

## Chapter 3

### Previous Analyses on *-hoi1*, *-maai4* and *-saii3*

#### 1. Overview

In this chapter, I will introduce some previous studies on the three Cantonese verbal suffixes which are *-hoi1* ‘open’, *maai4* ‘also’ and *saii3* ‘all’. These studies generally give a descriptive analysis to these suffixes, with meanings of each suffix diversified from others. Moreover, previous analyses emphasize the (non)-aspectuality of these suffixes to characterize their meaning differences.

#### 2. Previous Analyses on *-hoi1* and Their Limitations

One major issue in the previous analyses of *-hoi1* is to characterize its meaning, a very subtle issue, leading to a variety of classifications. Below, I will give a sketch of how *-hoi1* is analysed in some of these studies.

*-Hoi1* is assumed to be an aspect marker by previous analyses, and they either treat *-hoi1* on a par with *-gan2*, *-zyu6* as a progressive aspect marker (cf. Gao 1980), or categorize it under a different category, as a continuative or habitual marker (cf. Cheung 1972, Yue-Hashimoto 1993, Matthews & Yip (henceforth M&Y, 1994), Li 1995). However, neither of these aspectual approaches can adequately explain the properties of all *hoi1*-sentences.

##### 2.1 *-Hoi1* as a Progressive Marker

Gao (1980) does not differentiate among the aspect markers *-gan2*, *-zyu6* and *-hoi1*, and groups all three under the category “progressive aspect marker” which marks the on-going status of an event, as exemplified by the sentences below.

(1) (a) 佢 食嚟 飯.

s/he eat-Prog rice

“S/he is having his/her meal.”

(b) 佢 食開 飯.<sup>1</sup>

s/he eat-HOI rice

“She is having his/her meal.”

(c) 佢 食住 飯.

s/he eat-Imp rice

“She is in the state of having his/her meal.”

Gao regards sentences (1a) through (1c) as having the same interpretation, with all of them meaning that the relevant “eating” action is on-going or in progress. However, Cheung (1972) thinks that these three markers actually make different contributions to sentence meaning. He uses the following examples to illustrate his point.

(2) (a) 佢 著嚟 件紅色衫.

s/he wear-Prog CL-red-shirt

“S/he is wearing a red shirt.”

(b) 佢 著開 件紅色衫.

s/he wear-HOI CL-red-shirt

“S/he is used to wearing a red shirt.”

(c) 佢 著住 件紅色衫.

s/he wear-Imp CL-red-shirt

“S/he has her/his red shirt on.”

Cheung considers these three sentences as bearing different emphases: (2a) emphasizes the dynamicity of the action, i.e. the individual is performing the action of “putting on the red shirt”; (2b) the continuative (in Cheung’s terminology) or habitual (in M&Y’s terminology) sense of the sentence, i.e. the individual either has been wearing red shirts and is likely to continue wearing them, or has the habit of wearing red shirts; and (2c) the state of the individual, which is “having a red shirt on”. Hence, these three aspect markers exhibit different semantic properties and should not be grouped under the same category

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<sup>1</sup> Since this chapter focuses on previous analyses on the three suffixes, all translations of sentences with *-hoi1*, *maai4* and *saai3* given in this chapter are basically those provided by previous analyses, and hence, may not be the actual meanings of the relevant sentences.

“progressive marker.”

Following Cheung, I consider that *-hoi1* cannot be a progressive marker, while *-gan2* is a true progressive marker. Although *-zyu6* may function similarly to *-gan2*, its semantics is different from *-gan2*, so it is more like an imperfective but non-progressive marker in Cantonese. One distinct difference between *-gan2* and *-zyu6* can be revealed from their different distributions: *-zyu6* generally appears in subordinate clauses and seldom stands alone in the main clause without the co-existence of sentence final particles like *sin1* ‘first/before’; and *-gan2* can appear in both subordinate and main clauses. For an aspect marker to be a progressive marker, it must be compatible with situations with [+durative] and [+dynamic] features (cf. Smith 1997). This makes the progressive marker compatible only with activities, multi-event activities and accomplishments, but not with statives or achievements. Relevant examples are shown below.

(3) (a) 你 識開/\*嚟/\*住 佢, 就 知 佢 係 好人.

you know-HOI/-Prog/-Imp him/her then know s/he be good-person

“When you know him/her, you will know that s/he is a good person.”

(b) 呢度 死開/\*嚟/\*住 好多人.

this-place die-HOI/-Prog/-Imp many-person

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

(4) (a) 你 打住 波 (\*先).

you beat-Imp ball SFP

“You all start the ballgame first.”

(b) 你 打住 波, 等 我 呀.

you beat-Imp ball wait me SFP

“You all play the ballgame, while waiting for me.”

(c) 佢 打嚟 波.

they beat-Prog ball

“They are playing the ballgame.”

(d) 佢 打嚟 波, 你 遲啲 再 嚟過 啦.

they beat-Prog balls you later again come-over SFP

“They are playing ballgame, so you’d better come back later.”

The sentences in (3) show the difference of *-hoi1* with the progressive marker *-gan2* and the imperfective marker *-zyu6*. The well-formedness of (3a) and (3b) with *-hoi1* shows that it can co-occur with stative predicates like 識佢 ‘know-him/her’ and the so-called achievements like 死好多人 ‘die many-person’, while the ill-formedness of (3a) and (3b) with *-gan2* and *-zyu6* marks the incompatibility of the two markers with statives and achievements. Hence, *-hoi1* should not be considered as a progressive marker, on a par with *-gan2*, or even *-zyu6*. The incompatibility of *-gan2* and *-zyu6* with statives and achievements, as shown in (3), reveals the possibility of these two markers being a progressive marker or an imperfective marker. Since these two markers are not my focus here, their semantic details will not be discussed further. However, notice that (4) clearly demonstrates the distributional differences between *-gan2* and *-zyu6*. (4a) indicates that unlike *-gan2* which can stand alone in a main clause, as revealed by the well-formedness of (4c), *-zyu6* alone usually cannot appear in the main clause, except when co-occurring with the sentence final particle *sin1*, which shows that *-zyu6*’s similarity with the Mandarin imperfective marker *-zhe*.

## 2.2 *-Hoi1* as a Continuative Marker

Cheung (1972) and Li (1995) treat *-hoi1* as a continuative marker, emphasizing the continuation of a state or a situation. However, the term “continuative” was not defined clearly in their analyses. I consider that a situation is said to be “continuative” when its semantics follows the following representation.

(5) A situation or a state is said to be continuative iff

$$\text{Cont}(s) = \exists T \forall t \in T (s = 1 \text{ at } t > \text{RT})$$

where *s* = “situation”, *t* = “time point” within an interval *T*, and *RT* = reference time.

