatible with the suffixal quantifier if the relevant event denoted is not unique or can recur, satisfying the plurality condition.

From the above, we can see that verbal arguments and verbs play significant roles

in determining the grammaticality of *hoi1*- and *saai3*-sentences, since the plural interpretation required can be brought about by the verb or any verbal arguments in the sentences in question.

2.2.2 Subevents and [+Divisible] Objects

Besides the plural events and situations, the plurality condition of suffixal quantifiers can also be satisfied by the sub-event property of the event. This usually occurs when we have an incremental predicate, which is exemplified below.

(44) (a) 我 食開 嗰個杯面.

I eat-HOI that-CL-cup-noodles

“I am eating that cup noodle.”

(b) 我 食開 杯面.

I eat-HOI cup-noodles

“When I eat something, it is cup noodles.”

(c) 我 食開 兩個杯面.

I eat-HOI two-CL-cup-noodle

“When I eat cup noodles, I eat two cups.”

The object in (44a) belongs to the [+divisible] object, which can be divided into subparts. In (44a), we have *-hoi1* quantifying over the subevents. Whenever θ , which is “eat that cup of noodles” in (44a), holds for the object x “that cup of noodles” and an event e “eating that cup of noodles”, then every proper part y “part of the cup noodles” of x stands in the relation θ to some proper part e' of e . In other words, if the parts of the cup noodles are eaten incrementally in the event “eating that cup of noodles”, then there is a proper part e' of e such that a part of the cup noodle was eaten at e' . Hence, such a subevent property of the predicate can be taken as multiple occurrences of the subevent,

which can be regarded as plural. The plurality condition of *-hoil* is thus satisfied by a plurality of subevents, showing that the plurality condition can in fact be extended to include “parts”.

Contrasted (44a) with (44b) and (44c), the “sub-event” property is absent in predicates denoted by (44b) and (44c). We have a bare noun object in (44b), with the sentence giving a generic not an episodic reading, thus, no subevent property. (44b) is well-formed because the plurality condition of *-hoil* has already been satisfied by the bare noun object. In (44c), we have the quantized object “two cups of cup noodles”, and according to Krifka, quantized objects demonstrate no property of MSE(θ), cf. Chapter 2. Therefore, we fail to have *-hoil* quantifying over the subevents in (44c), and the only possible interpretation for (44c) is to have the entire event “eating two cups of cup noodles” recurring. The reading conveyed by (44c) thus becomes “When I have cup noodles, I have two cups”, with 兩個杯面 ‘two cups of noodles’ interpreted as a quantified NP.

A phenomenon related to the “subevent” property is the divisibility of the object NP. Previous analyses like Tang (1996) have proposed a divisibility requirement for *saai3* which states that *saai3* requires a [+divisible] object, in order to include both the cases of indefinites, bare nouns, and those nouns singular in form but can be divided into parts, hence plural in meaning. The sensitivity of *saai3* toward the divisibility of the object NP can also be captured under the “subevent” property and the requirement of *ssai3* to satisfy the plurality condition. Consider the examples below.

(45) (a) *佢 買晒 呢本書.

s/he buy-SAAI this-CL-book

(b) 佢 睇晒 呢本書.

s/he read-SAAI this-CL-book

“S/he has read the entire book.”

(46) (a) 佢 食晒 成包煙.

s/he eat-SAAI whole-CL-cigarettes

“S/he has consumed the whole pack of cigarettes.”

(b) 我 飲晒 杯水.

I drink-SAAI CL-water

“I have drunk the entire cup of water.”

(45a) is ill-formed, since there is neither a divisible object nor a plural subject, according to previous analyses. Contrasting (45a) with (45b) which only differ in the verb used, we can see that the event involved in (45b) can be divided into subevents, with reading pages of the book being part of the event “reading that book”, while that in (45a) does not have the subevent property. A similar subevent property is found in (46a) and (46b), which is triggered by the [+divisible] object NPs 成包煙 ‘the pack of cigarettes’ and 杯水 ‘the cup of water’ which consist of parts. The divisibility of the object NP has given a subevent reading to (46a) and (46b), making both sentences satisfy the plurality condition. (46a) and (46b) show that the plurality condition of suffixal quantifiers can also be satisfied by the [+divisible] feature of objects.

2.2.3 Plurality by Time Points and Degree Predicate

The plurality condition of suffixal quantifiers can also be satisfied by plural time points indicated by durative or temporal adverbial. This occurs when we have *hoi1-* and *saai3-*sentences giving the so-called “single-event” reading. Relevant examples are repeated below.

(47) 佢 啱啱/淨話 用開 嗰部機 㗎.

s/he just-now use-HOI that-CL-computer SFP

“S/he has been using that computer just now.”

(48) 我 頭先 飲開 呢隻杯 㗎.

I just-now drink-HOI that-CL-cup SFP

“I have been using that cup just now.”

For (47) and (48), with the introduction of adverbials like 啱啱 ‘just now’, 淨話 ‘just now’ and 頭先 ‘just now’, the duration denoted is very short, hence deriving the so-called “single-event” reading in previous analyses of Cantonese. What constitutes the restrictive domain in the sentences above is the time span denoted by the temporal adverbial. Hence, the plurality condition is satisfied by the plurality of the time points. However, notice that this way of satisfying the plurality condition occur only in the cases where we have the quantifier binding the temporal variables.

On the other hand, in the case of *saai3*, as I will show in section 5.3, *saai3* cannot quantify over the verbal/adjectival predicates or the VOs directly. If there is no appropriate verbal argument or adjunct for *saai3* to bind, *saai3* will quantify over the degree denoted by the relevant predicates or VOs. Under such a case, the plurality condition is satisfied by the plurality of different degrees denoted by the predicate.

Based on the above, I generalize the plurality condition as follows:

(49) A Plurality Condition for Suffixal Quantifiers

For suffixal quantifiers which require plurality, the relevant plurality can be satisfied by one of the followings:

(i) *A plurality of events or situations*

A situation or an event is said to be semantically plural, when neither the verb nor any verbal argument in the sentence forces it to have a unique or non-recurring interpretation.

(ii) *Plurality denoted by subevents or [+divisible] objects*

The plurality condition can be satisfied by (a) a sub-event property of the event; or (b) objects which are [+part] or [+divisible].

(iii) *A plurality indicated by time points or degree*

This is restricted to cases where we have the suffixal quantifier binding the temporal variable or the variable introduced by the degree predicate.

3. Unselective Binder *Maai4*

In section 2, I have shown that *-hoi1* is an unselective binder. In the following section, I will show that besides *-hoi1*, *maai4* is also an unselective binder.

3.1 No Predicate Restrictions for *maai4*

Maai4 is not sensitive to situation types, as it can occur with both telic and atelic situations: states and events, as shown below.

Statives

(50) 佢哋 唔單止 高度 差唔多, 個樣 都 似埋.

they not-only height about-the-same CL-face also resemble-MAAI

“They not only are similar in heights, but also look alike.”

(51) 佢個人 咁醒, 如果 口才 好埋, 就 真係 掂晒.

s/he-CL-person that-smart if orally good-MAAI then real-be no-enemy

“S/he is very smart, and if s/he is also a good speaker, then s/he will be marvelous.”

(52) 佢 前排 比人 呃咗幾千蚊,

s/he recent-past give-person cheat-Perf few-thousand-dollars

家陣 仲 病埋, 真係 慘情.

now even sick-MAAI real-be poor

“S/he was cheated several thousand dollars recently, and now s/he is even sick.
How poor she is!”

Activities and semelfactives

(53) 我 敲咗門, 擦埋鐘, 你 都 聽唔到?

I knock-Perf-door press-MAAI-bell you still hear-not-arrive

“I have knocked the door, and have also pressed the bell. Can’t you hear that?”

(54) 你哋 咁聰明, 不如 自己 諗埋佢, 寫埋佢 呀.

you that-smart why-not yourself think-MAAI-it write-MAAI-it SFP

“You all are that smart. Why don’t you also make up the story yourselves, and write it up?”

Accomplishments

(55) 你 食埋 嗰三個蘋果 佢呀.

you eat-MAAI those-three-apples SFP-SFP

“You’d better eat those three apples as well.”

(56) 我 食咗飯, 去埋 library, 你 竟然 仲 未起身 呀!

I eat-Perf-rice go-MAAI-library SFP you unexpectedly even not-wake-up SFP

“I have had my meal, and have also gone to the library. You still haven’t woken up.”

Achievements

(57) 最後一隻 都 死埋.

last-one-CL even die-MAAI

“The last one was dead as well.”

(58) 你 打爛晒 啲嘢 囉, 唔淨在 炸埋 間屋 佢!

you break-broken-SAAI things SFP why-not blow-MAAI CL-house SFP

“You have broken all those things. Why don’t explode the house as well?”

Putting aside the interpretation of the above sentences, we can see that they reveal that

maai4 is compatible with all types of situations including individual-level statives (cf. (50)), stage-level statives (cf. (51) & (52)), activities and semelfactives (cf. (53) and (54)), accomplishments (cf. (55) and (56)), and achievements (cf. (57) and (58)). Hence, *maai4* places no selectional restriction on its co-occurring predicate.

3.2 A Selectional Restriction: *Maai4* Requires a [+Definite] Argument

Assuming a distinction between specificity and definiteness, I adopt the following.

(59) Definite nouns - Specific

Indefinite nouns - Specific or non-specific

In order to further capture the differences between definiteness and specificity, we can use the interpretation of indefinite subject NPs as examples. As pointed out by Tsai (2001), it is observed cross-linguistically that there are two types of indefinite subject interpretations: One is quantificational, consisting of specific generic readings; the other is non-quantificational, consisting of non-specific non-generic readings.

(60) (a) A man arrived yesterday.

(b) A certain man arrived yesterday. (specific)

(c) One man (rather than two) arrived yesterday. (nonspecific)

(60) shows that indefinite NPs can be interpreted as specific or non-specific, as demonstrated in the interpretations given in (60b) and (60c). The article “a” in (60) can be construed either as a strong determiner in Milsark’s (1974) sense, resulting in the specific reading of (60b), or as a cardinality predicate resulting in the nonspecific reading of (60c).

Claiming that *maai4* requires a [+definite] argument, I am suggesting that *maai4*

will not select an indefinite argument, even though it is specific. On the other hand, in most cases, the definiteness of an argument will be indicated by demonstratives, the construction “CL + noun” (equivalent to “the + N” in English), pronouns and proper names. They are demonstrated below.

(61) 我 睇埋 (嗰)啲書 啦.

I read-MAAI those-book SFP

“I have read those books as well.”

(62) 我 睇埋 嗰/呢本書 啦.

I read-MAAI that/this-CL-book SFP

“I have read that/this book as well.”

(63) 我 睇埋 嗰三本書 啦.

I read-MAAI those-three-CL-book SFP

“I have read those three books as well.”

(64) 我 睇埋 本書 啦.

I read-MAAI CL-book SFP

“I read the whole book as well.”

(65) 阿 John/佢 走埋.

John/s/he go-MAAI

“John/s/he has gone as well.”

As seen from the above sentences, the object NPs in (61), (62) and (63) are definite, due to the presence of demonstrative articles (cf. (61), (62) and (63)). The relevant interpretations show that the additive meaning of *maai4* applies to these object NPs. Besides, the well-formedness of (64) and (65) reveals that *maai4* is not sensitive to plurality or singularity, and thus does not impose a divisibility requirement on its NPs. Hence, even though the object NP is singular and the verb is a distributive verb, the

relevant action is still considered as acting on the object NP as a whole. This is due to the fact that, unlike *saai3*, a universal quantifier, which requires its predicate to have some kind of distributive sense, *maai4*, as an additive quantifier, has no such requirement. In (64), *maai4* selects the “CL + noun” construction, 本書 ‘the book’, and gives an interpretation that “I have finished the book as well”. On the other hand, in (65), the only [+definite] NP in the sentence is the grammatical subject “John” or “he”. Hence, *maai4*, when occurring with unaccusative verbs, quantifies over such a grammatical subject, giving the interpretation of an addition of the individual “John” or “he” to the set of “individuals who have left”. Notice that in (61) and (64), the demonstrative and the definite article are not overt, but can be recovered from the context, hence still satisfying the definiteness requirement of *maai4*.

The above suggests that *maai4* selects a [+definite] NP, not just a specific one. If this is the case, one would predict that *maai4* fails to occur with indefinite NPs, be it specific or not. These include numeral NPs and bare nouns. Under these cases, *maai4* will either select other [+definite] NPs in the sentence or interpret with the verb/adjectival predicate if there is no other option left. This prediction is borne out in the following sentences.

(66) 我 睇埋 書 啦.

I read-MAAI books SFP

“I have done some readings as well.”

(67) 我 沖埋 涼 啦.

I take-MAAI showers SFP

“I have had a shower as well.”

(68) *我 睇埋 三本書.

I read-MAAI three-CL-books

(69) *我 食埋 兩碗飯.

I eat-MAAI two-CL-rice

Both (66) and (67) contain a bare noun object NP, and *maai4* under such a case is forced to quantify over the VO compound.³ (66) and (67) give the interpretation that the individual has performed the action denoted by the predicate as well. For (68) and (69), since the numeral object NPs are indefinite, *maai4* cannot select such NPs. As for the question why (68) and (69) are ill-formed, I will come back to it in the later part of this dissertation.

