國立交通大學

外國文學與語言學研究所

碩士論文

台語 *Khi1* 和 *Khi2* 的研究

A Case Study of Taiwanese *Khi1* and *Khi2*

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中華民國九十七年七月

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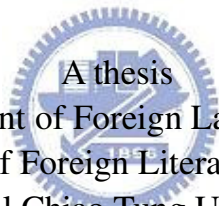**A Case Study of Taiwanese *Khi1* and *Khi2***

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台語 *Khi1* 和 *Khi2* 的研究

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摘　　要

　　此篇論文主要探討台語的 *khi1* 和 *khi2* 在句法與語意上的表現。前人的文獻主要是探討中文的去(位於謂語前的去和位於謂語後的去)和台語的 *khi2* (位於謂語後的去) (請參閱 柯淑君(1991)，張寧(2001)，陳怡君(2006))。但是，他們的分析和解釋沒有辦法說明所有台語 *khi1* 和 *khi2* 的用法。因此，本論文著重於 *khi*1 和 *khi2* 在不同句型中的句法分佈和語義解釋來作深入研究。

　　首先，我們介紹兩種 *khi1* 的用法，並加以討論。第一種視為意圖標記(purpose marker)，表示主詞做某事的意願或意圖，在句法上的位置如同根情態(root modal)。另一種則為受害者表達標記(affectee voice head)引出一個外加的受害者論元(extra affect argument)，也就是結構上的主詞，為事件的受害關係人。

　　接著，本論文提出 *khi2* 為完整式標記(lexical perfective marker)，表達某人或某事經過狀態改變之後，呈現其結果狀態(resultant state)。當 *khi2* 和活動動詞(activity verbs)以及靜態動詞(stative verbs)一起出現時，可得到此意。這些動詞和 *khi2* 的結合形成瞬成動詞(achievements)。*Khi2* 在這種特殊結構的用法如同中文的了接在靜態謂語(stative predicates)後面的用法，表示「完整狀態」(perfective states)的完整(perfectivity)和表始(inchoativity)之意義。

　　最後，我們得知 *khi1* 和 *khi2* 逐漸語法化，原本當成動詞，語義解釋如英文的 *go*，後來變成其他虛詞種類(functional categories)，推衍出不同語義。因此，台語 *khi1* 和 *khi2* 在句法上和語義上的用法擴大了。

A Case Study of Taiwanese *Khi1* and *Khi2*

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Abstract

This thesis deals with the semantic and syntactic representation of Taiwanese *khi1* and *khi2*. Previous studies have focused on the uses of Chinese pre-predicate *qu*, post-predicate *qu*, and Taiwanese *khi2*, known as the post-predicate *khi* (cf. Ke (1991), Zhang (2001), Chen (2006)). However, these analyses and interpretations do not fully explain the spectrum of uses of Taiwanese *khi1* and *khi2*. Therefore, this study aims to discuss the syntactic distributions and the semantic interpretations of *khi1* and *khi2* in various sentential constructions.

First, two types of *khi1* are introduced and discussed. One variant acts as a purpose marker to denote the subject's will or intention of performing an action, and is placed in the position of a root modal. The other is an affectee voice head that introduces an extra affectee argument (the structural subject), as an affectee participant of an event.

Second, this study introduces *khi2* as a lexical perfective marker that denotes the resultant state of something after a change of state, when it combines with activity verbs and stative verbs. The verbs and *khi2* combination become an achievement. *Khi2* in this particular construction is much like the Chinese *le*, which follows stative predicates. It invokes the perfective and inchoative sense of "perfective states".

Finally, we conclude that *khi1* and *khi2* are becoming grammaticalized. They were originally only used as lexical verbs, such as 'go,' but now we find that they exist in other functional categories. They present a plethora of diverse meanings. Therefore, the syntactic and semantic uses of Taiwanese *khi1* and *khi2* are extended.