From (5), we can see that when we say that a situation continues, that situation must be true at every time point within the specified interval, since the universal quantification operates over time points. Consequently, the relevant situation must be true at every time point within the time interval, that is, no gapping is allowed between time points within that particular interval. Hence, if we take the assumption of *-hoi1* as a continuative marker to be right, *-hoi1* can only mark a continuation of those situations which are not only (i)

homogeneous but also (ii) have no gapping between any two time points within a particular interval. (i) would make the relevant situations restricted to homogeneous situations which include States and Activities. For States, (ii) would further restrict the occurrence of *-hoi1* with (a) resultative states with no possible change out of state, and (b) stage-level statives. However, (ii) would exclude the occurrence of *-hoi1* with two types of statives which are habitual statives and generic statives formed by generalizations from occurrences of an episodic situation. The reason is that we can only talk about “pattern” when the number of occurrences of the episodic situation is more than one, and hence, since there exists temporal gaps between two occurrences, this is not what required by (5). For activities, although (i) allows the occurrence of *-hoi1* with an activity type of situation, (ii) would again restrict the relevant description to one single occurrence only.

On the other hand, (5) would rule out the occurrence of *-hoi1*, as a continuative marker, with punctual or heterogeneous situations, including Achievements, Semelfactives and Accomplishments, since even these situations occur many times, they are still accompanied by a temporal gap between each of any two occurrences. Hence, the assumption of treating *-hoi1* as a continuative marker would face problems when dealing with sentences like (6) and (7) below.

(6) 我 喺呢度 撞開 佢.

I at-here bump-into-HOI him

“When I bump into someone here, it is him/her.”

(7) 佢 打波 打開 星期三.

s/he play-balls play-HOI Wednesday

“When s/he plays ballgames, s/he plays it on Wednesday.”

The verb 撞 ‘bump-into’ in (6) gives us a situation of the achievement type which is [+dynamic], [-durative] and [+telic]. The well-formedness of (6) demonstrates that *-hoi1* can co-occur with punctual and heterogeneous situations like Achievements, which suggests that *-hoi1* cannot be a continuative marker which requires durative situations. On the other hand, sentences like (7) are always used as examples showing that *-hoi1* is a habitual marker. Putting aside the issue whether *-hoi1* is a habitual marker or not, we can see that the situation described by (7) is a habitual stative derived from occurrences of an

episodic situation, which should include more than one occurrence of the Activity “playing ballgames”, resulting in the existence of a temporal gap between any two occurrences. Hence, sentences like (6) and (7) would be at odds with the assumption that *-hoi1* is a continuative marker.

Besides, although Cheung’s claim that *-hoi1* should be differentiated from *-gan2* and *-zyu6* is correct, his interpretation of (2b), “s/he is used to wearing a red shirt”, repeated below, is not “continuative” but the so-called “habitual,” as claimed in previous literature.

(2) (b) 佢 著開 件紅色衫.

s/he wear-HOI CL-red-shirt

“S/he is used to wearing a red shirt.”

Based on our definition of “continuative marker” in (5), (2b) can have a “continuative” reading only under the interpretation “since an unspecified time point, she has been wearing his/her red shirt at all times, with no interruption” (i.e. a representation of a single occurrence of the stative “wearing red shirt”). This interpretation is different from Cheung’s intended interpretation for (2b), which does not require one single persistent occurrence of the Activity “his/her wearing of a red shirt”, with no temporal gap or interruption. In the later part of this dissertation, I will show that *-hoi1* is a generic quantifier, and it quantifies over the direct object (DO) in (2b).

### 2.3 *-Hoi1* as a Habitual Marker

M&Y (1994) and Yue-Hashimoto (1993) consider *-hoi1* as a habitual marker, describing an action or state that has been going on or in existence for some time. Although we admit that the habitual marker analysis of *-hoi1* comes closest to the truth (cf. (2b)), the definition of “habitual marker” is rather vague and unclear. According to Smith (1997), habitual sentences belong to derived statives which present a pattern of events, rather than a specific situation, and denote a state that holds consistently over a time interval.

Adopting a more formal approach, Chierchia (1995) suggests that the habitual operator is just the familiar generic operator, and a habitual marker says that there is a certain distribution or regularity of occurrence of an event. Hence, Krifka et al. (1995) (cf. also E.

Katz 1995, Smith 1997, Santos 2001) define “habitual sentences” as expressing generalizations over situations that are specified by the corresponding episodic verbal predicate. That is, habitual sentences can be represented as follows (cited from Krifka et al.).

- (8) A sentence is habitual if and only if its semantic representation is of the form  
**GEN**[...s...;...](**Restrictor**[...s...]; **Matrix**[...s...]) where s is a situation variable.

Hence, if we assume that *-hoi1* is a habitual marker, sentences like (9) and (10) which involve punctual adverbials sound counter-intuitive to the meaning of habitual marker which should span over a consistent duration.

- (9) (a) 佢 琴日 用開 嗰部機 㗎.  
 s/he yesterday use-HOI that-CL-computer SFP

“S/he had been using that computer yesterday.”

- (b) ???**GEN**[s;](s/he in s & **yesterday**(s); s/he uses that computer in s)

- (10) (a) 我 頭先 飲開 呢個杯 㗎.  
 I just-now drink-HOI that-CL-cup SFP

“I have been using that cup just now.”

- (b) ???**GEN**[s;](I in s & **just-now**(s); I use that cup in s)

If we assume that *-hoi1* is a habitual marker, (9a) and (10a) then have the representations of (9b) and (10b), respectively. The adverbial 琴日 ‘yesterday’ in (9a) describes a short temporal duration of just one day, with 頭先 ‘just-now’ in (10a) even shorter. Since the intervals specified are so short, particularly the latter, sentences like (9a) and (10a) cannot allow cases where the relevant events have a pattern of occurrences of events. This makes (9a) describing one single occurrence of the Activity “using that computer” within yesterday, though it may last for a couple of hours, and (10a) describing one single occurrence of the Activity “using that cup” which may last for one minute or two. Under these two readings, (9a) and (10a) are unlikely to be interpreted as habitual, since it is counter-intuitive to claim that a certain situation habitually occurs if it happened only once.

The *-hoi1*'s in (9a) and (10a) are more like “continuative marker”, since with both being activities, there is only one occurrence and no temporal gaps can be found within the specified interval. Therefore, the assumption of *-hoi1* as a continuative marker by Cheung and Li can account for sentences like (9a) and (10a) better. However, as mentioned earlier, that account fails to explain sentences like (2b) where “habitual” seems to be the preferred reading for them.