Based on the above, we can claim that *maai4* is an unselective binder which requires a [+definite] argument. We now come to the case of *saai3*.

4. Unselective Binder *saai3*

Apart from *-hoi1* and *maai4*, *saai3* is also an unselective binder.

4.1 No Predicate Restrictions for *Saai3*

T. Lee (1995) considers that *saai3* is not compatible with adjective predicates or copula, while Tang (1996) has proposed a telicity constraint on *saai3*. However, I argue that *saai3* can occur with adjectival predicates and imposes no telicity constraint on its co-occurring predicates.

4.1.1 Statives

4.1.1.1 Adjectival Statives

Following M&Y and Pan & Man (cf. (4) and (5)), I argue that *saai3* can go with adjectival predicates, as exemplified below.

³ As I will show later, when there is no focus, *maai4* fails to interpret with the subject. The only case where *maai4* can quantify over the grammatical subject is when the verb involved is an unaccusative verb. Under such a case, the grammatical subject is in fact base-generated at the DO position.

(4) 你睇吓, 間房 乾淨晒 啦. (cited from M&Y 1994)

you look-ASP CL-room clean-SAAI SFP

“Look, the room is all nice and clean (now).”

(5) 你 錯晒. (from Pan & Man 1998)

you wrong-SAAI

“You are completely wrong.”

(70) 佢個樣 殘晒.

His/her look-destroyed-SAAI

“S/he looked completely destroyed.”

(71) 佢 盲/聾/跛晒.

s/he blind/deaf/limb SAAI

“S/he is completely blind/deaf/limb.”

(72) 佢塊面 紅晒.

his/her-CL-face red-SAAI

“His/her face has turned red completely.”

Sentences (4), (5) and (70) through (72) above demonstrate that *saai3* is compatible with adjectival predicates. Notice that previous analyses argue that when *saai3* occurs with adjectival predicates, the predicates are required to denote a change of state (cf. T. Lee 1994, 1995, Tang 1996). However, the following examples further show that this requirement is too strong.

(73) 佢 叻晒 喺啲衰嘢度.

s/he smart-SAAI at-those-bad-things

“S/he is good at all bad things.”

(74) 佢啲近視 喺晒左眼.

His/her short-sightedness at-SAAI-left-eye

“His/her short-sightedness is all at his/her left eye.”

Sentences like (73) and (74) are well-formed *saai3*-sentences with adjectival predicates. The relevant predicates do not necessarily indicate a change of state, as it may be the case that the individual has entered into the relevant state long before, and *saai3* only quantifies over the area or boundary denoted by the PPs 喺衰嘢度 ‘at bad things’ and 喺左眼 ‘at left eye’ in (73) and (74), respectively.

4.1.1.2 Stative verbs

Apart from adjectival predicates, *saai3* can occur with stage-level stative verbs, and even individual-level ones.

(75) 佢 似晒 佢老豆.

s/he resemble-SAAI his/her father

“S/he resembles his father completely.”

(76) 佢 有晒 眼, 耳, 口, 鼻, 十足 個人.

s/he have-SAAI eye ear nose very-much CL-person

“S/he has eyes, ears, mouths and noses, and looks completely like a person.”

(77) 恐龍 絕晒種.

dinosaurs extinct-SAAI

“All the dinosaurs are extinct.”

Since *saai3* can occur with adjectival predicates, it is not surprising that *saai3* can also occur with individual-level stative verbs, as exemplified in the three sentences above. *Saai3* quantifies over the degree of resemblance between him/her and his/her father in (75), while it quantifies over the four entities denoted in the object in (76). Another case is when the co-occurring subject is a generic NP, cf. (77), and *saai3* quantifies over

such a generic or plural subject.

(78) and (79) below illustrate sentences with *saai3* occurring with stage-level stative verbs.

(78) 佢 識晒 呢度啲人.

s/he know-SAAI here-plural-people

“S/he knows all the people here.”

(79) 佢哋 病晒.

They sick-SAAI

“All of them are sick.”

The well-formedness of (78) and (79) shows that *saai3* can occur with stage-level statives. *Saai3* quantifies over the object in (78), and it quantifies over the subject in (79).

4.1.2 Eventives

Tang (1996) claims that *saai3* requires a telic predicate. However, the examples below show that *saai3* is compatible with atelic situations.

(80) 我哋 食晒飯 啦.

we eat-SAAI-rice SFP

“All of us have had eaten already.”

(81) 佢哋 讀晒書 啦.

they study-SAAI SFP

“All of them have studied.”

(82) 佢哋 瞓晒覺.

they sleep-SAAI

“All of them have gone to sleep.”

(83) 佢哋 跑晒.

they run-SAAI

“All of them have run.”

(84) 佢 成日 開會 搞晒破壞咁, 好鬼煩.

s/he always meeting make-SAAI-destroy SFP very-infix-annoying

“S/he is always a complete trouble-marker during meetings. That’s really annoying.”

(85) 佢 打晒冷顫.

s/he shiver-SAAI

“S/he is totally shivering.”

All the sentences above denote atelic situations. The objects in (80) and (81) are bare noun objects, which are non-specific, and according to the specificity requirement described in the next section, *saai3* is forced to interpret with the plural subjects 我哋 ‘we’ and 佢哋 ‘they’. On the other hand, (82) and (83) involve intransitive verbs, and *saai3* is forced to interpret with the plural subject 佢哋.

However, some previous analyses on *saai3* consider it as a nominal quantifier (cf. T. Lee 1994, 1995), since according to them, sentences from (80) to (83) would become ill-formed if the plural subjects are replaced by singular ones and *saai3* fails to interpret with the predicate in question. However, consider (84) and (85). The objects in (84) and (85) can be interpreted as non-referential, and under such a case, *saai3* should interpret with the subjects, which are both singular. Hence, (84) and (85) would be predicted to be ill-formed, which is not consistent with the fact. In order to explain the well-formedness of (84) and (85), previous analyses would be forced to say that the objects 冷顫 ‘shiver’ in (84) and 破壞 ‘destroy’ in (85) are plural and referential, which is absolutely not necessary. In fact, we consider that *saai3* in fact quantifies over

the degree denoted by the VP in both sentences. Hence, the quantification of *saai3* cannot be solely captured by a nominal quantification approach, as *saai3* can associate with elements beside NPs.

Based on the above sentences, unlike previous analyses like Tang (1996), I claim that *saai3*, as an unselective binder, is compatible with all types of predicates, and there exists no telicity constraint.

4.2 Selectional Restrictions of *saai3*: Specificity and Divisibility

Previous analyses claim that the nominal quantification of *saai3* must satisfy the following two conditions: (i) For any NP which associates with *saai3*, no matter whether it is subject or object, *saai3* requires it to be both semantically plural and definite; and (ii) the elements associated with *saai3* must be divisible, which roughly means that the object can be divided into parts.

Concerning the definiteness requirement of *saai3*, I consider that a more accurate characterization of such a requirement is the specificity requirement. *Saai3* can quantify over indefinite but specific NPs.

(86) 佢 食晒 兩碗飯.

s/he eat-SAAI two-bowl-rice

“S/he has eaten all those two bowls of rice.”

(87) 六個人 嚟晒.

Six-CL-person come-SAAI

“(Those) six people have come.”

(88) 佢啲近視 嚟晒左眼.

s/he-Poss-short-sight at-SAAI-left-eye

“His/her short-sightedness is all at his/her left eye.”

In sentences (86), (87) and (88), *saai3* quantifies over the numeral object NP, the numeral subject NP and the bare noun DO, respectively, all having a specific interpretation, even though being indefinite in form. This supports the claim that unlike *maai4*, *saai3* can quantify over definite NPs and NPs indefinite in form but specific in meaning.

In section 2.2, I have already illustrated the plurality condition which *saai3* needs to satisfy. The plurality condition for suffixal quantifiers in (49) has already shown that the introduction of [+divisible] objects is one way of satisfying the plurality condition. Hence, I will not repeat the relevant condition here. Notice that previous analyses like T. Lee (1994) and Tang (1996) point out that *saai3* requires a [+divisible] NP, and I have instead given a more general plurality condition in (49).

5. Hierarchies for suffixal quantifiers

In the following sections, I will show that quantification by suffixal quantifiers is subject to a grammatical function hierarchy.

5.1 The Hierarchy for *-hoi1*

As an unselective binder, what constituents do *-hoi1* quantify over? In the following sections, I will show that while *-hoi1* is syntactically a verbal suffix, it can semantically quantify over direct objects, indirect objects, postverbal PPs and preverbal PPs. However, such quantification is governed by a grammatical function hierarchy.

5.1.1 *-Hoi1* with Transitives

When the verb is transitive, *-hoi1* will associate with the DO instead of the subject, and hence, showing a hierarchical order of DOs over subjects. Relevant examples are given below.

(89) 佢 著開 嗰件紅色衫.

s/he wear-HOI that-CL-red-sweater

“When s/he wears something, it is that red sweater.”

(90) 後生仔 嚟開 呢啲地方.

youngsters come-HOI these-place

“When youngsters go somewhere, it is these places.”

(91) 依家啲學生 睇開 漫畫書.

nowadays-plural-students read-HOI comic-books

“When students nowadays read something, it is comic books.”

The three sentences above demonstrate a hierarchical order of DOs over subjects in the quantification of *-hoi*. *-Hoi* selects the DOs, be it a definite NP (cf. (89) & (90)) or a bare noun (cf. (91)).

5.1.2 *-Hoi* with Ditransitive Verbs: IOs vs DOs

Ditransitive verbs usually include verbs denoting actions of giving and sending.

According to Tang (1998, 2003), Cantonese has the following three patterns:

(92) (i) prepositional dative construction (PDC): V DO dative marker IO

(ii) double object construction (DOC): V IO DO

(iii) inverted double object construction (IDOC): V DO IO

These constructions involve IOs with or without a dative marker. It is interesting to see how *-hoi* interacts with the DO and the IO.

PDC pattern (V + DO + dative marker IO)

- (93) (a) 我 送開書 比佢.
 I give-HOI books to-him
 “When I give him/her something, it is books.”
- (b) *我 送開 呢本書 比佢/佢哋.
 I give-HOI this-CL-book to-him/her/them
- (c) 我 送開 好多書 比佢.
 I give-HOI many-books to-him/her
 “When I give him/her books, it is generally many.”
- (94) (a) 我 攤開 fax 紙 比佢哋.
 I bring-HOI fax-paper to-them
 “When I bring them something, it is fax papers.”
- (b) 我 攤開 嗰本書 比佢.
 I bring-HOI that-CL-book to-him/her
 “When I bring him/her something, it is that book.”

Since the IO in this construction is introduced by a dative marker, we may treat it on a par with a prepositional complement, and consider it as an indirect argument, which is differentiated from direct arguments like subjects and DOs.

(93) and (94) demonstrate a hierarchical order between DOs and IOs in their interpretation with *-hoi1*. *-Hoi1* is found to associate with the DO arguments rather than the IO in all the sentences above. Notice the contrast in grammaticality between (93b) and (93c). No matter whether the IO is 佢 ‘him/her’ or 佢哋 ‘them’, as long as the DO is 呢本書 ‘this book’, this will give us an event which fails to recur, since the presentation of a specific copy of a book can only happen once. The relevant sentence is thus ill-formed, due to the violation of the plurality condition stated in (49), and the plurality of the IO fails to save the ill-formedness of the relevant sentence. (93) supports

a hierarchical order of DO > IO in *hoil*-quantification.

In fact, the plurality condition of *-hoil* gains further support when we contrast (93b) with (94b). Unlike (93b), (94b) is well-formed, and there is neither an individual variable nor a plural NP in the sentence. The sentence is well-formed since the relevant event “my bringing that book to him/her” can recur. Hence, it is the possibility of the verb 攤 ‘bring’ to describe a recurring event that makes the event plural. This goes with what is described in the plurality condition mentioned in (49), that is, as long as there is a constituent, be it a verb or a verbal argument, that can make the relevant situation plural, (49) will be satisfied. Contrasting this with (93b) where the presenting of a particular book (as a gift) is harder to get a recurring interpretation, we can confirm that the condition stated in (49) can be applied to *-hoil*.

After the PDC pattern, we now examine the IDOC pattern.

IDOC pattern (V+DO+IO)

(95) 我俾開 Chomsky 啲書 (俾)阿明.

I give-HOI Chomsky’s books to Ah Ming

“When I give Ah Ming something, it is Chomsky’s books.”

(96) 我 俾開 past papers (俾)學生.

I give-HOI past papers to students

“When I give something to students, it is past papers.”

(97) 我 俾開 錢 (俾)我阿媽.

I give-HOI money to my-mother

“When I give something to my mother, it is money.”