致謝

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Chapter 1

<div style="text-align: right">**Introduction**</div>

According to Liu (1980), Lu (1988), and Ke (1991), Chinese pre-VP *qu* (*qu1*) can be used to express its verb meaning, 'go,' when it is followed by a locational phrase, shown in (1a), or if *qu1* and the VP refer to the same agent's direction, shown in (1b). Chinese post-VP *qu* (*qu2*) can express its meaning, 'go,' if *qu2* and the VP refer to the same agent's direction, shown in (1d), or *qu2* is a directional clitic, which denotes the agent's directional tendency represented in (1c), or *qu2* is a phase marker denoting the object's directional tendency represented in (1e). *Qu1* and *qu2* are allowed to occur simultaneously only when *qu1* and *qu2* have the verb meaning 'go' and the VP refer to the same agent's direction represented in (1f) but not in (1g), in which *qu2* might imply the object's direction.

(1) a.   Ta   qu   tai bei   le.   (verb meaning: go)

      he went   Taipei   Sentence Final le

      'He went to Taipei.'

  b.   Ta   qu   kan dian ying   le.   (verb meaning: go)

      he   went   see movies   Sentence Final le

<div style="text-align: center">1</div>

'He went to see the movies.'

c. Ta   kan dian ying   qu   le.

    he   see movies   went Sentence Final le

    'He went to see the movies.'

    (directional clitic: the agent's directional tendency)

d. Ta   na   yi xie shui guo   qu   le.   (verb meaning: go)

    he   take   some fruit   go   Sentence Final le

    'He took some fruit and went to somewhere.'

e. Ta   na   qu   yi xie shui guo   le.

    he   take go   some fruit   Sentence Final le

    'He took away some fruit.'

    (phase marker: the object's directional tendency)

f. Ta   qu   kan dian ying   qu   le.   (verb meaning: go)

    he   went   see movies   went   Sentence Final le

    'He went to see the movies.'

g. *Ta   qu   dai   yi xie shui quo   qu   le.

    he   went bring   some fruit   went   Sentence Final le

    'He went to bring some fruit and went somewhere.'

However, not all characteristics of Chinese *qu1* and *qu2* can be applied to the pre-VP *khi* (*khi1*) and the post-VP *khi* (*khi2*) in Taiwanese. *Khi1* or *khi2* in (2a-e) only presents the subject's directional tendency. In (2a), (2b) and (2d), a locational NP can be followed by *khi1* or *khi2*, so *khi1* and *khi2* are lexical verbs with the meaning 'go.' The lexical category of *khi2* in (2c) is uncertain, but what is assured is that *khi2* clearly shows the subject's directionality but not the object's. The ungrammaticality of (2e) shows the impossibility of specifying the object's directionality by *khi2*. The co-occurrences of *khi1* and *khi2* are unacceptable in (2f-g). The reason is unknown, but we know that *khi2* cannot be a verb and it only denotes the subject's directionality. Briefly, *khi1* can be a verb and expresses the meaning 'go.' *Khi2* can function like *khi1*, but sometimes it only denotes the subject's directionality.
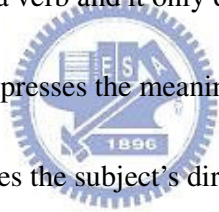
(2) a.   I   khi   tai bak   a.   他去台北阿   (verb meaning: go)

        he went   Taipei

        'He went to Taipei.'

   b.   I   khi   khuann tian ia   a.   他去看電影阿   (verb meaning: go)

        he went   see movies

        'He went to see the movies.'

c.   I   khuann tian ia   khi   a.   他看電影去阿

he   see movies   went

'He went to see the movies.'

d.   I   theh   tsit kua tsui koh   khi   a. 他拿一些水果去阿 (verb meaning: go)

he   took   some fruit   went

'He took some fruit and went to somewhere.'

e. *I   theh   qu   tsit kua tsui koh   a.   *他拿去一些水果阿

he took   went   some fruit

'He took away some fruit.'

f. *I   khi   khuann tian ia   khi   a.   *他去看電影去阿

he went   see movies   went

'He went to see the movies.'

g. *I   khi   tuat   tsit kua tsui koh   khi   a.   *他去帶一些水果去阿

he went bring   some fruit   went

'He went to bring some fruit and went somewhere.'

As mentioned above, the usages of *khi1* and *khi2* in Taiwanese appear to be limited.

However, there still exist other usages of *khi1* and *khi2* in Taiwanese, as shown in

(3)-(5). They provide unique syntactic and semantic properties. In these examples,

khi1 and *khi2* are no longer considered lexical verbs or just present the subject's

directionality. Instead, they derive meanings different from those in (2).