From the above discussion, we can see that while the assumption of *-hoi1* as a progressive marker is clearly not on the right track, some *hoi1*-sentences can have both continuative and habitual readings, though neither the assumption of *-hoi1* as a continuative marker nor that of *-hoi1* as a habitual marker is the correct notion to account for all the *hoi1*-sentences. Hence, in the later part of this dissertation, I will show that all the meanings posited previously can in fact be reduced to a quantificational effect imposed by *-hoi1* on the sentences in question.

### 3. Previous Analyses on *maai4* and Their Limitations

Before examining the verbal suffix *maai4*, we need to differentiate among three *maai4*'s in Cantonese, which are *maai4* as a verb, a complement, and a verbal suffix, as shown below.

- (11) 隻船 埋岸 啦. (maai4 as a verb)  
 CL-ship MAAI-shore SFP  
 “The ship is reaching the port.”
- (12) 佢 行埋咗 一邊 啦. (maai4 as a directional complement)  
 s/he walk-MAAI-Perf one-side SFP  
 “S/he has walked aside.”
- (13) 不如 你 去埋\*(咗) 呀. (maai4 as a verbal suffix)  
 why-not you go-MAAI-Perf SFP  
 “Why don’t you also come with us?”

The *maai4* in (11) is a verb. The use of *maai4* in (12) is a directional complement, which should be differentiated from its more grammaticalized suffixal use in (13). The difference between the *maai4*'s in (12) and (13) can be shown by applying Cheung’s two tests.

According to Cheung (1972), a verbal suffix (unlike verbal complements) demonstrates two characteristics: (i) incompatible with other verbal suffixes, and (ii) cannot appear in the potential construction, as in \*去得咗(咗 ‘Perf’ is a suffix), \*去得嚟(嚟 ‘Prog’ is a suffix) (contrast this with 食得完 (完 ‘finish’ is a complement), 做得好 (好 ‘good’ is a complement)). For (12) and (13), their difference in grammaticality is not due to any semantic incompatibility that may occur between the verbs in question and *maai4*, since *maai4* can occur with both 行 ‘walk’ in (12) and 去 ‘go’ in (13). Instead, the relevant contrast in grammaticality can be explained in terms of Cheung’s two criteria. The *maai4* in (12) is a directional complement, since its co-occurrence with the perfective marker  $-zo2$  results in well-formedness. On the other hand, (13) is ill-formed because the *maai4* in (13) is a verbal suffix, and hence, it is incompatible with  $-zo2$ , which is also a verbal suffix.

In this dissertation, we will focus on the *maai4* in (13), i.e. the verbal suffix *maai4*. We will show that the basic semantics of the verbal suffix *maai4* is an additive quantifier, which can interpret either with an individual/a thing denoted by an NP or an event/a state denoted by the predicate in question. The quantification performed by *maai4* is basically a combination of determiner quantification and adverbial quantification. Before going into our analysis, I will first introduce some previous studies on Cantonese *maai4*.

The meaning of *maai4* described by previous analyses (cf. Zhan 1958, Cheung 1972, Li et. al 1980, Mok 1993, Yue-Hashimoto 1993, Matthews & Yip 1995) can be summarized as follows: (a) marks the extension of the action to a related entity; (b) brings certain ongoing actions to completion; (c) has a meaning similar to *lin4...je2* ‘even...also’; (d) the meaning of accumulation, when appearing with verbs in the form of “V+V+*maai4+maai4*” and “V+*maai4*+V+*maai4*”; and (e) can combine with an optional *saai3* ‘all’. These properties act independently from one another, with which one being the most basic one not clearly specified in the literature.

On top of these, T. Lee (1995) has conducted a comparative study on three Cantonese post-verbal quantifiers, which are *dak1* ‘only’, *maai4* and *saai3*, in terms of their semantic properties. He posits that *maai4* is a verb suffix expressing inclusive focus, the first study having theoretically taken focus into account.

### 3.1 *Maai4* marks an “extension”

M&Y consider one meaning of *maai4* as “in addition” or “along”, while others (cf.

Zhan, Cheung, Mok, and Li et. al) consider the crucial meaning of *maai4* as marking an extension of an action to either the object (in case of transitive verbs) or the subject (in case of intransitive verbs). Examples are given below.

- (14) 佢 搵埋 張枱 啦. (cited from Mok 1993)  
 s/he-dump-MAAI CL-table SFP  
 “S/he has also dumped the table.”
- (15) 佢 飲埋 啲啤酒 啦. (cited from Mok 1993)  
 they drink-MAAI those-beer SFP  
 “They have also finished those beer.”
- (16) 明仔 睇埋 啲雜誌 啦. (cited from Mok 1993)  
 Ming read-MAAI these-magazine SFP  
 “Ming has read also the magazine.”
- (17) 啲細蚊仔 都 瞓埋 啦. (cited from Mok 1993)  
 these-kids all sleep-MAAI SFP  
 “Those kids have also gone to sleep.”
- (18) 佢 交咗 個壞朋友, 連 自己 都 壞埋. (cited from Cheung 1972)  
 s/he know-Perf CL-bad-friend even himself/herself also bad-MAAI  
 “S/he has made friends with some bad guys, and has made himself/herself into one of them.”
- (19) 唔啱 你 都 去埋. (cited from Zhan 1958 and Cheung 1972)  
 why-not you also go-MAAI  
 “Why don’t you go with us?”
- (20) 衫 都 濕埋 啦. (cited from Li et. al 1980)  
 clothes also wet-MAAI SFP  
 “The coat has also gone wet.”

The verbs in sentences (14) to (20) are transitive verbs, and *maai4* gives the meaning of an extension of the action denoted by the verbs 搵 ‘dump’, 飲 ‘drink’, 睇 ‘read’ to the object NPs 張枱 ‘the table’, 啲啤酒 ‘those beer’, and 啲雜誌 ‘those magazines’, respectively. On the other hand, since the verbs in (17) to (20) are intransitive, the relevant actions or states

described by 瞓 ‘sleep’, 壞 ‘broken’, 去 ‘go’ and 濕 ‘wet’ can only be extended to the subject NPs 啲細路仔 ‘those kids’, 自己 ‘himself/herself’, 你 ‘you’ and 衫 ‘clothes’, respectively.

Although previous studies are right in claiming that, when the verbs are intransitive (cf. (17) – (20)), *maai4* tends to associate with the subject. Concerning the cases of transitive verbs, the picture is not that simple. Consider the following example.

- (21) (除咗 游水), 我最近 打埋 網球.  
 (apart-from swimming) I recently play-MAAI tennis  
 “(Apart from swimming,) I also play tennis recently.”

(21) shows that it is not necessary for *maai4* to interpret with the object. In this sentence, *maai4* in fact interprets with the event or property denoted by the predicate 打網球 ‘play-tennis’.