Unlike Mandarin and English, Cantonese has a special order between DO and IO, which is reflected in the IDOC pattern. The IDOC pattern is considered to be the inverted pattern of the DOC pattern with the IO immediately following DO without any dative

marker. An immediate question is whether there is any covert dative marker introducing the IO, which will affect its status as a direct argument or an indirect one. Tang (1996, 2003) claims that the IO in the IDOC pattern is in fact an indirect argument, and there should be a covert dative marker before the IO. He uses two pieces of evidence to support his claim. Firstly, phonologically, when uttering sentences like the above, there is either a break between the IO and DO, or the last syllable of the DO is elongated, and such a break is not found in the DOC pattern. Secondly, according to Tang (1996), *saai3* can only quantify over direct arguments like subjects and objects, but not indirect ones like prepositional complements. So, if *saai3* fails to quantify over the IO, then the status of the IO should be an indirect argument (cf. also T. Lee 1994, Tang 1996, Pan & Man 1998, Auyeung 1998, etc.). Tang uses the following to show that in the IDOC pattern, *saai3* fails to quantify over the IO.

- (98) 我 俾晒 呢幾封信 (俾)佢。
 I give-SAAI these-CL-letter to him/her
 “I have given all these letters to him/her.”
- (99) *我俾晒 呢封信 (俾)佢哋。
 I give-SAAI this-CL-letter to them

Tang accounts for the (un)grammaticality of (98) and (99) by appealing to the fact that *saai3* definitely fails to associate with the IO, and hence, it is the singularity of the DO in (99) which causes its ill-formedness. The essence of Tang’s claim is basically on the right track, but only that he is appealing to an asymmetric relation between the direct and the indirect arguments, making the association with the latter impossible. Hence, if the DO fails to satisfy the requirement of *saai3*, then the relevant sentence will absolutely result in ill-formedness. In other words, as long as there is a DO in the sentence, there is no way for *saai3* to quantify over the IO. However, as I will show

later, such an “asymmetry” claim is too strong. Tang is right in claiming that suffixal quantifiers are sensitive to the difference between direct and indirect arguments, but it is not the case that the presence of a DO will always hinder the quantification over the IO. A more accurate claim would be the two simply form a hierarchical relation of DO > IO. The relevant quantification over a plural IO fails to improve the grammaticality of the relevant sentence only when the DO is unique or specific, making the relevant event/situation fail to recur. Under such a case, even though the IO is plural, it still fails to change the relevant event or situation into a recurring one.

To elaborate on such an idea, we can in fact account for the ill-formedness of (99) based on our plurality condition in (49). As I have mentioned before, the claim that *saai3* requires a [+divisible] NP is only part of the picture, since what is crucial is whether the event or the situation in question is possible to have a plural interpretation. The actual reason causing the ill-formedness of (99) is not the failure of *saai3* to quantify over the IO, rather it is due to the fact that the event denoted by 俾呢封信 ‘give-this-CL-letter’ by default occurs only once, due to the specificity of the DO. Therefore, since *saai3* will select the DO not the IO first, the specificity of the DO has already made the event 俾呢封信 ‘the delivery of a particular letter’ into a unique event, hence, violating the plurality condition required by *-saai3*.

The interpretations of (95), (96) and (97) also demonstrate a hierarchical order of DOs over IOs. None of the *-hoi1* in the above sentences associates with the IO, and *-hoi1* associates with the DOs only. In (95) and (96), we have *-hoi1* associating with the bare noun DO, giving the readings of “when I give something to Ah Ming, it is Chomsky’s books” and “when I give something to students, it is past papers”, respectively. Moreover, contrasting (95) and (96) with (97), we can see that when the verb is followed by a monosyllabic noun forming a VO construction, that construction is in fact ambiguous between a phrase and a compound. *-Hoi1* is possible to interpret with the entire VO construction 俾錢 ‘give money’ or just the bare noun object 錢

‘money’ in (97), demonstrating a tight relation between the verb and the O, thus, their likeliness to be a VO compound.

Finally, in the DOC pattern, due to the absence of dative markers, it is reasonable to take both DO and IO as direct arguments, to differentiate it from the PDC and the IDOC patterns. It is found that *-hoil* is possible to interpret with both of them.

DOC pattern (V+IO+DO)

(100) 我俾開 佢哋 Chomsky 啲書.

I give-HOI them Chomsky’s books

“When I give them something, it is Chomsky’s books.”

“When I give Chomsky’s books to someone, it is them.”

(101) 我問開 佢 semantics 嘅嘢.

I ask-HOI him/her semantics-questions

“When I ask him/her something, it is questions on semantics.”

“When I ask someone questions on semantics, it is him/her.”

In (100) and (101), it is found that *-hoil* is possible to interpret with the DO and the IO which are both direct arguments under such a pattern. This further supports the hierarchical relation between direct DO arguments and indirect IO arguments in the interpretation of *-hoil*. Generalizing from the cases of transitives and ditransitives, we can see that quantification by *-hoil* in both transitives and ditransitives demonstrates a hierarchical order of direct DO arguments over indirect IO arguments.

5.1.3 Bare noun object NPs as arguments and non-arguments

Extending from the dative argument above, we can consider the cases of postverbal directional PP, which can be treated on a par with dative arguments introduced by the

dative marker “to”. This is exemplified by the following examples.

(102) (a) 我 send 開 memo 落樓下個 office.

I send-HOI-memos to downstairs-CL-office

“When I send memos to somewhere, it is the office downstairs.”

(b) 我 send 開 e-mails 去嗰幾度.

I send-HOI-e-mails to-those-several-places

“When I send e-mails to somewhere, it is to those places.”

(c) 我 派開信 去嗰幾間公司度.

I send-HOI-letters to-that-CL-company-location

“When I deliver letters to somewhere, it is to those companies.”

(d) 我 派開信 俾嗰幾間公司.

I send-HOI-letters to-that-CL-company

“When I deliver letters to somewhere, it is to those companies”

(e) 我 落開油 炒菜.

I put-HOI oil fry-vegetables

“I generally put oil to fry vegetables.”

Comparing among sentences (102a) through (102d), we can see that *-hoil* still associates with the DOs in (102a) and (102b), but more naturally to be with the postverbal directional PPs, which can be treated on a par with the dative argument with “to”, in (102c) and (102d). The difference in quantification between (102a) and (102b) and (102c) and (102d) is contributed by the argument and non-argument status of the bare nouns in (102a) and (102b) and (102c) and (102d), respectively. *-HoiI* associates with the DOs in (102a) and (102b), due to its argument nature. Since *-hoil* does not require its quantified argument to be specific or definite and the quantification of *-hoil* over the DOs here also satisfies the plurality condition, (102a) and (102b) are both

well-formed. *-Hoi1* binds the individual variables introduced by the bare nouns under both cases. On the other hand, 派信 ‘deliver letters’ tends to be taken as a VO compound in (102c) and (102d), conveying a meaning of “letter-delivery”, and hence, 信 ‘letters’ is interpreted as non-argument-like. This makes *-hoi1* directly quantify over the postverbal PP. I will not go into details of how to distinguish VO compounds from non-VO-compounds. What is crucial here is, the hierarchy will predict *-hoi1* to quantify over the postverbal PP or the dative argument if what is involved is a VO compound; and *-hoi1* quantifies over the bare noun object NP if it is interpreted as an argument. This is what is exemplified in sentences (102a) through (102d). Further research will be needed to distinguish VO compounds from non-VO-compounds.

Contrasting (102a-d) with (102e), we can see that in (102e), we have a serial verb construction, and *-hoi1* simply binds the event variable introduced by the VO 落油 ‘put oil’. The reason is that 落油炒菜 ‘put oil to fry vegetables’ form a serial verb construction in (102e), with 炒菜 ‘fry the vegetables’ being opaque to *hoi1*-quantification under such a case due to the locality effect. Contrasting (102e) with (102c) and (102d), we can see that the directional preposition in (102c) and (102d), like the dative one, is transparent to the interpretation of *-hoi1*, and hence, belonging to grammatical prepositions. Most importantly, (102e) demonstrates that the quantification of *-hoi1* is restricted to a local domain, and hence, fails to extend to the second clause 炒菜.

The sentences above lead to a hierarchical order of DOs/ IOs (with no dative markers, direct arguments) > IOs with covert and overt dative markers (indirect arguments) / postverbal PPs.

The question now is can *-hoi1* associate with preverbal adjuncts?

(103) 我 同佢哋 打開波.

I with-them play-HOI-ballgames

“When I play ballgames with someone, it is with them.”

(104) 我 對佢哋 扮開嘢.

I to-them disguise-HOI

“When I disguise in front of someone, it is in front of them.”

The examples in (103) and (104) do not include a DO argument, since it is difficult to consider the objects 波 ‘balls’ and 嘢 ‘things’ in the predicates 打波 ‘play ballgames’ and 扮嘢 ‘disguise’ as [\pm referential] arguments. *-Hoi1* will associate with the preverbal PPs 同佢哋 ‘with them’ and 對佢哋 ‘to them’ in both sentences.

5.1.4 The failure of *-hoi1* to associate with subjects

In the case of intransitive verbs, it will be interesting to see whether *-hoi1* could associate with the subject, the only argument in the sentence. However, the following examples demonstrate that *-hoi1* fails to associate with the subject. Consider the examples below.

(105) 後生仔 跑開步 呀.

youngsters run-HOI-steps SFP

“Youngsters generally jog.”

(106) 好多人 跳開舞.

many people dance-HOI

“Many people generally dance.”

(107) (a) 農村嘅人 勞動開, 所以咁 大隻.

Villagers work-HOI so that muscular

“Villagers generally work hard, which explains their being muscular.”

(b) 我哋勞動開, 所以咁 大隻.

we work-HOI so that muscular

“We generally work hard, which explains our being muscular.”

(c) 我 勞動開, 所以咁 大隻.

I work-HOI so that muscular

“I generally work hard, which explains my being muscular.”

The readings of (105) to (107) demonstrate that *-hoil* fails to associate with the subject. In (105) and (106), considering 跑步 ‘jog’ and 跳舞 ‘dance’ as VO compounds, since *-hoil* fails to extend to subjects, it is forced to associate with the VO compounds. The failure of *-hoil* to associate with subjects gains further support in (107). The interpretation of (107abc) confirms that *-hoil* can never associate with the subject, no matter whether it is generic, plural or singular.

Generalizing the results concerning eventives, we can conclude that *-hoil* is a proportional generic quantifier, quantifying over the constituents in the following hierarchical order:

(108) The Hierarchy for *-hoil* Association in Eventives

DO/IO arguments > dative arguments/postverbal PPs > preverbal PPs > verbal predicates/VOs

5.1.5 *-Hoi* with Statives

In the case of statives, what is crucial for *-hoil* is whether there is a restrictive domain or not. As I have mentioned earlier, such a restrictive domain can be provided by time variables.

Stative verbs

(109)(a) *佢 鍾意開 “三國誌”.

s/he like-HOI “A Romance of Three Kingdoms”

(b) 佢 一向 鍾意開 “三國誌”.

S/he for-long like-HOI “A Romance of Three Kingdoms”

“S/he likes ‘A Romance of Three Kingdoms’ for long.”

$\exists t \subset I \text{ HOI}t' [t' \in t] [S/he \text{ likes Samkokji at } t']$

(c) 佢 不嬲/一向 鍾意開名著.

S/he used-to/for-long like-HOI classics

“S/he likes classics for long.”

$\exists t \subset I \text{ HOI}t' [t' \in t] [S/he \text{ likes classic literature at } t']$

(110) (a) *佢 似開 佢老豆.

s/he resemble-HOI his/her father

(b) 佢 有 一段時間 似開佢老豆,

S/he have one-CL-time resemble-HOI his/her father

不過 後尾個樣 越變越 似 佢阿媽.

but later CL-face more-change-more resemble his/her mother

“For one time, s/he very much resembled his/her father. But now s/he looks more like his/her mother.”

$\exists t \subset I \text{ HOI}t' [t' \in t] [S/he \text{ resembles his/her father at } t']$

(111) (a) *我識開 阿明.

I know-HOI Ming

(b) 我 不嬲 識開 阿明.

I for-long know-HOI Ah-Ming

“I know Ah Ming for long.”

$\exists t \subset I \text{ HOI}t' [t' \in t] [I \text{ know Ah Ming at } t']$

The (a)-sentences in the above are all ill-formed due to the incompatibility between *-hoi* and the individual-level statives. These sentences become well-formed when durative adverbials are introduced into the relevant sentences. The function of the

preverbal durative adverbial is to give the originally individual-level predicates a temporal interpretation, restricting their interpretation to a certain temporal domain. The time variable triggered by the durative adverbial will be quantified over by *-hoi1*. A similar feature is observed in the case of adjectival predicates.

Stative adjectives

(112) 張枱 不嬲 爛開 㗎啦.

CL-table for-long broken-HOI SFP-SFP

“The table has long been broken.”

$\exists t \subset I \text{ HOI}t' [t' \in t]$ [The table is broken at t']

(113) 佢 前排 靚開 㗎, 最近 咁 恐怖 嘅.

S/he recently pretty-HOI SFP lately that horrible SFP

“S/he looked pretty in the recent past, but suddenly looks destroyed lately.”

$\exists t \subset I \text{ HOI}t' [t' \in t]$ [S/he was pretty at t']

(114) 農村嘅人 一向 大隻開 㗎啦, 多勞動 呀嘛.

Villagers for-long muscular SFP-SFP a-lot-of-work SFP-SFP

“Villagers are muscular, as they do a lot of work.”

$\exists t \subset I \text{ HOI}t' [t' \in t]$ [Villagers is muscular at t']

(115) 啲花 一向 紅開 㗎啦, 你 冇 留意 之嘛.

flowers for-long red-HOI SFP-SFP you not-have notice SFP-SFP

“The flowers used to be red, only that you did not notice them.”