(3) a. I   khi   lon   tshia   他去撞車

    he   khi   hit   car

    'He hit a car'

   b. I   khi   hoo   A-Ming phah   他去 hoo 阿明打

    he   khi   let   A-Ming hit

    'He let A-Ming hit him'

(4) a. I   khi   lon tioh   tshia   他去撞到車

    he   khi   hit   car

    'He (the affectee) hit a car'

   b. I   khi   hoo   A-Ming   tsao khi   a   他去 hoo 阿明跑去阿

    he   khi   hoo   A-Ming   run away   a

    'He (the affectee) had A-Ming running away on him'

   c. I   khi   hoo   tshia   lon tioh   他去 hoo 車撞到

    he   khi   hoo   car   hit

    'He (the affectee) got hit by a car'

(5) a. A-Ming   tsao khi   a   阿明跑去阿

A-Ming   run away

'A-Ming ran away unexpectedly'

b. san   tam   khi   a   衫溼去阿

clothes   wet khi

'The clothes became wet unexpectedly'

c. tsheh   hoo A-Ming   theh khi   a   書 hoo 阿明拿去阿

book   hoo A-Ming   take khi

'The book was taken away by A-Ming'
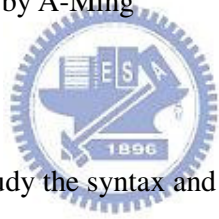
The purpose of this paper is to study the syntax and semantics of sentences like (3-5), and especially how *khi1* and *khi2* work syntactically and semantically in many various constructions. We propose that *khi1* has two forms: one is a purpose marker to denote the subject's will of performing an action, as shown in (3). The other form is an affectee voice head, which introduces the structural subjects as extra affectee arguments in relation to the events, as shown in (4). The syntactic positions of the two types of *khi1* are higher than those of the verbs: the first is a root modal, and the other is a voice head. On the other hand, *khi2* in (5) is a perfect marker to bring about the resultant state after a change of state. *Khi2* also derives an additional semantic

interpretation about the event's outcome beyond the speaker's or the subject's

expectation.

The organization of this paper is as follows: In section 2, we shall discuss the

syntactic and semantic characteristics of *khi1* and *khi2* and how they function in

various constructions. This discourse shall serve as a preliminary for section 3, where

several previous studies are reviewed. Section 3 will determine whether any analysis

on the syntactic and semantics functions of *qu1* and *qu2* in Chinese can be applied to

the cases of *khi1* and *khi2* in Taiwanese. In section 4.1, we will introduce the

preliminaries and the analysis of the uses of *khi1*. Likewise, in section 4.2, the

preliminaries and analysis of the use of *khi2* will be discussed. Section 5 is the

conclusion.

Chapter 2

<div style="text-align: right">**Characteristics of *khi1* and *khi2***</div>

2.1 The semantic and syntactic interpretations of *khi1*

2.1.1 Two types of *khi1*

There are two types of *khi1*. One denotes the subject's will or intention of performing

an action. The examples (6-9) demonstrate the verb types that can follow this *khi1* and

which types cannot follow it. The alternative *khi1* represents the subject as an affectee

of an event. The examples (10-12) show verb types acceptable to follow the second

khi1. A common property shared between the two *khi1s* is that neither is viewed as a

lexical verb to express the meaning 'go,' because a locational NP cannot follow either

of them. The two *khi1s* are placed syntactically higher than lexical verbs, because

their appearance does not influence the syntactic structure. They still have different

semantic interpretations and become functional categories.

We discuss the examples about the first type of *khi1*. By examining the examples in

(6), we see that activity verbs can follow *khi1* to represent the subject's intention or

will to cause events.

(6) a. I   khi   be   phua   san   他去買破衣

       he   khi   buy   ragged clothes

       'He bought ragged clothes'

   b. I   khi   tsiah   phainn khi a   mih 他去吃壞掉的食物

       he   khi   eat   stinky   food

       'He ate stinky food'

   c. I   khi   lon   tshia   他去撞車

       he   khi   hit   car

       'He hit a car'

   d. I   khi   khuann   kui a pa 他去看鬼魅

       he   khi   see   ghost

       'He saw ghosts'

Examples (7a-e) show that activity verbs and resultant complements can follow *khi1*,

meaning that the outcomes of the events are all derived from the subject's will. The

affectees are the objects.