In some cases, as noted in M&Y, *maai4* denotes an expansion of a domain to include the last of a series of items (cf. (22)). This is in line with what Mok claims, namely that, when the subject NPs indicate a quantity of “one”, *maai4* will extend the quantity of the subject to the last one, giving a meaning of “no one or nothing is left”. Mok provided examples like (23) to (26) below, which we find odd, to support his claim.

- (22) 如果冇埋 呢個機會, 我就慘啦!  
 if not-have-MAAI this-CL-chance I then poor SFP  
 “If I lose this chance as well, I will be driven to despair.”
- (23) %一個人客 都 扯埋 啦.  
 one-CL-guest also go-MAAI SFP
- (24) %一架車 都 開埋 啦.  
 one-CL-car also drive-away-MAAI SFP
- (25) %一個細蚊仔都 瞓埋 啦.  
 one-CL-kid also sleep-MAAI SFP
- (26) %一個人 都 食埋 啦.  
 one-CL-person also eat-MAAI SFP

Sentences (23) to (26) all involve intransitive verbs and numeral subjects, and their oddness is due to the reason that they all have numeral phrases as their subjects, which are indefinite or the verb being intransitive. It is the indefiniteness of these subjects that causes these sentences to be odd. Contrast the above with the following sentences.

(27) 最後一架車 開埋 啦.

last-one-CL-bus drive-away-MAAI SFP

“The last bus has left as well.”

(28) 阿 John 走咗, 明年 你 走埋, 我哋 呢度 好冷清 囉.

John leave-Perf next-year you leave-MAAI we this-place very-quiet SFP

“John has left us, and you are also leaving us next year. We will be very lonely here.”

Comparing (24) with (27), we can see that association of *maai4* with the subject NP 最後一架車 ‘the last car’ is possible if the subject is definite. However, the association of *maai4* with the subject is possible only when the verb is an unaccusative one, and hence, the subject is base-generated at the DO position. Moreover, as I will show later, [+definite] is one of the features determining the interpretation of *maai4*.

### 3.2 *Maai4* marks the completion of an event

Zhan, Cheung, Mok, Li et. al., and Yue-Hashimoto also claim that *maai4* can describe the action itself. However, when *maai4* describes an action, the relevant interpretation is restricted to the marking of the completion of the relevant action, as shown below.

(29) 食埋 碗飯, 就 嚟 啦! (cited from Cheung)

eat-MAAI CL-rice then come SFP

“I will come when I have finished this bowl of rice.”

(30) 呢單嘢 既然 搞開 啦, 就 搞埋落去 啦! (cited from Li et. al.)

this-CL-thing since do-open SFP then do-MAAI-continue SFP

“Since you have started doing this project, you should finish it.”

(31) 我 睇埋 呢出戲, 就 返去. (cited from Zhan)

I read-MAAI this-CL-movie then come-back

“I will go home when the movie is over.”

(32) 佢 做埋 今年 就 走 啦! (cited from M&Y)

s/he do-MAAI this-year then go SFP SFP

“S/he will leave us after this year.”

Notice that all events described above involve a singular and specific object. As I will show later in Chapter 5, this so-called completive reading can be derived when the object denoted by the singular noun here is considered to contain proper subparts. Hence, *maai4* does not give a completive sense to these situations.

According to Mok, unlike *saai3* which imposes a divisibility requirement on its associated NPs, *maai4* has no such requirement, and its relation with the NP is to mark its quantity. Moreover, besides marking the quantity of NP, Mok considers that *maai4* also quantizes the action described by the verb. Examples are given below.

(33) 佢 洗 \*晒/埋 嗰件衫 啦.

s/he wash SAAI/MAAI that-CL-shirt SFP

MAAI4: “S/he washed that shirt as well.”

(34) 佢 食晒/埋 支煙仔 啦.

s/he eat-SAAI/MAAI that-CL-cigarette SFP

SAAI3: “S/he has consumed the entire cigarette.”

MAAI4: “S/he has finished the cigarette as well.”

(35) 明仔 睇晒/埋 本雜誌 啦.

Ming read-SAAI/MAAI that-CL-magazine SFP

SAAI3: “Ming has read the entire magazine.”

MAAI4: “Ming has read the magazine as well.”

Sentences (33) through (35) demonstrate the different realizations of *saai3* and *maai4* concerning the divisibility requirement. *Saai3* requires its NPs to be further divided into smaller parts which can be acted upon by the action in question. However, this is not required by *maai4*. In (33), since 嗰件衫 ‘that shirt’ is a non-divisible NP, only *maai4* but not *saai3* can occur with it. *Saai3* and *maai4* give different interpretations to (34) and (35). Owing to the divisibility requirement imposed by *saai3* on its associated NPs, (34) gives a

reading that s/he has finished the entire cigarette, where the cigarette in question is considered as an object divided into its proper sub-part, with each sub-part having the property of being a cigarette; *saai3* gives an interpretation that Ming has finished reading the entire book in (35), where the pages of the book are considered to be the proper sub-parts of the object “book”.

The suggested readings all relate the sentences to a completion of events, regardless of *maai4* or *saai3*, and are thus no different from the claim made in previous analyses. Notice that similar to sentences (29) through (32), the objects NPs of the three sentences above are also bounded, making the relevant situations telic. It is the boundedness of the object NP that makes the event telic. *Maai4*, as a verbal suffix, just like the aspect markers, plays no role in deciding the situation type of the sentence, which is what has been suggested in the two-component framework of aspect proposed by Smith (1997). Moreover, referred back to (21), *maai4* can also associate with an atelic event, which includes no natural final endpoint. Hence, completive reading cannot be the basic meaning of *maai4*. Finally, as mentioned earlier, the objects involved in (34) and (35) are singular and specific NPs consisting of proper subparts. I will show later that such a completive reading is derived due to the quantificational nature of *maai4*.

### 3.3 *Maai4* and “*lin4...je2*”

Zhan claims that *maai4* can sometimes express the idea of *lin4...je2* ‘even...also’, with Mok treating the Mandarin *lian...ye* as the most appropriate translation of *maai4*. On the basis of such a translation, *lin4...maai4* is sometimes treated as a preposition, with the object NP occurring in-between *lin4* and *maai4*. However, as already pointed out by Cheung, this claim is problematic, since (a) *lin4* ‘even’ is optional; and (b) *maai4* can occur after “*lin4...maai4*”, as illustrated by (36) and (37).

(36) 呢間舖頭 呀, (連) 臘腸 都 賣埋.

this-CL-store SFP even dried-sausage also sell-MAAI

“This store even sells dried sausage.”