$\exists t \subset I \text{ HOI}t' [t' \in t]$ [Those flowers are red at t']

All sentences above involve adjectival predicates. They contain preverbal durative adverbials like 不嬲 and 一向 which introduce a time span starting from some time in the past to ST, restricting the interpretation of the relevant sentences into a time span denoted by the durative adverbial. *-Hoi1*, as a proportional quantifier, requires a

restrictive domain, and these sentences are well-formed, since the durative adverbial gives a restrictive domain to the relevant sentence, a tripartite structure, including the operator, the restrictor and the nuclear scope, can thus be triggered.

In the case of stage-level stative verbs, the quantification pattern is similar to that of eventives, that is, the constituent quantified by *-hoil* is determined by the hierarchy in (108). When there is no verbal argument over which *-hoil* can quantify, *-hoil* will either associate with the stative verb or bind any variable which can constitute as its restrictive domain.

Stage-level stative verbs

(116) (a) 本書 擺開 喺張枱度.

CL-book put-HOI at-table-location

“When the book is put somewhere, it is on the table.”

HOIx [The book is put on x] [x = the table]

(b) 本書 不𨀓/一向 擺開 喺張枱度.

CL-book used-to/for-long put-HOI at-CL-table-location

“For long, the book has been put mostly on the table.”

$\exists t \subset I [t' \in t] \text{ HOI}\langle x \rangle$ [The book is placed on x at t'] [x = the table]

(117) (a) *佢 病開.

s/he sick-HOI

(b) 佢 不𨀓/一向 病開.

s/he used-to/for-long sick-HOI

“S/he has been sick.”

$\exists t \subset I \text{ HOI}t' [t' \in t]$ [S/he is sick at t']

(116b) show that when there is an appropriate verbal argument from the hierarchy, *-hoil* will quantify over the verbal argument selected according to the

hierarchy in (108), with the time variable which is a member of the time points t included in the interval I denoted by the durative adverbial simply bound by the existential operator. When there is no verbal argument where *-hoi1* can select, as in (117b), *-hoi1* will bind the time variable t' . Notice that the ill-formedness of (117a) is due to the lack of a restrictive domain, violating the semantic requirement of *-hoi1* as a proportional quantifier.

The sentences below demonstrate that like the case of eventives, *-hoi1* remains a proportional quantifier in adjectival statives. Since adjectival statives generally do not take IO or DO, *-hoi1* still operates according to the hierarchy in (108). When there is no DO or IO, the hierarchy will predict that *-hoi1* will quantify over the preverbal PP, which is the only possible phrase in the hierarchy for *-hoi1* to quantify over; otherwise, *-hoi1* will quantify over any variable available, as long as the semantics of *-hoi1* as a proportional quantifier is satisfied.

(118) (a) *佢 客氣開.

I courteous-HOI

(b) 佢 一向 客氣開.

s/he used-to courteous-HOI

“S/he used to be courteous.”

$\exists t \subset I \text{ HOI}t' [t' \in t] [\text{S/he is courteous at } t']$

(c) 佢 對我哋 客氣開.

S/he to-us courteous-HOI

“When s/he is courteous to someone, it is to us.”

$\text{HOI}x [\text{S/he is courteous to } x] [x = \text{us}]$

(119) (a) *我 坦白開.

I honest-HOI

(b) 我 一向 坦白開.

I used-to honest-HOI

“I used to be honest.”

$\exists t \subset I \text{ HOI}t' [t' \in t] [I \text{ am honest at } t']$

(c) 我 對佢 坦白開.

s/he to-him/her honest-HOI

“When I am honest to someone, it is to him/her.”

HOIx [I am honest to x] [x = him/her]

(118a) and (119a) are ill-formed, since bare adjectival predicates fail to occur with *-hoi1*, due to the lack of a restrictive domain. The relevant ill-formedness can be avoided when we have a verbal argument or any variable which can be quantified over by *-hoi1*, hence, triggering a tripartite structure, cf. (118bc) and (119bc).

Concerning the interaction between durative adverbials and eventives, like statives, the relevant quantification remains to be determined by the hierarchy first, and then appeal to other variables if there is no verbal argument in the hierarchy over which *-hoi1* can quantify. Relevant examples are repeated below, with the addition of a preverbal durative adverbial.

Transitives

(120) 依家啲學生 不嬲 睇開 漫畫書.

Nowadays' students for-long read-HOI comic-books

“For long, when nowadays' students read something, they read comic books.”

$\exists t [t \subset I] [t' \in t] \text{ HOI}\langle x \rangle [\text{nowadays' students read } x \text{ at } t'] [x = \text{comic books}]$

DitransitivesPDC pattern (V + DO + dative marker IO)

(121) 我 不嬲/一向 送開書 比佢.

I used-to/for-long give-HOI-books to him/her

“For long, when I give him/her something, it is books.”

$\exists t \subset I [t' \in t] \text{HOI}\langle x \rangle [I \text{ give } x \text{ to him/her at } t'] [x = \text{books}]$

IDOC pattern (V+DO+IO)

(122) 我 不嬲/一向 俾開 past papers (俾)學生.

I used-to/for-long give-HOI-past-papers to students

“For long, when I give something to students, it is past papers.”

$\exists t \subset I [t' \in t] \text{HOI}\langle x \rangle [I \text{ give } x \text{ to students at } t'] [x = \text{past papers}]$

(123) 我不嬲/一向 問開佢 semantics 嘅嘢.

I used-to/for-long ask-HOI him/her semantics-questions

“For long, when I ask him/her something, it is questions on semantics.”

$\exists t \subset I [t' \in t] \text{HOI}\langle x \rangle [I \text{ ask him/her } x \text{ at } t'] [x = \text{questions on semantics}]$

“For long, when I ask someone questions on semantics, it is him/her.”

$\exists t \subset I [t' \in t] \text{HOI}\langle x \rangle [I \text{ ask } x \text{ questions on semantics at } t'] [x = \text{him/her}]$

The above demonstrates that when durative adverbials are introduced into the *hoil*-sentences, the quantification of *-hoil* is still governed by the hierarchy described in (108). In the case of statives, when there are no verbal arguments which can be bound by *-hoil*, the relevant sentence will still be well-formed if variables like time variables can be mapped to the restrictive clause, triggering a tripartite structure. On the other hand, in the case of eventives, the function of the durative adverbials is simply to restrict the interpretation of the *hoil*-sentence to a certain time span denoted by the durative adverbial. This gives an interpretation that the *hoil*-sentence will be true with respect to the time span denoted by the durative adverbial, giving the relevant

representations in the above sentences. *-Hoi1* still binds the verbal argument selected from the hierarchy, with the time variables bound by the existential operator.

Summarizing from the above, we can arrive at the following conclusion:

(124) The Hierarchy for the Quantification by the Verbal Suffix *-hoi1*

As a generic quantifier, *-hoi1* quantifies over the constituent selected according to the following hierarchy.⁴

DO/IO direct arguments > indirect dative arguments with covert and overt dative markers/postverbal PPs > preverbal PPs > stative verbs/VOs > temporal phrases

Moreover, the quantification of *-hoi1* needs to fulfill the quantificational requirement, repeated below.

(125) A Quantificational Requirement for *Hoi1*

-Hoi1 is a proportional quantifier. It requires a tripartite structure, and gives an obligatory binary interpretation relating the set in the restrictor to that in the nuclear scope.

(125) predicts that as a proportional quantifier, *-hoi1* obligatorily requires a restrictive domain, with such a domain possibly to be individual variables triggered by the hierarchy in (124), locative variables, time variables, and so on. What is crucial for *-hoi1* is the occurrence of a restrictive domain for it to quantify over.

5.2 The Hierarchy for *maai4*

Like *-hoi1*, the quantification of *maai4* is also determined by a grammatical

⁴ The quantification performed by *-hoi1* will be further discussed in Chapter 4.

function hierarchy. In the following sections, I will illustrate the hierarchy of *maai4*.

5.2.1 *Maai4* in ditransitive constructions

I have already discussed above that *maai4* requires its quantified constituent to be [+definite]. In the case of dative and double object constructions, the interpretation of *maai4* also demonstrates a hierarchical order of [+definite] DOs > [+definite] IOs > preverbal PPs with [+definite] NPs.

When *maai4* appears in sentences with ditransitive verbs, if both IO and DO are [+definite], *maai4* will select the direct argument, instead of the indirect argument. This is illustrated by the following sentences.

PDC pattern (V + DO + dative marker + IO)

(126) 阿 John 攞埋 我本書 比佢細佬.

John take-MAAI my-CL-book to-his-brother

“John has taken my book as well to his brother.”

(127) 阿 John 會 影埋 佢篇文 比你叻.

John will copy-MAAI his-CL-paper for-you-all

“John will photocopy his paper as well for you all.”

(128) 阿 John 會 買埋禮物 比佢.

John will buy-MAAI-gifts for him/her

“John will buy him/her as well a gift.”

(129) 我 打埋電話 比佢.

I call-MAAI telephone to him/her

“I called him/her as well.”

(126) reveals that when both DO and IO are [+definite], *maai4* selects the [+definite] DO, instead of the [+definite] IO, giving an interpretation that “John has taken, in

addition to other things, my book, to his brother”. This is again shown in (127), where *maai4* selects the [+definite] DO instead of the [+definite] IO, giving an interpretation that his paper is added to the set of things which he will bring with him. These two sentences suggest a hierarchical order of DOs over IOs concerning the interpretation of *maai4*.

Consider (128) and (129). Both sentences have a [-definite] DO or a bare noun DO and a [+definite] IO. The interpretation of both sentences show that *maai4* selects the [+definite] IO, instead of “verb + [-definite] DO”. This gives the reading of (128) as “John will buy gifts for him/her as well” and that of (129) as “I have given a call to him/her as well”. Hence, in both cases, the additive meaning of *maai4* applies to the individuals denoted by the IO argument.

IDOC pattern (V+DO+IO)

(130) 我 俾埋 你嘅相/你張相 (俾)佢.

I give-MAAI your-photos/your photo to-them

“I have given them your photo(s) as well.”

(131) 我 俾埋 我本書 (俾)佢.

I give-MAAI my-CL-book to him/her

“I have given to him/her my book as well.”

(132) 我 送埋 書 (俾)佢.

I give-MAAI books to him/her

“I have given books to him as well.”

(133) 我俾埋 郵票 (俾)佢.

I give-MAAI stamps to him/her

“I have given stamps to him/her as well.”

(130) reveals that when both DO and IO are [+definite] and the dative marker is covert,

maai4 selects the [+definite] DO, instead of the [+definite] IO, giving an interpretation that “I have given, in addition to other things, your photo(s), to him/her”. This is again shown in (131), where *maai4* selects the [+definite] DO instead of the [+definite] IO in the adjunct, giving an interpretation that my book is added to the set of things I will bring to him/her. Like the above PDC pattern, these two sentences suggest a hierarchical order of DOs over IOs concerning the interpretation of *maai4*.

Consider (132) and (133). Both sentences have a [-definite] DO or a bare noun DO and an [+definite] IO. The interpretation of both sentences shows that *maai4* selects the [+definite] IO instead of “verb + [-definite] DO”. This gives the reading of (132) as “I have given books to him/her as well” and that of (133) as “I have given stamps to him/her as well”. Hence, in both cases, the additive meaning of *maai4* applies to the individuals denoted by the IOs, showing that *maai4* will select the [+definite] IO when the DO is [-definite].

Finally, we come to the DOC pattern. Based on the above discussion, it is reasonable to predict that under such a case, *maai4* will select either the IO or the DO, since the IO carries no dative marker and can be considered as a direct argument. Such a prediction is in fact borne out in the following sentences.

DOC pattern (V+IO+DO)

(134) 我 俾埋 佢 我嗰本書.

I give-MAAI him/her my-that-CL-book

“I have given my book to him/her as well.”

“I have given to him/her my book as well.”

(135) 我 問埋 佢哋聯絡方法 啦.

I ask-MAAI their contacts SFP

“I have asked them (apart from others) their contacts.”

(136) 我 俾埋 學生 我嘅 e-mail 地址.

I give-MAAI students my-Poss-e-mail-address

“I have given students my e-mail account as well.”

The sentences above show that in the DOC pattern where both DO and IO occur as arguments, the choice of *maai4* to associate with the DO and IO is in fact neutral, depending on their definiteness. If both DO and IO are definite, *maai4* can interpret with both DO and IO, giving an ambiguous interpretation. (134) has both DO and IO being [+definite], and the relevant interpretations show that *maai4* is ambiguous between its association with DO and/or IO. Two readings are possible for both (134): (134) can mean “I have given my book to him/her as well” or “I have given my book as well to him/her”. On the other hand, in (135), we have a definite IO but an indefinite DO, and since *maai4* requires a definite argument, it can be predicted that *maai4* will select the definite IO. This is what is shown by the interpretation of (135), which has only one interpretation “I have asked them (apart from others) their contacts”. A similar feature is observed in (136), which has one of the objects being [+definite], with the other being [-definite]. *Maai4* will be predicted to quantify over the definite one, which is what is again shown in its interpretation “I have given students my e-mail account as well”, the only interpretation of (136).