(7) a. I   (tiau kong)   khi   ka   khong khue   tsoh liau 他(故意)去 ka 工作做完

       he (intentionally) khi   ka   job   finish

'He finished the job'

b. I (tiau kong)   khi ka mih puann liau liau 他(故意)去ka東西搬光光

he (intentionally) khi ka thing move   all

'He moved away all the things'

c. I (tiau kong)   khi long si   jong   他(故意)去撞死人

he (intentionally) khi hit dead   someone

'He hit someone and the guy died'

d. I (tiau kong)   khi ka tng tian suan 他(故意)去剪斷電線

he (intentionally) khi sever electric wire

'He severed the electric wire'

e. I (tiau kong)   khi tsha to   te 他(故意)去翻倒茶

he (intentionally) khi upset   tea

'He upset tea'

However, if activity verbs and *tioh/到,* 'the verb-ending complement,' co-occur with

khi1, as in (8a-d), event outcomes cannot be controlled by the subject[1]. Thus, *khi1* in

(8a-d) is not a marker to denote the subject's will.

---

[1] Few think that (8a-d) are acceptable, but pragmatic restrictions exist.

(8) a. *I   tiau kong   khi   long tioh   tshia   *他故意去撞到車

   he   intentionally   khi   hit   car

   'He intentionally hit the car'

   b. *I   tiau kong   khi   tsiah tioh   phainn khi a   mih

   he   intentionally   khi   eat   stinky   food

   'He intentionally ate stinky food'

   *他故意去吃到吃壞掉的食物

   c. *I   tiau kong   khi   be tioh   phua   san   *他故意去買到破衣

   he   intentionally   khi   buy   ragged clothes

   'He intentionally bought ragged clothes'

   d. *I   tiau kong   khi   siam tioh   io   *他故意去閃到腰

   he   intentionally   khi   twist   waist

   'He intentionally twisted his waist'

The rule that stative verbs and achievements cannot follow *khi1*, nor express the

subject's will or intention is presented in examples (9a-b).

(9) a.*I   khi   u   tsheh   *他去有書   (stative verbs)

   he   khi   have book

'He had a book'

b. * I   khi   gau (tat)   suann   tiann   *他去到(達)山頂 (achievements)

   he   khi   arrive   mountain top

   'He arrived at the top of the mountain'

Presently, we know that the first type of *khi1* denotes the subject's will of performing

an action and the acceptable verb types following *khi1* are activity verbs, the

combinations of activity verbs and resultant complements (excluding *tioh/到*)[2].

---

[2] *Lai/來* in Taiwanese can also denote the subject's purpose of performing an action, but the syntactic restrictions exist.

Lai can be followed by activity verbs to express the subject's purpose or will of doing an action.
(1) I   lai   be   phua san   他來買破衣
    he   lai   buy   ragged clothes
    'He bought ragged clothes'

Lai can be followed by activity verbs and resultant complements, but the acceptable resultant complements are restricted. If the event outcomes denoted by resultant complements are negative for the subject like (2b-d), *lai* is unacceptable in these sentences. (The subject, the possessor of the rice, is dropped.) Unlike the first type of *khi1*, *lai* shows that the subject cannot control the unfavorable or negative outcomes for himself.
(2) a. I   lai   ka   khong khue   tsoh liau   他來 ka 工作做完
       he   lai   ka   job   finish
       'He finished the job'
    b.*I   lai   long   si   jong   *他來撞死人
       he   lai   hit   dead   someone
       'He hit someone and the guy died'
    c. *I   lai   tsha to   te   *他來翻倒茶
        he lai   upset   tea
       'He upset tea'
    d. ben   lai   hoo   A-Ming   jia   liau liau   *飯來 hoo 阿明吃光光
       rice   lai   hoo   A-Ming   eat   all
       'All the rice was eaten by A-Ming'

Lai cannot followed by activity verbs and the resultant complement, *tioh/到* because the negative event outcomes denoted by *tioh/到* are uncontrollable by the subjects.
(3) a. I   lai   long tioh   tshia   *他來撞到車
       he lai   hit   car
       'He hit the car'

Then, we discuss the examples about the second type of *khi1*. Verb types that can

follow the second *khi1* are presented in (10-12). The verbs that follow *khi1*, to mark

subjects as affectees, are achievements, and the combinations of activity verbs and

resultant complements, which always imply results after events. When event results

are uncontrollable and unfavorable for the subjects, the subjects are considered

affectees of the events[3].