(37) 佢 連埋 你 都 一齊 鬧埋.

s/he even-MAAI you also together scold-MAAI

“S/he will even have you scolded.”

Based on sentences like (36) and (37), Cheung argues that *maai4* is not necessarily related to *lin4*, and hence, the two cannot be considered as a discontinuous compound preposition.

### 3.4 *Maai4* marks accumulation

M&Y mention that the meaning of *maai4* as accumulation is seen in the phrases like 加埋 ‘add-MAAI’ and 連埋 ‘add-MAAI’. A similar observation is made by Li et.al who claim that the meaning of *maai4* as accumulation is easily found in verbs indicating a meaning of “get” or “take”, as exemplified below.

(38) 加埋 今個月人工, 就 夠 買 架車. (cited from M&Y)

add-MAAI this-CL-month-salary then enough buy CL-car

“With this month’s salary also included, I shall have enough money to buy a car.”

(39) 你 架車 連埋 稅 要 八十萬. (cited from M&Y)

you CL-car add-MAAI tax need 800-thousand

“Your car costs 800,000 dollars with tax included.”

(40) 要埋 咁多 做乜 嗜? (cited from Li et.al)

want-MAAI that-much do-what SFP

“You have gathered so many things as well. But for what?”

(41) 賺埋 咁多錢 唔使, 攞嚟 養老 啊? (cited from Li et. al)

earn-MAAI that-much-money not-use get-come feed-old SFP

“You earned so much money all together, but you never spent it. Are you saving it for future retirement?”

This meaning of *maai4* is also found in verbs like 積 ‘cumulate’, 儲 ‘save’, 收 ‘get’, 攞 ‘take’, 借 ‘borrow’, and can appear in the form of “V+V+*maai4*+*maai4*” or “V+*maai4*+V+*maai4*”, like 攞埋攞埋(攞攞埋埋)啲利是 ‘take-MAAI-take-MAAI (take-take-MAAI-MAAI) those red pockets’, 講埋講埋(講講埋埋)啲笑話 ‘tell-MAAI-tell-MAAI (tell-tell-MAAI-MAAI) those jokes’, 食埋食埋(食食埋埋)啲冷嘢 ‘eat-MAAI-eat-MAAI (eat-eat-MAAI-MAAI) those cold things’.

However, as I will explain later in Chapter 5, the basic semantics of *maai4* is an additive quantifier, and it is from such an additive nature that the above so-called

accumulation reading is derived. Moreover, the concept of “accumulation” is in fact rather vague, and previous analyses have not clearly defined it. I think that accumulation means more than one addition. Hence, we can talk about “accumulation” only when more than one addition occurs. However, in sentences like (38) and (39), the relevant additions can occur only once, making it counter-intuitive to relate these cases to accumulation. *Maai4*, as an additive quantifier, carries an existential presupposition, i.e., the pre-existence of at least one event/state or one individual/thing, and such an existence need not be more than one. Hence, in (38) and (39), the additions involved can occur only once: In (38), the relevant addition can be the addition of this month’s salary and last month’s salary, while in (39), the relevant addition can be just that of the cost of the car and the tax.

From the above discussion, we can see that previous analyses may be right in claiming that *maai4* gives an extension meaning to the sentence, but whether such an extension applies to individuals/things or events is not made clear. Moreover, the distinction among the properties of *maai4* proposed in previous analyses is not clearly defined, making it difficult to predict the meaning of *maai4*-sentences, i.e. which meaning out of the five meanings should the relevant sentence bear. Furthermore, the five properties seem to share some similarities, and which meaning is the most basic one is again not clearly stated.

#### **4. Previous Analyses on *-sai3* and Their Limitations**

Compared with other verbal suffixes in Cantonese, *sai3* is the one which attracts the most attention. Besides the Cantonese grammatical studies conducted by M&Y (1994), individual studies on *sai3* include T. Lee (1994, 1995, 2001), Tang (1996), Teng (1996) and Pan & Man (1998), etc. In this section, I will introduce some properties of *sai3* discussed in these previous studies.

##### **4.1 Properties of *sai3***

###### **4.1.1 Predicate Restriction**

T. Lee (1994) considers that *sai3* is incompatible with adjective predicates and copula.

- (42) \*佢哋 懶晒.  
 they lazy-SAAI
- (43) \*佢哋 傷晒心.  
 they sad-SAAI
- (44) \*我哋 係晒 語言學者.  
 we be-SAAI linguists

The above two sentences are ill-formed, even though there exists a semantically plural subject possible to be quantified over. The reason of their ungrammaticality is due to the incompatibility of *saai3* with predicates describing states. These sentences are acceptable only if the relevant state described involves a change.

However, following Matthews & Yip, Pan & Man (1998) argue against the claim of *saai3* being incompatible with adjectival predicates. Relevant examples are given below.

- (45) 你睇吓, 間房 乾淨晒 啦. (cited from M&Y)  
 you look-Asp CL-room clean-SAAI SFP  
 “Look, the room is all nice and clean (now).”
- (46) 你 錯晒. (from Pan & Man 1998)  
 you wrong-SAAI  
 “You are completely wrong.”

In line with T. Lee’s claim, Tang (1996) further claims that *saai3* requires the telicity of the predicate. Relevant examples of Tang are given below.

- (47) 佢 食晒 個漢堡飽.  
 s/he eat-SAAI CL-hamburger  
 “S/he has eaten the entire hamburger.”
- (48) 佢哋 死晒.  
 they die-SAAI  
 “All of them had died.”
- (49) \*佢哋笑晒.  
 they laugh-SAAI

(50) \*佢哋 聰明晒.

they smart-SAAI

(47) denotes an accomplishment, (48) an achievement, (49) an activity; and (50) a state. Based on the above examples, Tang argues that *saai3* is only compatible with those predicates which describe telic events, thus explaining the ill-formedness of the sentences with activities and states. In line with T. Lee, Tang states that *saai3* is compatible with adjectival predicates only in cases where they express a change of state, as given below.

(51) 佢 著咗 呢件衫, 成個靚晒.

s/he wear-Perf this-CL-shirt totally-pretty-SAAI

“After s/he had put on that shirt, s/he became pretty.”

When the relevant adjectival predicate describes a change of state, it can then go with *saai3*, according to Tang.

Secondly, *saai3* is found to be incompatible with verbs of cognition and sense, like 希望 ‘hope’, 相信 ‘believe’, 認為 ‘think’, 覺得 ‘think’. The relevant sentences below are modified from T. Lee (1994).

(52) \*我哋 希望/相信晒 老張 會 嚟.

they hope/believe-SAAI old-Zhang will come

(53) \*我哋 認為晒 老張 會 嚟.

They think-SAAI old-Zhang will come

(54) \*我哋 覺得晒 老張 好人.