Extending from the dative construction above, we can consider the cases of postverbal PP, which can be treated on a par with dative argument with dative marker “to”. This is exemplified by the following examples.

(137) (a) 我 寄埋信 去嗰間公司度.

I send-MAAI-letters to-that-CL-company-location

“I have sent letters to that company as well.”

(b) 我 寄埋信 俾嗰間公司.

I send-MAAI-letters to-that-CL-company

“I have sent letters to that company as well.”

(c) 我 send 埋 memo 落樓下個 office.

I send-MAAI-memos to-downstairs-CL-office

“I have sent memos to the office downstairs as well.”

(d) 我 send 埋 e-mails 到嗰度.

I send-MAAI-e-mails to-there

“I have sent e-mails to there also.”

(e) 我 落埋油 炒啲菜.

I put-MAAI-oil fry-vegetables

“I have also spread oil to fry the vegetables.”

Sentences (137a) through (137d) have *maai4* quantifying over the postverbal directional PP, which can be treated on a par with the dative argument with “to”. These cases show that the directional preposition, like the dative one, is transparent to the quantification of *maai4*. Contrasting (137a-d) with (137e), we can see that in (137e), we have a serial verb construction, and *maai4* associates with the VO 落油 ‘put oil’. This demonstrates that the quantification of *maai4* is restricted to a local domain, and hence, fails to extend to the second clause 炒啲菜 ‘fry the vegetables’.

From the above discussion and the different patterns of the ditransitive construction, we can generalize that *maai4* demonstrates a hierarchical order of [+definite] DO/IO direct arguments > indirect dative arguments with covert and overt dative markers / postverbal PPs > VOs.

To further look into the hierarchical order of direct and indirect arguments in the

interpretation of *maai4*-sentences, observe the sentences below which involve preverbal PPs or postverbal PPs.

(138) (a) 佢 對嗰啲學生 動埋粗.

s/he to-those-students use-MAAI-force

“S/he uses force to those students as well.”

(b) 我 同佢 食埋飯.

I with him/her eat-MAAI-rice

“I have had meal with him/her as well.”

(c) 我同佢哋 反埋面.

I with-them in-MAAI-bad-terms

“I am in bad terms with them as well.”

(139) (a) 我 擺埋本書/嗰啲書 喺張枱度.

I put-MAAI CL-book/those-books on-CL-table-location

“I put on the table the book/those books as well.”

(b) 我 擺埋書 喺嗰張枱度.

I put-MAAI-books on-CL-that-table-location

“I put books on that table as well.”

(140) (a) 我 喺嗰張枱度 擺埋書.

I on-that-CL-table-location put-MAAI-books

“I put books on that table as well.”

(b) 我 喺嗰張枱度 擺埋本書/嗰啲書.

I on-that-CL-table-location put-MAAI CL-book/those-books

“I put on that table the book/those books as well.”

(c) 佢 喺美國 買埋屋 啦.

s/he at-US buy-MAAI-house SFP

“S/he has bought houses in the US as well.”

As I have mentioned before, it is difficult to differentiate VO compounds from a VP, when we have the construction “verb + monosyllabic bare noun”. To simplify the picture at the meantime, I will regard the construction “verb + monosyllabic bare noun” as a VO compound, and for those involving bare nouns with two or more syllables, it will depend on different constructions to determine the relevant issue. The association of *maai4* with the preverbal PPs 對啲啲學生 ‘to those students’, 同佢 ‘with him/her’ and 同佢哋 ‘with them’ in (138a) to (138c), respectively, instead of the VOs 動粗 ‘use force’, 食飯 ‘have meals’ and 反面 ‘in bad terms’ gives a hierarchical order of preverbal PP > VO compounds. (139a) shows a selection of [+definite] DO over the postverbal PPs, and (139b) illustrates a hierarchical order of postverbal PPs > VO compounds. On the other hand, in (140a), *maai4* associates with the preverbal PP, instead of the VO 擺書 ‘put books’. The hierarchical order of direct arguments over indirect arguments is further shown in (140b) where the [+definite] DO will be preferred over the preverbal PP. A similar account can be extended to (140c) which has *maai4* selecting the preverbal locative PP, instead of the VO 買屋 ‘buy houses’.

All the sentences above suggest a hierarchical order of [+definite] DO/IO direct arguments > [+definite] indirect dative arguments/postverbal PPs > preverbal PPs (V-licensed PPs) > VO compounds.

5.2.2 *Maai4* with Subjects

For cases where the relevant verb is intransitive, there are two possibilities for the interpretation of *maai4*, associating with either the verb or the subject. In order to examine this, consider the sentences below.

(141) 嗰個遲到大王 終於 嚟埋 啦.

That-CL-late-comer-king finally come-MAAI SFP

“The king of late comers as well has arrived.”

(142) 佢 曬到 條頸 紅埋.

s/he sun-burn-arrive CL-neck red-MAAI

“His neck as well was sun-burnt.”

(143) 最懶瞓嗰個 醒埋 啦.

most-lazy-sleep-that-one wake-MAAI SFP

“The laziest one as well has woken.”

The three sentences above involve either an adjective or an intransitive verb, and they share a common point that no object NPs are present in these sentences. Hence, *maai4* may associate with the subject NP, the only argument in the sentence, or the verb/adjective. The interpretations of these sentences show that *maai4* associates with the grammatical subject NP. (141) has the reading of “apart from others, the king of the late-comers has arrived”; (142) has the reading of “beside other parts of his/her body, his/her neck got sun-burn”; and (143) has the reading of “apart from the others, the laziest one has woken”. Hence, these sentences demonstrate that what is added is the individuals denoted by the subject NPs.

The verbs in (141) to (143) are unaccusative, with the subject NP base-generated at the object NP position. Hence, it is possible that *maai4* in fact associates with the trace left by the grammatical subject at the base-generated DO position. Such a predication is in fact borne out in the following examples.

(144) (a) ??你 跳埋 呀.

you jump-MAAI SFP

(b) (不如) 你 跳埋 一份.

(why-not) you jump-MAAI one-part

“Why don’t you take a part as well and jump?”

- (c) 你 跳埋落去 呀.
 you jump-MAAI-down SFP
 “You jumped down as well.”

(145) (a) ??佢 跑埋.

you run-MAAI

- (b) 佢 跑埋 一份.

s/he run-MAAI one-part

“Why don’t s/he take a part as well and race?”

The verbs above are unergative, with the subject NPs being agentive, and hence, base-generated at the subject NP position, instead of rising from object position in deep structure to the subject position at SS. The contrast in grammaticality between (144a) & (144b) and (141) to (143) above demonstrates that it is the DO, be it moved or base-generated, that is associated with *maai4* in these cases. The well-formedness of (144b) and (145b) further supports the claim made here. (144b) will be grammatical if *maai4* is interpreted with the DO 一份 ‘a part’. (145b) is an example demonstrating a similar feature, as the sentence will be well-formed only when a DO argument 一份 is triggered, cf. (145b). The sentence confirms that *maai4* actually associates with the DO argument, be it moved or base-generated. The sentences above demonstrate that *maai4* can select the grammatical subject only when it is base-generated at the DO position.

We can further extend our account to consider cases of preposed DOs. When objects are preposed, there are two possible landing sites, resulting in SOV and OSV patterns. According to Ernst & Wang (1995), the preposed object in the OSV pattern does not require a contrastive focus, and is considered to be an IP-adjunction. Consider the topicalised object (the OSV pattern) in the sentence below first.

- (146) 你 我 梗 會 教埋.
 you I certainly will teach-MAAI
 “I will certainly teach you as well.”

Maai4 associates with the preposed object 你 ‘you’ in (146), which is an IP-adjunction. Since the preposed object in such a construction does not require a contrastive focus, the association of *maai4* with the preposed object cannot be explained in terms of focus association. The association of *maai4* with the topicalised DO in (146) is in fact another example demonstrating the possibility of *maai4* to associate with traces left by DOs. Hence, the association in (146) is still an association of *maai4* with [+definite] DO. (147) illustrates the interaction between topicalized DO and locative complements.

- (147) (a) 我 擺埋 今日買嗰啲書 喺張枱度.
 I put-MAAI today-bought-those-books on-CL-table-location
 “I have put on the table those books I bought today as well.”
- (b) 今日買嗰啲書 我擺埋 喺張枱度.
 Today-bought-those-books I put-MAAI on-CL-table-location
 “For those books I bought today, I have put them (apart from other things) on the table.”

Maai4 associates with the preposed DO in (147b), suggesting that *maai4* will select the [+definite] DO, be it a trace or not, over the postverbal PP. The claim that *maai4* associates with the DO trace instead of the topicalised DO at SS gains further support when we consider the failure of *maai4* to associate with base-generated topics.

- (148) (a) 你班 friend 最漏氣嗰個 *(都)嚟埋,
 You-CL-friends most-slow-that-one also come-MAAI

你自己 反而 唔知 去咗邊.

you-self contrarily not-know go-Perf-where

“The slowest one among your friends has also come. On the contrary, I have no idea where you have gone.”

(b) 啲狗仔 細個隻 *(都) 瞓埋.

Those-dogs the-small-one also sleep-MAAI

“Among those dogs, the small one has also gone to sleep.”

Both (148a) and (148b) sound odd without *doul* ‘also’, which binds the base-generated plural topics to its left. This demonstrates that *maai4* fails to associate with the base-generated topic which is an IP-adjunction, and due to the blockage by *doul*, *maai4* will associate with the verb.

Based on the above, we can come up with the following conclusion.

(149) Selection of Suffixal Quantifiers over Verbal Arguments

Suffixal quantification can be performed over both covert and overt verbal arguments.

We are now in a position to answer the question “in the case where we have [-definite] objects or a VO, would *maai4* select the VO or the [+definite] subject or the preverbal PP. Consider the examples below.

(150) 阿 John 錄埋音 啦.

John record-MAAI-music SFP

“John has also recorded.”

(151) 佢哋會 打埋波.

they will play-MAAI-ballgames

“They will also play ballgames.”

(152) 我哋 食埋飯.

we eat-MAAI-rice

“We have also had our meal.”

Maai4 interprets with the VO instead of the [+definite] subject in all the sentences above. The readings of (150), (151) and (152) are “John has also recorded”, “They will also play ballgames” and “We have also had our meal”, respectively. This suggests that *maai4* associates with the verbal predicates, instead of the subject NPs, giving an interpretation of an addition of the relevant events/states. Hence, these sentences demonstrate a hierarchical order of VOs over [+definite] subjects.

Notice that the selection between the VO and the [+definite] subject in the case of *maai4* is more subtle than other suffixal quantifiers, since it is highly sensitive to context. Contexts can make the subject more dominant over the VO, making the quantification of *maai4* over the focused subject possible. The interaction of *maai4* with focus will be discussed in Chapter 6.

For the interaction among [+definite] subjects, preverbal PPs and VOs, consider more examples below.

(153) 阿 John 同佢哋 錄埋音.

John for-them record-MAAI-music

“John has recorded for them as well.”

(154) (a) 我 同佢 賭埋錢.

I with-him/her gamble-MAAI-money

“I gamble with him/her as well.”

(b) 我 同佢 賭埋錢 㗎, 所以 要 認真啲.

I with-him/her gamble-MAAI SFP so have-to serious-more

“I with him/her gamble as well, so I need to be more serious.”

(155) (a) 我 對佢哋 賣埋口乖.

I to-them sell-MAAI-good-words

“I say good things to them as well.”

(b) 我 對佢哋 賣埋口乖 添.

I to-them sell-MAAI-good-words even

“I to them even say good things.”

(153) has a reading of “John has recorded for them as well” and (154a) “I gamble with him as well”. Contrasted with (154a), due to the presence of the sentence-final particle 㗎 (having a meaning on a par with the preverbal “even”) in (154b), the event denoted by the VO is then made into focus, and hence, we have *maai4* interpreted with the VO instead of the preverbal PP. In (155a), *maai4* associates with the preverbal PP, giving the reading of “I say good things to them as well”. Comparing (155a) with (155b), we can see that the addition of the sentence-final particle 添 ‘even’ (cf. Lee 2001) has triggered a scalar implicature toward the event denoted by the VO 賣口乖 ‘sell-good-words’, making the VO more dominant than the preverbal PP. Hence, *maai4* associates with the VO instead of the preverbal PP under such a case. The contrast between (155a) and (155b) again demonstrates the sensitivity of *maai4* toward focus, see more discussion in Chapter 6.

5.2.3 *Maai4* with statives

Both stative verbs and adjectival predicates demonstrate a similar pattern to that of eventives.

(156) 最近, 佢哋個樣 似埋.

recently their-CL-face also resemble-MAAI

“Recently, they resemble each other as well.”

(157) 呢種生物 遲啲會 絕埋種.

this-CL-animals later will extinct-MAAI

“In the coming future, this kind of animals will be extinct as well.”

In (156), since there is no DO argument or any verbal argument in the hierarchy available for *maai4* to bind, *maai4* associates with the verb 似, meaning that the two resemble each other (apart from other properties). Notice that like the case of eventives, *maai4* does not quantify over the [+ definite] subject under such a case. Similarly, in (157), *maai4* selects the VO compound not the [+definite] subject. (156) and (157) show that *maai4* does not select [+definite] subjects, with the stative predicates being its last resort under such a case

A similar pattern is found in adjectival predicates, which is exemplified by the following sentences.