(10) I   khi   puat to   a 他(*故意)/(不小心)去跌倒阿

    he khi   fall down

    'He (the affectee) fell down'

(11) a. I   (*tiau kong)/(bo se li)   khi   long tioh   tshia

    he (*intentionlly)/(unintentionally)   khi   hit   car

    'He (*intentionlly)/(unintentionally) hit the car'

    他(*故意)/(不小心)去撞到車

---

b. I   lai   hoo   tshia   lon tioh   *他來 hoo 車撞到
   he lai   hoo   car   hit
   'He was hit by a car'

Thus, if *lai* presents the subject's purpose or will, the only verb types can follow *lai* are activity verbs, and the combinations of activity verbs and resultant complements, which do not present negative event outcomes for the subjects.

[3] As mentioned above, we know that the verb types occur with the second type of *khi1* imply the event outcomes are unfavorable and uncontrollable for the subjects. Thus, the second type of *khi1* denotes the subjects as affectees of the events. However, *lai* cannot denote the subjects as affectees of events. According to the examples shown in Note 2, it is known that *lai* cannot be followed by activity verbs and resultant complements, which present negative event outcomes for the subjects. This, it is tenable to say why *lai* cannot mark the subjects as affectees.

b. I   (*tiau kong) /(bo se li)   khi   tsiah tioh   phainn khi a   mih

   he (*intentionlly)/(unintentionally)   khi   eat   stinky   food

   'He (*intentionlly)/(unintentionally) ate stinky food'

   他(*故意) /(不小心)去吃到壞去 a 食物

c. I   (*tiau kong) /(bo se li)   khi   be tioh   phua   san

   he (*intentionlly)/(unintentionally)   khi   buy   ragged   clothes

   'He (*intentionlly)/(unintentionally) bought ragged clothes'

   他(*故意) /(不小心)去買到破衣

d. I   (*tiau kong) /(bo se li)   khi   siam tioh   io

   he (*intentionlly)/(unintentionally)   khi   twist   waist

   'He (*intentionlly)/(unintentionally) twisted his waist'

   他(*故意) /(不小心)去閃到腰

e. I   khi   siu tioh   siong hai   他去受到傷害

   he   khi   suffer   hurt

   'He was hurt'

f. I   khi   liang tioh   bat to   他去冷到肚子

   he   khi   cold   belly

   'He had a cold because his belly was exposed'

(12) a. I   sih tshiu   khi   phah si   A-Ming 他失手去打死阿明

        he   unintentionally   khi   beat   dead A-Ming

        'He unintentionally beat A-Ming dead'

    b. I   (bo se li)   khi   long   si   jong   他(不小心)去撞死人

        he   unintentionally   khi   hit   dead   someone

        'He unintentionally hit someone dead'

    c. I   (bo se li)   khi   ka tng   tian   suan 他(不小心)去剪斷電線

        he unintentionally   khi   sever   electric wire

        'He unintentionally severed the electric wire'

    d. I   (bo se li)   khi   tsha to   te   他(不小心)去翻倒茶

        he   unintentionally   khi   upset   tea

        'He unintentionally upset tea'

2.1.2 *Khi1* in the *hoo* constructions

We also know that *khi1* can occur with *hoo*, as shown in (13-14). According to Huang

(1999), *hoo* in (13) has the weak causative meaning, 'let.' The subject can

simultaneously be the patient, so *hoo* here can be causative *hoo* or get-passive *hoo*.

The subject marked by the first *khi1* in (13a) exhibits his willingness to be hit by

A-Ming. The subject in (13b) presents his willingness to let A-Ming run away but

meantime he is affected.