We find-SAAI old-Zhang a-good-man

However, exceptional cases are found, where the cognition indicates a change of state.

(55) 我 發現晒 佢啲秘密.

I discover-SAAI his/her-secrets

“I have discovered all his/her secrets.”

(56) 我知道晒 佢啲秘密.

I know-SAAI his/her secrets

“I come to know all his/her secrets.”

The above sentences involve changes of state from “secrets not revealed” and “not known” to “secrets revealed” and “known”, respectively.

Thirdly, it is natural to predict that *saai3* cannot occur with the predicate construction involving a degree complement.

(57) \*我哋 食晒到 好飽.

we eat-SAAI-arrive very-full

(58) \*我 攞晒到 手酸.

I take-SAAI-arrive hand-sore

(16) \*我哋 行晒到 鞋都穿咗.

we walk-SAAI-arrive shoe-also-worn-Perf

Since a degree complement usually indicates a state, the ungrammaticality of the above sentences can thus be predicted.

#### 4.1.2 The Definiteness & Plurality/Divisibility Requirement of *saai3*

According to previous studies like T. Lee (1994), Tang (1996) and Pan & Man (1998), for any NPs which associate with *saai3*, no matter whether it is the subject or the object, *saai3* requires it to be both semantically plural and definite.

(59) 佢哋 食晒 嗰幾盒糖.

they eat-SAAI those-few-CL-candies

“They have eaten all those boxes of candies.”

(60) 佢哋 去晒 美國.

they go-SAAI US

“All of them have gone to the US.”

(61) \*佢 睇晒 兩本書.

s/he read-SAAI two-CL-books

(62) \*佢 買晒 呢本書.

s/he buy-SAAI this-CL-book

(63) \*佢 瞓晒覺.

s/he sleep-SAAI

According to the NP-quantification approach (cf. T. Lee 1994, etc.), *saai3* is possible to quantify over the object NP or the subject NP, with the former having priority over the latter. Hence, in (59), even though both the subject and the object are semantically plural and definite, the interpretation of (59) is “they have eaten all those boxes of candies”, showing that *saai3* associates with the object NP instead of the subject NP. However, according to the previous literature, the quantification effect of *saai3* can be extended to the subject if the object cannot be quantified over, as shown in (60). The interpretation of (60) is “All of them have gone to the US”, showing that *saai3* associates with the semantically plural and definite subject 佢哋 ‘they’ instead of the object 美國 ‘the US’ which is semantically singular.

(61) is ill-formed, since the object numeral phrase is indefinite, and the subject NP is semantically singular, and hence, *saai3* can quantify over neither of them. Similarly, both (62) and (63) are ill-formed. In (62), neither the object nor the subject is semantically plural, hence leading to vacuous binding of *saai3*. On the other hand, if *saai3* has to associate with NPs, the only possible candidate in (63) is the subject NP, which again is semantically singular, thus again leading to vacuous binding of *saai3*.

Tang (1996) extends the plurality requirement to a more general requirement of divisibility requirement which mentions that the elements associated with *saai3* must be divisible. This roughly means that the object can be divided into parts. Teng (1996) and T. Lee (1994) also discuss a similar property and consider that such a property is determined by the contextual information and our conceptual knowledge.

(64) 佢 食晒 成包煙.

s/he consume-SAAI whole-CL-cigarettes

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

(65) 我 飲晒 杯水.

I drink-SAAI CL-water

“I have drunk the whole cup of water.”

The well-formedness of (64) demonstrates that even though the object NP is singular in form, as long as it is semantically plural, *saai3* can quantify over it. The object NP 成包煙 ‘the entire pack of cigarettes’ in (64) is semantically plural, due to its divisibility property, which is revealed in the fact that a pack of cigarettes usually contains more than one cigarette, with each cigarette constituting a sub-part of the whole pack. Therefore, the object NP of (64) is semantically plural in the sense of its sub-part property, making *saai3* able to quantify over it. Similarly, the *saai3* in (65) associates with the object 杯水 ‘the water’, a mass noun which is divisible.

From the above, we can see that previous analyses all adopt the above definiteness and plurality or divisibility requirement for *saai3*. In Chapter 4, I will show that such a requirement in fact can be revised to a specificity requirement and a more general plurality condition for suffixal quantifiers. As I will argue later, *saai3* is compatible with indefinite but specific verbal arguments, and hence, specificity instead of definiteness is a more accurate characterization. On the other hand, even when all verbal arguments in question are singular, *saai3*-sentences can be well-formed as long as the relevant verb can describe a recurring event, hence suggesting a more general plurality condition.

#### 4.1.3 Subjects vs Objects

T. Lee (1994) considers that *saai3* can be interpreted with the subject if the object is not semantically plural. Extending further, Tang (1996) states that the relation between *saai3* and the elements with which *saai3* associates with exhibits a *locality effect* (in Tang’s terminology): *saai3* associates with the object if there is one; otherwise, *saai3* associates with other elements, for instance, the subject or the spatiotemporal argument. Relevant examples of Tang are given below.

(66) 佢 摘晒 啲花.

he pick-SAAI those-flowers

“He picked up all those flowers.”

(67) \*佢哋 摘晒 朵花.

they pick-SAAI CL-flower

Lit: “They all picked up the flowers.”

(68) 佢哋 嚟晒.

they come-SAAI

(i) “They all come.”

(ii) “They came in all specific occasions.”

(69) 佢哋 買晒屋.

they buy-SAAI-houses

(i) “They all bought houses.”

(ii) “They bought houses (e.g. by spending all the money).”

(iii) \*”They bought all the houses.”

(70) (a) 我 問晒 佢哋 呢條問題.

I ask-SAAI them this-CL-question

“I have asked all of them this question.”

(b) 我 問晒 佢 呢啲問題.

I ask-SAAI him these-question

“I have asked him all of these questions.”

Tang states that there is a subject-object asymmetry in transitives. The *saai3* in (66) associates with the semantically plural object 啲花 ‘those flowers’. On the other hand, the ill-formedness of (67) reveals that even though the subject is semantically plural, *saai3* still fails to associate with it, since there exists an object NP. *Saai3* can only associate with the subject if there exists no object in the sentence, which accounts for the ambiguity of (68). (68) shows that if there is no object, *saai3* can be associated with either the subject 佢哋 ‘they’ (cf. 68i) or the spatiotemporal argument (cf. (68ii)), according to Tang.

Tang states that in (69), the bare noun 屋 ‘houses’ and the verb 買 ‘buy’ form a VO compound such that the object is part of the VO compound instead of an argument of the verb. It turns out that either the subject or the spatiotemporal argument could be the argument associated with *saai3*. (69) and (70) involve double object construction, and the interpretations of the sentences show that *saai3* can associate with the DO or the IO, according to Tang.