(158) 阿明 對佢 客氣埋.

Ah Ming to-him/her courteous-MAAI

“Ah Ming is courteous to him/her as well.”

(159) 佢 最近 又 整容, 對眼 大隻埋.

s/he recently again plastic-surgery his/her-eye bigger-MAAI

“S/he recently has undergone plastic surgery again. His/her eyes become bigger also.”

In (158), we can see that *maai4* selects the preverbal PP over the adjectival predicate. Finally, *maai4* again has selected the adjectival predicate instead of the [+definite] subject in (159).

Based on the above discussion, we have arrived at the following hierarchy.

(160) The Hierarchy for the Interpretations of *maai4*

[+definite]DO/IO direct arguments > [+definite] indirect dative arguments/postverbal PPs > preverbal PPs with [+definite] NPs > verbal/adjectival predicates or VOs

5.3 The Hierarchy for *saai3***5.3.1 *Saai3* with Eventives**

I will begin my examination with eventives followed by statives.

5.3.1.1 *Saai3* with VOs

Consider the following examples again.

(161) (a) ??佢 瞓晒覺.

s/he sleep-SAAI

(b) 頭先 上堂, 你 聽到 瞓晒覺 喎.

Just-now class you listen-arrive sleep-SAAI SFP

“In the class just finished, you felt so bored and fell asleep completely.”

(162) 佢 成日 開會 搞晒破壞 咁, 好鬼煩.

s/he always meeting make-SAAI-destroy SFP very-infix-annoying

“S/he is always a complete trouble-marker during meetings. That’s really annoying.”

(163) 佢 打晒冷顫.

s/he shiver-SAAI

“S/he is totally shivering.”

All the sentences above involve a singular subject and a [-specific] object, and hence, previous analyses would predict all these sentences to be ill-formed. The well-formedness of these sentences demonstrates that *saai3* quantifies over constituents

other than subjects and object NPs in these sentences. When there is no appropriate argument or adjunct for *saai3* to associate in the sentence, *saai3* will quantify over the degree triggered by the predicate. In the examples above, *saai3* quantifies over the degree to which the relevant events denoted by the verbal predicates 瞓覺 ‘fall asleep’, 搞破壞 ‘make troubles’, and 打冷顫 ‘shiver’ are performed, giving a meaning that the relevant event is performed to its fullest degree. In fact, the quantification of *saai3* over the degree denoted by the VOs can be considered on a par with that of the adjectival predicates, which will be discussed later. While the former describes the maximum degree the event can be performed, the latter describes the greatest degree the property can be attained.

The question now is when we have a plural subject, will *saai3* associate with the plural subject or the verbal predicate? Consider the examples below.

(164) 我哋 食晒飯 啦.

we eat-SAAI-rice SFP

“All of us have our meal.”

(165) 佢哋 返晒學 啦.

they back-SAAI-school SFP

“All of them were back to school.”

Sentences above suggest a priority of [+plural] subjects over verbal predicates or VOs. Both sentences have *saai3* associating with plural subjects, rather than verbal predicates, suggesting that verbal predicates are the last resort of association. Hence, the above reveals an association order of the following.

(166) [+plural] & [+specific] subject > verbal predicates/VOs

5.3.1.2 Quantification of *saai3* over arguments

It is argued in Tang (1996) that *saai3* demonstrates a locality effect, which suggests that *saai3* will associate with the direct argument if there is one; otherwise, it will associate with other elements in the argument structure, for instance, the external or spatiotemporal argument. A similar claim is made in Lee (1994, 1995) who thinks that *saai3* will only associate with the subject if the object is non-divisible or non-referential. Based on previous analyses, I will show that the association of *saai3* with the arguments demonstrates some kind of hierarchical order.

5.3.1.3 Subjects vs Objects

The interpretation of *saai3* demonstrates a hierarchical order of objects over subjects. Consider the examples below.

(167) 佢哋 做晒 嗰幾個 exercises 啦.

they do-SAAI those-few-exercises SFP

“The students have done all those few exercises.”

(168) 佢哋 食晒 嗰兩個蘋果.

they eat-SAAI those-two-CL-apples

“They have eaten up all those two apples.”

(169) 佢哋 攞晒 我本書.

they take-SAAI my-CL-book

“All of them have taken my book.”

When both the subjects and the objects are divisible and specific, *saai3* selects the DOs over the subjects, hence, the following order.

(170) [+plural] & [+specific] DOs > [+plural] & [+specific] subjects.

Notice that we are suggesting a hierarchical order of DOs over subjects here. Tang's claim that as long as there exists a DO, *saai3* will never select the subject is too strong. In (169), *saai3* quantifies over the subject, the only plural NP in the sentence, even though there is a DO. (169) gives the meaning "all of them have taken my book". Notice that if *saai3* quantifies over the DO directly, the meaning of (169) becomes "They have taken all copies of my book", which is not the desired reading of the sentence. (169) only requires all individuals denoted by the subject have taken my book, and whether all copies of my book have been taken or not is not at issue here.

Such a hierarchical order gains further support in the following examples which are mentioned in previous analyses.

(171) (a) 佢哋 去晒 西藏.

They go-SAAI Tibet

"All of them have gone to Tibet."

(b) 河邊 種晒 蘆葦.

riverside plant-SAAI willows

"All of the riverside is planted with willows."

Previous analyses claim that *saai3* quantifies over the subjects 佢哋 'they' and 河邊 'riverside' in (171a) and (171b), respectively, since the object of the former 西藏 'Tibet' is singular and that of the latter is non-specific. We agree with previous analyses in the sense that *saai3* quantifies over the subject NPs in (171a) and (171b). The above sentences also show that *saai3* can associate with the subject, despite the existence of a DO, again showing that Tang's asymmetry account is too strong.

Incorporating the above results into the hierarchy, we can arrive at the following hierarchy.

(172) [+plural] & [+specific] DOs > [+plural] & [+specific] subjects > verbal predicates/VOs.

The above demonstrates a hierarchical order of objects over subjects. To further examine the hierarchical order between the DO and the subject concerning the interpretation of *saai3*, observe the interaction between a plural subject and a divisible object which is realized by the “CL + noun” construction. These nouns are singular in form, but semantically plural, due to their divisibility. Let us assign a [+part] feature to such a DO. Hence, when the DO is divisible, it will carry a [+part] feature, and when it is interpreted as a whole, the relevant feature will be [-part] or [+whole]. Hence, it would be very interesting to see how a noun with the “CL + noun” construction interacts with a plural subject. Consider the example below.

(173) (a) 我哋 飲晒 杯茶.

we drink-SAAI CL-tea

(b) “We finished the cup of tea together.”

(c) “All of us have drunken our own cups of tea.”

In (173), we have a singular object in the “CL + noun” construction. There are two logical possibilities for (173), since both the subject and the object are semantically plural. The reading in (173b) has *saai3* quantifying over the DO, and the reading is “we together finished a particular cup of tea”. Under such a reading, the object is interpreted as divisible, and with *saai3* quantifying over such an object, we have *saai3* performing a universal quantification over parts of the object denoted by the DO. Hence, this gives rise to an interpretation that every part of the relevant cup of tea is consumed by the subject. Such a reading can in fact be predicted from our hierarchical order in (172), since with both DOs and subjects being semantically plural, *saai3* should select the DO.

However, what I would like to show here is that when we have a DO which is singular in form but can be divided into parts in a “CL + N” construction, the DO is in fact open to two possible interpretations, one is the [+part] reading just described and another is to have the [+part] DO interpreted as a whole. In the latter case, the DO will no longer demonstrate a part reading, rather it is taken as a whole or in its entirety. The reading of (173a) then becomes (173c), that is, “all of us have drunken our own cups of tea”. Such a reading does not require every one of us having finished our own cups of tea, since the DO is viewed as a whole, with its part reading no longer dominating. What concerns us is every individual denoted by the subject has consumed his/her own cup of tea, be it a sip or the entire cup. The inference of having most or every one of us finished our own cup is a pragmatic implicature, which can be cancelled, as shown below.

(174) (a) 佢哋 飲晒 杯茶, 個底 係 因為 啲茶葉.

They drink-SAAI cup-tea CL-bottom be because the-tea-leaves

“They have drunk all of the tea. The bottom part is due to the tea leaves.”

(b) 佢哋 飲晒 杯茶 㗎啦,

They drink-SAAI cup-tea SFP-SFP

阿 John 同阿 Man 不𦉳 飲淨 四分之一 㗎啦.

Ah John and Ah Man for-long drink-remain one-fourth SFP-SFP

“They have drunk the entire cup of tea. John and Man used to drinking only one-fourth of the cup.”

The sentences in (174) show that most of them did not finish some portions of the tea, while (174b) demonstrates that not every individual in that group has finished their own cup of tea. Both sentences are semantically well-formed, revealing that when we have *saai3* quantifying over the subject, *saai3* is no longer sensitive to the part reading of the

DO.

However, whether (173b) or (173c) is the preferred reading of (173a) is influenced heavily by both context and the nature of the DO. In sentences like (173a) which involves the consumption of some drinks, under such a context, (173c) will be the preferred reading, since it is counterintuitive to have all of us sharing one single cup of tea. However, in more neutral contexts, (173b) is in fact the dominant one.

(175) (a) 佢哋 食晒 盒糖.

they eat-SAAI box-candies

(b) “They have finished the entire box of candies.”

(175a) has the reading predicted by the hierarchy, since unlike (173), it is natural for a box of candies to be taken as parts, with each candy being part of the box. Therefore, we will have *saai3* quantifying over the DO which is singular in form but plural in meaning. The reading in (175b) does not require every individual denoted by the subject to have eaten the candy, since universal quantification by *saai3* is not over the subject but the DO, hence, as long as all parts of the box are consumed, we will have our desired reading. Notice that sentences like (173) and (175) illustrate that when we have a DO which is in a “CL + N” construction, that is, singular in form but demonstrates a part reading, either the subject or the [+part] DO is being quantified over but not both, and when it is the former case, the DO will then be interpreted as a whole, with no parts. In other words, the NP selected by *saai3* should bear the [+part] feature. If a DO does not have [+part], then it will not be selected, and the next available candidate will be the subject. Hence, the grammatical hierarchy in (170) can be represented in the form of the following.

(170') [+part] & [+specific] DOs > [+part] & [+specific] subjects.

Based on the above discussion, we arrive at the following.

(176) A General Condition on the Interpretation of “CL + Noun” Objects with *saai3*
‘all’

Objects consisting of parts, that is, with the [+part] feature, will have part reading when quantified over by *saai3*; otherwise, a [-part] reading (that is, as a whole), when *saai3* quantifies over plural NPs other than the DO in the sentence, e.g. the plural subject.

5.3.1.4 A Priority of DO over IOs/Postverbal PPs/Preverbal PPs

Like *-hoi1* and *maai4*, *saai3* also demonstrates a hierarchical order of DOs over postverbal PPs.

- (177) 我 散晒 啱啱買嗰啲書 喺張枱度.
 I scatter-SAAI just-bought-those-books on-CL-table-location
 “I scattered all the books I just bought over the table.”

- (178) 你 擺晒啱啱買嗰啲書 喺張枱度.
 you put-SAAI just-bought-those-books on-CL-table-location
 “You have put all the books I just bought on the table.”

From the interpretations of the above sentences, we can see that *saai3* will select the DO instead of the postverbal PP, demonstrating a hierarchical order of DO over postverbal PPs. Now consider the examples of IOs and DOs.

DO vs IO

PDC pattern

- (179) 我 送晒 以前啲 VCD 比佢哋.
 I give-SAAI old-VCDs to them

“I have given all my old VCDs to them.”

(180) 我 擺晒 嗰幾個袋 比佢哋.

I take-SAAI those-few-CL-bags to them

“I have taken all those few bags for them.”

(181) 我 俾晒錢 比啲學生.

I give-SAAI-money to those-students

“I have given money to all those students.”

IDOC pattern

(182) 我 俾晒 啱啱買嗰啲書 (俾)佢哋.

I give-SAAI just-bought-those-books (to) them

“I have given all the books I have just bought to them.”

(183) 我 俾晒 嗰堆書 (俾)佢哋.

I give-SAAI that-pile-books to them

“I have given all the books in that pile to them.”

(184) 我 俾晒錢 (比)佢哋.

I give-SAAI-money to them

“I have given money to all of them.”

Both PDC and IDOC patterns involve a DO argument and an IO with dative markers, hence, the IO can be considered on a par with postverbal PPs. When both the DO and the IO are [+specific] and plural, the preferred reading of *saai3* is to associate with the DO, as shown in (179), (180), (182) and (183). This demonstrates that like *-hoi1* and *maai4*, a hierarchical order of direct arguments over indirect ones also exists in *saai3*. On the other hand, when we have a bare noun DO and a [+specific] and plural IO, as exemplified in (181) and (184), the readings of the sentences show that *saai3* associates with the [+specific] and plural IO, instead of the bare noun DO. This reveals that when both IOs and DOs in PDC and IDOC constructions are possible candidates,

quantification of *saai3* demonstrates a hierarchical order of DOs over IOs.