(13) a. I   (tiau kong)   khi   hoo   A-Ming   phah   他(故意)去 hoo 阿明打

he   intentionally   khi   hoo   A-Ming   hit

'He intentionally got hit by A-Ming'

b. I   (tiau kong)   khi   hoo   A-Ming   tsao   a   他(故意)去 hoo 阿明跑阿

he   intentionally   khi   hoo   A-Ming   run away

'He intentionally had A-Ming running away on him'

c. i   (tiau kong)   khi   hoo   A-Ming   khoan tioh   i e   pibit

he   intentionally   khi   hoo   A-Ming   see   his   secret

'He intentionally had A-Ming discovering his secret'

他(故意)去 hoo 阿明看到他 a 祕密

d. I   (tiau kong)   khi   hoo   tshia   lon tioh   他(故意)去 hoo 車撞到

he   intentionally   khi   hoo   car   hit

'He intentionally got hit by a car'

Huang (1999) also mentions that (14a) is an exclusive (or subject excluded) indirect

passive, (14b) is an inclusive (or subject included) indirect passive, and (15c) is a

direct passive. The subjects in (14a-c) are indirect patients (affectees), indirect

affectees, and patients, respectively. The *hoos* in (14a-c) are passive. The subjects in

(14) are all viewed as the affectees of the events denoted by *khi1* because the event

outcomes are unfavorable for the subjects. The affectee, likely the possessor of the

rice, in (14d) is dropped in the subject position.

(14) a. I   (bo se li)   khi   hoo   A-Ming   tsao khi   a

     he   unintentionally   khi   hoo   A-Ming   run away   a

     'He (the affectee) had A-Ming running away on him'

     他(不小心)去 hoo 阿明跑去阿

   b. i   (bo se li)   khi   hoo   A-Ming   khoan tioh   i e   pibit

     he unintentionally   khi   hoo   A-Ming   see   his   secret

     'He (the affectee) had A-Ming discovering his secret'

     他(不小心)去 hoo 阿明看到他 a 祕密

   c. I   (bo se li)   khi   hoo   tshia   lon tioh   他(不小心)去 hoo 車撞到

     he   unintentionally   khi   hoo   car   hit

     'He (the affectee) got hit by a car'

   d. Ben   khi   hoo   A-Ming   jia   liau liau   a   飯去 hoo 阿明吃光光阿

     rice   khi   hoo   A-Ming   eat   all

     'All the rice was eaten by A-Ming'

The occurrence of *khi1* in (13) and (14) does not influence the syntactic structure, so the position of *khi1* is syntactically higher than that of a verb. The two types of *khi1* are shown in (13) and (14), with their various semantic interpretations.

2.1.3 Summary

In brief, (6-7) and (13) present the subject's will, which is always denoted by the first *khi1*. The verbs are restricted to activity verbs, or combinations of activity verbs and resultant complements (except the resultant complement, *tioh/到*), or causative or get-passive *hoo*. On the other hand, subjects as affectees, denoted by the second type of *khi1* are negatively affected by the events in examples (10-12) and (14). Verbs that are able to occur after the second *khi1* have resultant complements following activity verbs, or are passive *hoo*, meaning that event outcomes are unfavorable for the subjects.

Table 1: two types of *khi1*

khi1	function	acceptable verb types after *khi1*
Type 1	denote the subject's will of performing an action	(1) activity verbs (2) activity verbs + resultant complements (excluding *tioh/到*) (3) causative *hoo* / get-passive *hoo*
Type 2	denote the subject as an affectee of an event	(1) achievements (2) activity verbs + resultant complements (3) passive *hoo*

2.2 The semantic and syntactic interpretation of *khi2*

2.2.1 *Khi2* in the NP+V+Khi2 constructions

First, we consider *khi2* in the NP+V+Khi2 constructions. After the addition of *khi2*,

the activity verbs in (15d-e) show the resultant state of disappearance turning from its

original state of existence. When those activity verbs occur with *khi2*, the change of

state and the resultant state of disappearance becomes more important than the lexical

meanings of the activity verbs. The activity verbs merely present the method of

disappearance, such as flying or running. In (15k), the verb *theh/*拿 'take' is also

considered an activity verb, which can be related to the disappearance of something.

Example (15k) is ungrammatical because it violates the restriction that (15) and (16)

are agent-less sentences, where NPs make the events happen autonomously.