However, as I will show later in Chapter 4, such an asymmetry in fact does not exist, since by an asymmetric relation, it means that while *saai3* can occur with objects, the other

way around, that is the occurrence of *saai3* with subjects, is never possible. However, I argue that the constituent over which *saai3* quantifies is governed by a grammatical function hierarchy. There is no asymmetry between subjects and objects, as the selection between the two is simply determined by a grammatical hierarchy.

#### 4.1.4 The Constraint on Aspectual Markers

Tang (1996) states that among all aspectual markers, *saai3* can only occur with the experiential marker *-gwo3*, as exemplified below (cited from Tang).

- (71) \*佢哋 去咗晒 香港.  
 they go-Perf-SAAI Hong Kong
- (72) 佢哋 去過晒 香港.  
 they go-Exp-SAAI Hong Kong
- (73) \*我 睇嚟晒 呢啲書.  
 I read-Prog-SAAI these books
- (74) \*我哋 企住晒 喺度.  
 we stand-Imp-SAAI here

The sentences above illustrate that *saai3* can only occur with experiential aspect marker *-gwo3* (cf. (72)), but not the perfective marker *-zo2* (cf. (71)), the progressive marker *-gan2* (cf. (73)), or the imperfective marker *-zyu6* (cf. (74)).

Based on the above properties, the post-verbal particle *saai3* is analysed as (1) a nominal quantifier (cf. T. Lee 1994, 1995), quantifying over nominals like the subject NP and the object NP; and (2) an A-quantifier over events or as an anti-quantifier (cf. Tang 1996).

## 4.2 Quantification by *saai3*: Nominal Quantification or Event Quantification

### 4.2.1 *Saai3* as a Nominal Quantifier (cf. T. Lee 1994, 1995, etc.)

Based on the above properties of *saai3*, T. Lee (1994, 1995) treats *saai3* as a nominal quantifier, on a par with the preverbal *dou1*, since both *saai3* and *dou1* are universal quantifiers binding NPs within their scopes. *Saai3* is thus a universal quantifier that

operates on individuals under such an approach. T. Lee (1995) has given some examples as follows.

- (75) (a) 佢 攞晒 呢幾本書.  
 s/he take-SAAI these-CL-books  
 “They have taken all of these books.”
- (b) 佢 飲晒 啲酒.  
 s/he drink-SAAI the-wine  
 “S/he has drunk all the wine.”
- (76) (a) \*佢哋 買晒 呢本書.  
 s/he buy-SAAI this-CL-book
- (b) \*佢 瞓晒覺.  
 s/he sleep-SAAI
- (c) ??佢 睇晒 兩本書.  
 s/he read-SAAI two-CL-books

In (75a) and (75b), *saai3* quantifies over the objects 幾本書 ‘those few books’ and 啲酒 ‘the wine’. On the other hand, quantification fails in (76a) and (76b) because of the singularity of the object 呢本書 ‘this book’ and the indefiniteness of the cognate object 覺 ‘sleeps’, respectively. (76c) can only be well-formed if the numeral phrase object 兩本書 ‘two books’ is interpreted specifically.

According to T. Lee, quantification can be extended to the subject position if the object cannot be quantified, as in the case of a singular object or a non-specific object, as exemplified by the following sentences.

- (77) (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.”

The occurrences of *saai3* in (77a) and (77b) quantify over the subjects 佢哋 ‘they’ and 河邊 ‘riverside’, respectively, since the object of the former 西藏 ‘Tibet’ is singular and that of the latter is a bare noun interpreted non-specifically.

However, concerning subject quantification by *saai3*, additional constraints are noted. Subject quantification is blocked in two types of environments. Firstly, if the verb is an adjective or a copula, *saai3* cannot quantify across the predicate, as claimed in previous analyses. Secondly, as observed in Cheung (1972), Bai (1985) and T. Lee (1995), if the predicate contains another quantificational element, specifically a quantifier phrase (cf. (79a)), a negator (cf. (79b) & (79c)) or a postverbal modal (cf. (79c)), quantification of the subject by *saai3* will not be possible.

(78) (a) \*我哋 聰明晒.

we intelligent-SAAI

(b) \*我哋 有晒書.

we have-SAAI-books

(79) (a) \*我哋 睇晒 三本書.

we read-SAAI three-CL-books

(b) \*佢哋 唔攞晒 呢本書.

they not-take-SAAI this-CL-book

(c) \*佢哋 攞得晒 呢本書.

they take-DAK-SAAI this-CL-book

(d) \*佢哋 攞唔晒 呢本書.

they take-not-SAAI this-CL-book

(79a) illustrates an example with a quantifier phrase as object, and due to the non-specificity of 三本書 ‘three books’, *saai3* fails to quantify over the quantified object, and the only NP which can be quantified by *saai3* is the subject. However, the ungrammaticality of (79a) shows that *saai3* is not able to associate with the subject. In sentences like (79a), the presence of the quantified object NP seems to have “blocked” *saai3* from associating with the subject, which is referred to as “blocking effect” in previous analyses. (79b) demonstrates the failure of *saai3* to quantify over the subject due

to the blockage by the negator. Since the object NP is non-divisible, there is no NP within the scope of the negator that can be quantified by *saai3*, explaining the ill-formedness of (79b). Similarly, the postverbal particle *dak1* ‘can’ forms the potential construction 攞得晒 ‘take-*dak1-saai3* (take-can-all)’ in Cantonese in (79c), and its presence again blocks the quantification of *saai3* over the subject, making the sentence in question ill-formed. The blocking effect is also found in the postverbal negator 攞唔晒 ‘take-not-*saai3* (take-not-all)’ in (79d).

All the above ungrammatical examples will be acceptable if the verb suffix quantifier is replaced by the preverbal adverb *dou1*, suggesting that the restrictions on quantification are due to the postverbal position of *saai3*.

#### 4.2.2 *Saai3* as an A-quantifier over Events or as an Anti-quantifier

Tang (1996) claims that *saai3* is a lexical quantifier, but no comparison has been made to the nominal quantification approach. Unlike lexical quantifiers claimed in Partee (1995) which quantify over either the event or other verbal arguments, Tang argues that *saai3* can be associated with both the event and the verbal arguments in the argument structure. In *saai3* quantification, the event is marked as the distributee and the argument associated *saai3* is selected to be the distributor distributing over the event. As *saai3* marks the event as the distributee having a scope under the distributor, *saai3* can be considered to be an “anti-quantifier”, in the sense of Choe (1987).