Before closing our discussion on dative arguments, a few points can be made about the cases with directional PPs and serial verbs.

(185) (a) 我 寄晒信 去嗰啲公司度.

I send-SAAI-letters to-those-companies-location

“I have sent letters to all those companies.”

(b) 我 寄晒信 俾嗰啲公司.

I send-SAAI-letter to-those-companies

“I have sent letters to all those companies.”

(c) 我 send 晒 memo 落樓下啲 office.

I send-SAAI-memos down-downstairs-offices

“I have sent memos to all offices downstairs.”

(d) 我 send 晒 e-mails 到呢幾個地方.

I send-SAAI-e-mails to-these-few-CL-places

“I have sent e-mails to all these places.”

(e) 我 落晒油 炒啲菜.

I put-SAAI-oil fry-the-vegetables

“I have spread oil all over to fry the vegetables.”

The sentences from (185a) to (185d) have *saai3* quantifying over the postverbal PPs, which can be treated on a par with the dative argument with the dative marker “to”. These cases show that like the case of other verbal suffixes, the directional preposition, like the dative one, is transparent to the quantification of *saai3*, hence sentences (185a) to (185d) do not contain a serial verb construction. Contrast (185a-d) with (185e), we can see that we have a serial verb construction in (185e), and the interpretation of *saai3* with the VO 落油 ‘put oil’ demonstrates that the quantification of *saai3* is restricted to

a local domain, and hence, fails to extend to the second clause 炒啲菜 ‘fry the vegetables’.

How about cases where both dative arguments and postverbal directional PPs are present?

(186) (a) 我送晒花 去啲公司度 俾佢哋.

I send-SAAI-flowers to-the-companies-location to-them

“I have sent flowers to all those companies for them.”

“I have sent flowers to those companies for all of them.”

(b) 我 派晒信 去啲公司度 俾佢哋.

I send-SAAI-letter to-the-companies-location to-them

“I have delivered letters to all those companies for them.”

“I have delivered letters to those companies for all of them.”

The interpretations of the above sentences demonstrate that when both postverbal PPs and dative construction, are present in the sentences, the relevant interpretations are ambiguous between the two. Hence, we can consider the two logically occupying the same position in the hierarchy.

The hierarchical order of direct arguments over indirect ones gains further support in the cases where we have both DO and IO as arguments and possible candidates for *saai3* to associate, as shown in (187) below. It can be predicted that with both IO and DO being [+specific] and plural and the IO lacking a dative marker, the readings of *saai3* toward the association with DO or IO should be ambiguous, as in other suffixal quantifiers. Such prediction is in fact borne out in (187).

(187) 我 俾晒 佢哋 我嘅書.

I give-SAAI them my-Poss-book

“I have given them all my books.”

“I have given all of them my books.”

Concerning the hierarchical order between preverbal PPs and subject, examples below show that the former has a higher priority over the latter.

(188) (a) 我哋幾個 同佢 反晒面.

we-few-CL with-him/her in-SAAI-bad terms

“All of us are in bad terms with him/her.”

(b) 我 同佢哋幾個 反晒面.

I with they-few-CL in-SAAI-bad-terms

“I am in bad terms with all of them.”

(c) 我 同佢 反晒面.

I with him/her in-SAAI-bad-terms

“I am in total bad terms with him/her.”

(d) 我哋 同佢哋幾個 反晒面.

we with-them in-SAAI-bad terms

“We are in bad terms with all of them.”

(189) (a) 佢 對嗰幾個學生 動晒粗.

s/he to-those-few-students use-SAAI-force

“S/he used force to all those few students.”

(b) 佢哋 對嗰幾個學生 動晒粗.

They to-those-few-students use-SAAI-force

“They used forced to all those students.”

(c) 佢哋幾個 對嗰個學生 動晒粗.

They-few-people to-that-student use-SAAI force

“All of them used force to that student.”

The sentences from (188a) to (188c) demonstrate that *saai3* will quantify over the preverbal PP with a [+specific] and plural NP, if there is one; otherwise it will associate with the [+specific] and plural subject, with the degree/extent of the verbal predicate being the last option. In (188c), *saai3* quantifies over the degree denoted by the verbal predicate. (188d) demonstrates that when both subject and the NP in the adjunct are [+specific] and plural, *saai3* will quantify over the PP instead of the subject.

The hierarchical order of preverbal PPs over subjects gains further support in (189). The well-formedness of (189a) and (189c) show that *saai3* is possible to quantify over the preverbal PP and the subject, respectively. The interpretations of (189b) and (189c) also show that a hierarchical order of preverbal PPs over subjects regarding the quantification of *saai3*, with the degree denoted by the verbal predicate having the lowest priority.

Finally, the interpretations of the sentences below demonstrate a hierarchical order of dative arguments over preverbal PPs.

(190) 我哋 喺嗰個地方 送晒書 俾佢哋.

We at-those-places give-SAAI-books to-them

“We have given books to all of them in those places.”

(191) 我 同幾個 friend 送晒書 俾佢哋.

I with-several-friends send-SAAI-books to-them

“I have given books to all of them with my few friends.”

Both preverbal PPs and dative arguments are possible candidates of *saai3*, since the DOs in the sentences are [-specific], and thus not a possible candidate for *saai3*. *Saai3* selects the dative arguments instead of the preverbal PPs in both sentences, supporting a hierarchical order of dative arguments > preverbal PPs (V-licensed PPs).

From the above, we arrive at the conclusion that the association of *saai3* demonstrates the following hierarchical order in eventives.

(192) The Hierarchy for Association of *saai3* in Eventives

DO/IO direct arguments > indirect dative arguments (with overt or covert dative markers)/postverbal PPs > preverbal PPs (V-licensed PPs) > subjects > degrees of the verbal predicate.

All the above associations have to satisfy the plurality condition and the specificity condition of *saai3*.

5.3.5 *Saai3* with statives

Unlike previous studies, I consider that *saai3* can occur with adjectival predicates, but with some restrictions to be illustrated below.

5.3.5.1 Adjectival statives

Previous analyses argue that when *saai3* occurs with adjectival predicates, the predicates in question are required to denote a change of state. However, this requirement is too strong. Consider the occurrences of adjectival predicates and *saai3* below.

(193) 你睇吓, 間房 乾淨晒 啦. (cited from M&Y 1994)

you look-Asp CL-room clean-SAAI SFP

“Look, the room is all nice and clean (now).”

(194) 你 錯晒. (from Pan & Man 1998)

you wrong-SAAI

“You are completely wrong.”

- (195) 佢個樣 殘晒.
 s/he-CL-face destroyed-SAAI
 “S/he looked completely destroyed.”

- (196) 佢 盲/聾/跛晒.
 S/he blind/deaf/limb-SAAI
 “S/he is completely blind/deaf/limb.”

Sentences (193) to (196) demonstrate that *saai3* can quantify over the degree denoted by the adjectival predicate, giving a reading that the relevant property has reached its maximum degree. All the relevant predicates above do not necessarily indicate a change of state, as the individual may have entered into the relevant state long before.

However, when there is an appropriate argument for *saai3* to quantify over, *saai3* will select such an argument, instead of the degree predicate.

- (197) 佢塊面 紅晒.
 his/her-CL-face red-SAAI
 “His/her face is completely reddened.”

- (198) 佢啲頭髮 白晒 啦.
 his/her-hair white-SAAI SFP
 “His/her is completely white.”

- (199) 佢 叻晒 喺啲衰嘢度.
 s/he smart-SAAI at-those-bad-things-location
 “S/he is smart all at bad things.”

Sentences like (197), (198) and (199) are well-formed *saai3*-sentences with adjectival predicates. *Saai3* quantifies over the subject NPs describing the areas of his/her hair and his/her face in (197) and (198), while *saai3* quantifies over the boundary set by the PP

in (199).

The priority of *saai3* to associate with the plural subject over the degree denoted by the adjectival predicate is more obvious in the examples below.

(200) 佢哋 錯晒.

you wrong-SAAI

“All of them are wrong.”

Not: “They are completely wrong.”

(201) 佢哋 殘晒.

they destroyed-SAAI

“All of them look destroyed.”

Not: “They look completely destroyed.”

(202) 佢哋 盲/聾/跛晒.

they blind/deaf/dumb-SAAI

“All of them are blind/deaf/limb.”

Not: “They are completely bind/deaf/limb.”

Sentences above show that *saai3* will associate with the plural subject, instead of the degree denoted by the adjectival predicate. *Saai3* will only associate with the degree of adjectival predicate when the subject is singular, showing a hierarchical order of plural subjects > degree denoted by adjectival predicates.

Moreover, the same hierarchical order between postverbal PPs and subjects can be found in adjectival predicates, as shown below.

(203) (a) 佢 叻晒 喺啲衰嘢度.

S/he smart-SAAI at-those-bad-things-location

“S/he is smart all at bad things.”

- (b) 佢哋 叻晒 喺啲衰嘢度.
 they smart-SAAI at-those-bad-things-location
 “They have their talent spent all on bad things.”

(203b) clearly shows that *saai3* will select the postverbal PPs over the subjects, showing a hierarchical order of postverbal PPs > subjects.

Based on the above, we can see that it is not accurate to claim that *saai3* cannot occur with adjectival predicates. However, the occurrence of *saai3* with adjectival predicates is subject to the following condition.

(204) A Condition on the Occurrence of *saai3* with Adjectival Predicates

Saai3 is compatible with adjectival predicates if one of the following factors is satisfied:

- (i) the relevant adjectives are gradable; (ii) a set is denoted by the object; and (iii) the subject is plural or generic.

Hence, when *saai3* occurs with adjectival predicates, it quantifies over (i) the degree triggered by the adjectival predicates; (ii) the boundary encoded in the sentence; or (iii) verbal arguments or adjuncts matching its features.

5.3.5.2 Stative verbs

In the case of stative verbs, no matter whether it is individual-level or stage-level, the quantificational pattern is similar to that of eventives.

- (205) 佢 似晒 佢老豆.
 s/he resemble-SAAI his/her father
 “S/he resembles his/her father totally.”

- (206) 佢啲近視 喺晒一隻眼.
his/her short-sightedness at-SAAI-one-CL-eye
“His/her short-sightedness is all at one eye.”
- (207) 佢 有晒眼, 耳, 口, 鼻, 十足個人.
s/he have-SAAI eye ear mouth nose very-much-like-CL-person
“S/he has all – eyes, ears, mouths and noses, which makes her very much like a person.”
- (208) 佢 識晒 呢度啲人.
s/he know-SAAI here-people
“S/he knows all the people here.”
- (209) 恐龍 絕晒種.
dinosaurs extinct-SAAI
“All dinosaurs are extinct.”
- (210) 佢哋 病晒.
they sick-SAAI
“All of them are sick.”

Saai3 associates with the DOs in (205) to (208), that is 佢老豆 ‘his/her father’ in (205), 一隻眼 ‘one eye’ in (206), 眼, 耳, 口, 鼻 ‘eyes, ears, mouths, noses’ in (207) and 呢度啲人 ‘people here’ in (208), no matter whether the relevant statives are individual-level or stage-level. When no object is found in the sentence, *saai3* will associate with the subject, cf. (209) and (210).

Like the case of eventives, in the case of stative verbs, *saai3* will select the stative verbs as its last resort.

- (211) (a) *佢 病晒.
s/he sick-SAAI

(b) 佢 搞到 自己 病晒 咁, 真係可憐.

s/he make-arrive himself/herself sick-SAAI SFP really-be-pathetic

“S/he made himself/herself completely ill. How pathetic s/he is!”

(212) (a) *佢 對人 客氣晒.

s/he to-people courteous-SAAI

(b) 佢 受過 教訓, 而家 對人 客氣晒 啦.

s/he have-Exp lessons now to-people courteous-SAAI SFP

“S/he has had lessons. Now s/he is completely courteous to people.”

(213) (a) 佢 受過 教訓,

s/he have-Exp lessons

而家 (佢) 對自己嘅人 客氣晒 啦.

now s/he to-own-Poss-people courteous-SAAI SFP

“S/he has had lessons. Now s/he is courteous to all his/her own people.”

(b) 佢哋 受過 教訓,

they have-Exp lessons

而家 (佢哋) 對嗰幾個老師 客氣晒 啦.

now they to-those-teachers courteous-SAAI SFP

“They have had lessons. Now, they are courteous to all those teachers.”

No compatible arguments can be found in (211) or (212). The ill-formedness of (211a) and (212a) shows that unlike the case of eventives, the association of *saai3* with stative verbs is rather unlikely, and needs more context to support the relevant reading. However, the relevant association is still possible, as shown in (211b) and (212b). Both *saai3* in (211b) and (212b) associate with the stative verb, and like the case of eventives, we have *saai3* quantifying over the extent/degree denoted by the stative verb. (213a) and (213b) show that like eventives, *saai3* quantifies over the preverbal PP with [+specific] and plural NP (if there is one), instead of the subject. Hence, stative verbs

reveal a hierarchical order of DO > preverbal PPs with [+specific] & plural NPs > subjects > stative verbs.

Generalizing from the above discussion on *saai3* with statives and eventives, we can now come up with the following hierarchies.