Moreover, Tang assumes that the distributor-distributee mapping in *saai3* quantification is a cyclic operation, which is the consequence of the bottom-up process of Merge. The object (direct internal argument) is always the closest element in the first mapping cycle. This explains why the distributor *saai3* exhibits some locality effects: *saai3* associates with the object if there is one; otherwise, *saai3* associates with other elements.

Appealing to the distributor-distributee mapping, Tang accounts for the *locality effect* (in Tang’s terminology) of *saai3* as follows: only the argument that measures out the event is selected to be the distributor.<sup>2</sup> This can explain the subject-object asymmetry of *saai3*: the subject of unaccusative verbs and the VO compounds could be created or consumed over time or undergo some change in a property over time. The spatiotemporal argument could provide a temporal bound or a gradient along which the progress of the

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<sup>2</sup> For the definition of “measuring-out”, see Tenny (1994).

event may be measured. Therefore, either the subject or the spatiotemporal argument of the intransitive verbs (unaccusatives) and the VO compounds can be the measuring-out argument and serve as the distributor. Since both the syntactic and the aspectual approaches seem plausible, Tang has left the possibilities open in his paper. However, as we will show later, this picture is too simple. Firstly, the association of *saai3* follows a hierarchical order. Secondly, *saai3* can associate with the [-referential] VP and the statives, of which both fail to measure out the event in question.

One important contribution of treating *saai3* as a marker of the distributee is that it can correctly derive the distributive interpretation of *saai3*. However, as I will show later, such a reading can be accounted for by the association of *saai3* with the verbal predicate. Tang uses (80) to explain the distributive interpretation of *saai3*.

(80) 佢哋 結晒婚.

They get-SAAI-marry

- (i) “Each of them marries someone else.”
- (ii) \*”They marry each other.”

Only the distributive reading (i) is available in (80). The distributive interpretation of (80) is that each of them should marry someone else and thus there should be separate events of marrying. The collective reading in (80ii) is not available. The event of marrying is marked by *saai3* as the distributee, the numeric interpretation of the event of marrying will be dependent on the numeric interpretation of the distributor, i.e. the subject 佢哋 ‘they’, and the parts of the distributor distribute over the event.

The distributive interpretation of *saai3* can also be observed when the distributor is the object.

(81) (a) 條橋 連接 呢兩個地方.

CL-bridge connect this-two-CL-places

“The bridge connects these two places.”

(b) \*條橋 連接晒 兩個地方.

CL-bridge connect-SAAI two-CL-places

Lit.: “The bridge connects (\*all) these two places.”

(c) 條橋 連接晒 呢三個地方.

CL-bridge connect-SAAI three-CL-places

“The bridge connects all these three places.”

Each minimal event of connecting requires that there be at least two event participants. According to Tang, in (81a), the two participants of the event of connecting are the two places. In (81b), if the event of connecting is marked as the distributee having a scope under the distributor, i.e. the object 呢兩個地方 ‘these two places’, each of the two individuals in the set denoted by the distributor is mapped onto an event of connecting. However, it is impossible for a minimal event of connecting to have only one event participant, i.e. one place. As a result, (81b) is unacceptable. If the object refers to three places, as in (81c), the reading improves.

Moreover, comparing with the English binominal “each”, which is regarded as an anti-quantifier by Choe (1987) (cf. also Safir & Stowell 1988, and Moltmann 1991), Tang points out that there are similarities between “each” and the Cantonese *saai3*.

(82) The balloons are held by one child each.

The binominal “each” in (82) marks “one child” as the distributee having a scope under the distributor “the balloons”. Properties exhibited by “each” are also found in *saai3*. Firstly, both “each” and *saai3* require the distributor to be plural/divisible. Secondly, both “each” and *saai3* require the distributor to be definite/specific, while the distributee should be indefinite. Moreover, according to Tang, the telicity constraint of *saai3* can also be derived from the general constraints on distributivity. Since the event marked as the distributee by *saai3* has to be countable, treating events on a par with things, atelic predicates are thus ruled out.

Finally, Tang tries to extend his account of *saai3* as an anti-quantifier to explain the compatibility between *saai3* and the experiential marker *-gwo3*, but not imperfective markers *gan2* and *zyu6*. As argued by Chan (1996), the perfective marker *-zo2* marks the event as definite whereas the experiential marker *-gwo3* marks the event as indefinite. Given that the event is marked as the distributee, *saai3* can only select *-gwo3* where the event is marked as indefinite, but not *-zo2* where the event is marked as definite. On the

other hand, the incompatibility between *saai3* and *-gan2* and *-zyu6* is that the imperfective markers make the predicate denote a non-countable event. Since the relevant event is non-countable, it cannot be a distributee, making *saai3* incompatible with the two imperfective markers. However, a crucial question here is why the distributee has to be indefinite? Such an issue is not clearly explained in Tang's account.

#### 4.2.3 *Saai3* is Neither a Pure Nominal Quantifier nor an Event Quantifier

Following T. Lee (1995) and Pan & Man (1998), I consider *saai3* as a universal quantifier which associates with verbal arguments or the verb/the verbal predicate. However, as I will show in Chapter 4, what is interesting is that *saai3* is an unselective binder, as it can occur with adjectival predicates, individual-level or stage-level, and individual-level stative verbs. Since *saai3* is not a selective binder of event or situation variable, contrary to Tang's event quantification, *saai3* cannot be an event quantifier, since the distributee (in Tang's terminology) is not necessarily an event, and can be a degree, spatial boundary or some kind of scale.

On the other hand, previous analyses treating *saai3* as a nominal quantifier will also predict nominal quantification of *saai3*. Nominal quantifiers in English or Chinese are either D-quantifier or A-quantifier associating with focused NPs. *Saai3*, as an universal quantifier, can quantify over either direct/indirect arguments or adjuncts, which is determined by a hierarchy to be shown later in Chapter 4. Hence, treating *saai3*, on a par with a pure D-quantifier or a pure nominal quantifier, cannot adequately explain at least the following two facts: (i) its quantification over adjuncts; and (ii) its syntactic status as a verbal suffix. Therefore, even though quantification over arguments by *saai3* patterns like nominal quantification, it cannot be treated as a pure D-quantifier. However, we still cannot treat *saai3* as a pure A-quantifier, even though it is syntactically a verbal suffix, since its quantificational pattern does resemble that of nominal quantification or even determiner quantification. So, what kind of quantifier is *saai3* actually? How do suffixal quantifiers map from their surface syntax to their semantic representation? What kind of quantifiers does suffixal quantifiers belong to? D-quantifiers? A-quantifiers? Or neither? These are the questions I would like to address in this dissertation.

In this chapter, I have reviewed some previous analyses on the three Cantonese verbal suffixes. Before going into the new quantificational analysis in this dissertation, I will first examine the basic facts concerning these suffixes in the next chapter.