(214) The Hierarchies for Association of *saai3* in Stative Predicates

(i) Adjectival statives: preverbal PPs > subjects > adjectival predicates

(ii) Stative verbs: DOs > preverbal PPs > subjects > stative verbs

(i) + (ii): DOs > preverbal PPs > subjects > adjectival predicates/stative verbs

(215) The Hierarchy for Association of *saai3* in Eventives

DO/IO direct arguments > indirect dative arguments (with covert or overt dative markers)/postverbal PPs > preverbal PPs > subjects > verbal predicates/VOs

Notice that the selection of constituents from the above hierarchies is subject to both the plurality condition and the specificity condition of *saai3*.

5.4 A General Hierarchy for Suffixal Quantifiers

I have shown above the relevant hierarchies of different suffixal quantifiers, when all arguments are potential candidates, satisfying the selectional restrictions of the affixes in question. These hierarchies are repeated below.

(216) The Hierarchy for *-hoi1*

-Hoi1, as a generic quantifier, binds the constituent determined by the following hierarchy:

DO/IO direct arguments > indirect dative arguments (with covert or overt dative markers) > preverbal PPs (V-licensed PPs) > verbal/adjectival predicates/VOs > temporal phrases

(217) The Hierarchy for *maai4*

Maai4, as an additive quantifier, binds the constituent determined by the following hierarchy:

[+definite] DO/IO direct arguments > [+definite] indirect dative arguments (with covert or overt dative markers)/postverbal PPs > preverbal PPs with [+definite] arguments > verbal/ adjectival predicates or VOs

(218) The Hierarchies for *saai3*

Saai3, as a universal quantifier, binds the constituent determined by the following hierarchies:

Adjectival statives and stative verbs

Adjectival statives:

[+plural] subjects > adjectival predicates

Stative verbs:

[+specific] & [+plural] objects > preverbal PPs (V-licensed PPs) with [+specific] & [+plural] NP > [+plural] subjects > degrees/extents denoted by stative verbs and VOs

Eventives

[+specific] & [+plural] DO/IO direct arguments > [+specific] & [+plural] indirect dative arguments/postverbal PPs > preverbal PPs (V-licensed PPs) with [+specific] & [+plural] NPs > [+plural] subjects > degrees/extents of verbal predicates/VOs.

The hierarchies above demonstrate a nice pattern. Individual hierarchies can be unified into a general hierarchy as follows:

(219) A General Hierarchical Order of Association in Suffixal Quantifiers

DO/IO direct arguments > indirect dative arguments (with covert or overt dative markers)/postverbal PPs > preverbal PPs (V-licensed PPs) > subjects > verbal/adjectival predicates/stative verbs/VOs

(219) represents the general hierarchical order of argument association in suffixal quantifiers, and the relevant association is subject to the selectional restrictions and the semantics of particular affixes. The general hierarchy simply shows that when a certain suffixal quantifier can go with all verbal arguments, the hierarchical order will be that of (219), i.e. the argument at the relative higher position in the hierarchy will be selected. Moreover, when there is an appropriate argument in the sentence, association of the suffix with the verbal and adjectival predicates, and the temporal phrase in the case of *-hoi1*, will be the last resort.

6. Interaction between Suffixal Quantifiers and Other logical Operators

6.1 Blocking Effect of Subject Quantification by Verbal Operators

As observed in Cheung (1972), Bai (1985) and T. Lee (1995), if the predicate contains another quantificational element, specifically a negator (cf. (221b & 221c)) or a modal (cf. (221c)), quantification over the subject by *saai3* will not be possible. Relevant examples are repeated below.

(220) 佢哋 攞晒 本書.

they take-SAAI CL-book

“All of them have taken a copy of the book.”

(221) (a) *佢哋 唔攞晒 本書.

they not take-SAAI CL-book

- (b) *佢哋 攞得晒 本書.
 they take-DAK-SAAI CL-book
- (c) *佢哋 攞唔晒 本書.
 they take-not-SAAI CL-book

As explained in the previous literature, (221a) demonstrates the failure of *saai3* to quantify over the subject due to the blockage by the negator. Since the object NP is neither divisible nor plural and there is no NP other than the object within the scope of the negator that can be quantified by *saai3*, (221a) is thus ill-formed. Similarly, the postverbal particle *dak1* ‘can’ forms the potential construction 攞得晒 ‘take-DAK-SAAI (take-can-all)’ in (221b), and its presence again blocks the quantification of *saai3* over the subject, making the sentence ill-formed. The blocking effect of subject quantification by the negator is also found in the construction 攞唔晒 ‘take-not-SAAI (take-not-all)’ in (221). Contrasting (220) with (221), we can see that when these blockers are removed in (220), *saai3* can quantify over the plural and specific subject NP. Since the plurality and the specificity conditions of *saai3* are satisfied in (220), the sentence is thus well-formed. Hence, the question now is why quantification over the plural subject is not possible for *saai3* when the negator *m4* and the postverbal modal *dak1* are added?

In fact, since verbal suffixes are quantifiers, we can predict that the blockers should be operators, not predicate modifiers, which is supported by the examples below.

- (222) (a) 佢哋 拿拿林 攞晒 本書.
 they quickly take-SAAI CL-book
 “All of them have quickly taken a copy of the book.”
- (b) 佢哋 拿拿林 食晒飯.
 they quickly eat-SAAI-rice

“All of them quickly have had their meals.”

The well-formedness of both sentences above demonstrates that *saai3* can associate with the [+plural] and [+specific] subject in the sentence. This shows that preverbal manner adverbials, which are predicate modifiers, are not blockers of subject quantification. Moreover, the blockers are restricted to verbal operators or VP-operators, but not IP-operators.

(223) (a) 佢哋 有 攞晒 本書.

they have take-SAAI CL-book

“It is the case that all of them have taken the book.”

(b) 佢哋 會 攞晒 本書.

they will take-SAAI CL-book

“All of them will take the book.”

The pre-predicate *jau6*, which is treated as an existential operator, attaches to the IP. The grammaticality of (223) and (223b) shows that the pre-predicate 有 *jau6* ‘have’ and the modal 會 *wui3* ‘will’ do not create a blocking effect in these two cases. Hence, (223a) and (223b) suggest that what causes the ill-formedness of sentences in (221) is the presence of the verbal operators like *m4* and *dak1*. The relevant suffix fails to directly associate with the subject, due to the blocking effect created by them.

Notice that as shown in the hierarchy in (219), the association of *saai3* with the extent or the degree denoted by the VO or the verbal predicate will be the last resort of the quantification of *saai3*. Hence, (221a) and (221b) will be well-formed if such an interpretation is possible. However, the realis of such kind of association contradicts with the irrealis of the contexts created by the negator *m4* and the postverbal modal *dak1*, which is also a factor leading to the ill-formedness of the relevant sentences.

Since neither *maai4* nor *-hoi1* can associate with subjects, it is pointless to talk about its blocking effect here. Generalized from the above results, a general constraint on suffixal quantifiers is proposed below:

(224) A General Constraint on Quantification of Subjects by Affixal Quantifiers

Quantification of subjects by an affixal quantifier is blocked by verbal operators.

6.2 Suffixal Quantifiers with Numeral Object NPs

Concerning the interaction between numeral NP objects and the affix, it is observed that either the numeral NP blocks subject quantification, resulting in ill-formedness of the relevant sentence, or the numeral NP is interpreted as a quantified NP. Relevant examples are repeated below.

(225) *佢哋 攞晒 三本書.

they take-SAAI three-CL-books

(226) *我 食晒 兩碗飯.

I eat-SAAI two-CL-rice

Both (225) and (226) are ill-formed, since it is suggested that the occurrence of the indefinite or non-referential numeral NP has blocked the quantification over the subjects, which are both possible candidates. However, why such a numeral NP can create such a blockage is never explained adequately in previous analyses. Tang's account is that the presence of any DO will make the interpretation of the affix (in his case, *saai3*) with the subject impossible. Hence, if the DO is not the right candidate, the relevant sentence will result in ill-formedness, even though the subject is a potential candidate. T. Lee (1995) explains sentences like (225) and (226) in the way that the non-referential numeral NP has made the relevant VP ill-formed, due to its incompatibility with *saai3*,

and hence, the subject cannot select such an ill-formed VP. Both explanations are reasonable in the sense that they both appeal to the incompatibility between *saai3* and the numeral object NP to account for the relevant ill-formedness. However, what actually hinders *saai3* from selecting the subject?

A similar incompatibility between suffixal quantifiers and numeral object NPs is found in the case of *maai4*. Relevant examples are given below for demonstration.

(227) (a) *我食埋 兩碗飯 啦.

I eat-MAAI two-CL-rice SFP

(b) *佢哋 行埋 兩個圈 啦.

They walk-MAAI two-CL-circle SFP

(c) *佢 唔食埋 一碗飯.

I not eat-MAAI one-CL-rice

The ill-formedness of (227a-c) again shows that *maai4* is not compatible with the numeral object NPs. The case of *maai4* is easier to explain, since *maai4* requires its argument to be definite, not just specific, and hence, the numeral object NP definitely cannot fulfill such a requirement. However, the problem is what hinders *maai4* from selecting the verbal predicate which should be the last resort in the hierarchy.

Unlike the case of *saai3* and *maai4*, *-hoi1*, which does not require the DO to be definite or specific, can interpret the numeral DO as a quantified NP. Consider the examples below.

(228) 我 食開 一碗飯.

I eat-HOI one-CL-rice

“When I eat rice, I have one bowl.”

(229) 佢 飲開 一杯齋咖.

s/he drink-HOI one-CL-black-coffee

“When she drinks black coffee, s/he drinks one cup.”

(230) 我 俾開 一本書 佢.

I give-HOI one-CL-book him/her

“When I give books to him/her, I give him/her one.”

The “one + CL + N” expression has the interpretation of “one + N” in English, instead of “a + N”. The introduction of *-hoi1* gives a recurring reading to the entire event, with the quantity involved being “one” at each occurrence.⁵ *-Hoi1* has blocked the indefinite reading, and gives the NP a quantity reading. Since *-hoi1* does not require its associated DO to be definite or specific, it can go with the indefinite numeral NP. However, the question is why the numeral NP is interpreted as a quantified NP, not an indefinite?

6.3 Suffixal Quantifiers with Wh-indefinites

Suffixal quantifiers fail to license wh-indefinites, and these wh-words receive an interrogative interpretation, instead of the quantificational meaning conveyed by the affix, which is exemplified below.

⁵ Such a reading is more difficult to get with some predicates, due to the habitual meaning of *-hoi1*. However, we think that this is due to the influence of pragmatics.

- (i) 呢間醫院 死開 一個人.
 this-CL-hospital die-HOI one-CL-person
 “This hospital generally has one person dead.”
- (ii) 佢 喊開 一個鐘.
 s/he cry-HOI one-CL-hour
 “S/he generally wins one race.”

The sentences above sound odd, not because of semantic reasons, but of pragmatic reasons. It is counter-intuitive to consider the events described above as some kind of habits.

(231) 你 睇開 乜嘢書?

you read-HOI what-book

“When you read, what kind of books you generally read?”

(232) 佢哋 行晒 邊度?

they walk-SAAI where

“Where have they walked all over?”

(233) 佢哋 擺埋 乜嘢?

they take- MAAI what

“What have they taken as well?”

In the three sentences above, the affixes fail to quantify over the wh-words, and the relevant sentences only have an interrogative reading not a declarative one (cf. also T. Lee 1995).

7. Summary

The studies on suffixal quantifiers *-hoi1*, *maai4* and *saai3* suggest the following shared properties among them. These properties make suffixal quantifiers distinct from Q-adverbs and other preverbal quantifiers. Some of the crucial features are summarized in the following table.

Table 1: The Basic Facts concerning Suffixal Quantifiers

	Facts	<i>-Hoi1</i>	<i>Saai3</i>	<i>Maai4</i>
(i)	Selective or unselective binders	Unselective binder	Unselective binder	Unselective binder
(ii)	Subject to syntactic constraints	+	+	+
(iii)	Subject to the plurality condition	+	+	—
(iv)	Able to quantify over subjects	—	+	—
(v)	Blocking effect over subject quantification by <i>m4</i> and <i>dak1</i>	/	+	/
(vi)	Able to license indefinite numeral object NPs	Fail to license	Incompatible with indefinite numeral object NPs	Incompatible with indefinite numeral object NPs
(vii)	Able to license wh-indefinites	—	—	—
(viii)	Subject to locality constraint	+	+	+
(ix)	Scopes	vP	vP or TP	vP

The basic fact shown in (ii) concerns the crucial role of verbal arguments in suffixal quantification. The association of the relevant arguments with suffixal quantifiers demonstrates the following hierarchical order.

(234) A General Hierarchical Order of Association in Suffixal Quantifiers

DO/IO arguments > dative arguments/postverbal PPs > preverbal PPs (V-licensed PP) > subjects > verbal predicates/adjectival predicates/stative verbs/VO compounds

Moreover, (vi) shows that when the numeral NP can be interpreted under the suffixal quantifier in question, it is at most interpreted as a quantified NP not as an indefinite, as in the case of *-hoi*.

I will explain the last two facts, (viii) and (ix), in Chapter 5, which are listed here together with other properties of suffixal quantifiers for the sake of comparison. In the next chapter, adopting a syntax-semantics mapping approach, I will explain all these basic facts of suffixal quantifiers.