(15) a. *A-Ming   khau khi   a   *阿明哭去阿

        A-Ming   cry   khi

        '*A-Ming cried away unexpectedly'

    b. *A-Ming   tsho khi   a   *阿明唱去阿

        A-Ming   sing away

        '*A-Ming sang away unexpectedly'

c. *A-Ming　thiau khi　a　　　*阿明跳去阿

　　A-Ming　jump khi

　　'*A-Ming jumped away unexpectedly'

d. A-Ming　tsau khi　　a　　　阿明跑去阿

　　A-Ming　run khi

　　'A-Ming ran away unexpectedly'

e. tsiau a　　pue khi　a　　　　鳥阿飛去阿

　　bird　　fly khi

　　'The bird flew away unexpectedly'

f. *phainn lan　thai khi　　a　　　*歹人殺去阿

　　　bad　guy　kill khi

　　'*The bad guy killed away unexpectedly'

g. *A-Hua　phah khi　　a　　　*阿華打去阿

　　A-Hua　hit　khi

　　'*A-Hua hit away unexpectedly'

h. *ing ku　oh khi　a　　　　*英文學去阿

　English study khi

　'*English studied away unexpectedly'

i. *kiu   that khi   a   *球踢去阿

   ball   kick khi

   '*The ball kicked away unexpectedly'

j. * tsheh   theh khi   a   *書拿去阿

    book   take khi

   '*The book took away unexpectedly'

k. *tian iann   khann khi   a   *電影看去阿

    movie   see   khi

   '*The movie saw away unexpectedly'

l. *im kah   thiann khi   a   *音樂聽去阿

    music   listen khi

   '*The music listened away unexpectedly'

Besides, the verb types in (16) are all acceptable. They all imply a state, and are

therefore known as stative verbs. When stative verbs occur with *khi2*, the verb+khi2

combination expresses the resultant state after a change of state. Accordingly, (16a)

shows the dog's death after the process of dying; (16b) presents the resultant state of

the sunken ship; (16h) indicates the open state of the door; (16j) points out A-Ming's

loss of consciousness, the resultant state of falling asleep.

(16) a.   kau a   si khi   a   狗阿死去阿

          dog   die khi

       'The dog died unexpectedly'

   b.   tsun   tim khi   a   船沉去阿

        ship   sink khi

       'The ship sunk unexpectedly'

   c.   san   la sap   khi   a   衫 la 髒去阿

        clothes   dirty   khi

       'The clothes became dirty unexpectedly'

   d.   toh po   tam khi   a   抹布溼去阿

          cloth   wet khi

       'The cloth became wet unexpectedly'

   e.   i a   phainn khi   a   椅阿壞去阿

        chair   ruin   khi

       'The chair broke unexpectedly'

   f.   san   phua khi   a   衫破去阿

        clothes   rag khi

       'The clothes become ragged unexpectedly'

g. soh a   ton   khi   a   繩子斷去阿

    rope   become two pieces   khi

    'The rope become two pieces unexpectedly'

h. moo a poo a   mng   khui khi   a, hai   i   kiann tsit le

    tomb's   door   open khi   make he   scare

    'The door of the tomb opened unexpectedly, and he was scared'

    墓阿埔的門開去阿,害他嚇一下

i. moo a poo a   mng   kuainn khi   a, hai   i   shut bue khi

    tomb's   door   close khi   make him   out not   go

    'The door of the tomb closed unexpectedly and he could not go outside'

    墓阿埔的門關去阿,害他出不去

j. A-Ming   khuan khi   a   阿明睏去阿

    A-Ming   sleep khi

    'A-Ming fell asleep unexpectedly'

Therefore, whether *khi2* occurs with activity verbs to denote the disappearance of

something, or with stative verbs to imply a change of state, it marks the resultant state

after a change of state, and forms an achievement with its preceding verb.

To make an elaborate explanation for the semantics of *khi2*, we examine (15e) and

(16j). If *khi2* did not appear in (15e), the sentence would be ordinary, without

presupposition. However, because of the occurrence of *khi2*, the sentence is

acceptable only when A-Ming's running away is beyond the speaker's expectation.

Likewise, (16j), without *khi2*, would be an ordinary sentence without presupposition.

With *khi2*, the sentence is acceptable only when A-Ming's falling asleep is not the

speaker's expectation.

Therefore, we can derive the semantic denotation of *khi2*, as follows:

For any w, $[[\text{khi2}\,(\phi\,)]]^{w}$ = $\lambda p \in D_{<s,t>}$. λx.[for all worlds w' incompatible with

what x expects in w: p(w')=1], where x is the speaker or the subject.

2.2.2 *Khi2* in the causative *hoo* constructions and in the passive *hoo* constructions

Khi2 can occur not only in the NP+V+Khi2 constructions, but also in the causative

and passive *hoo* constructions. These constructions determine if the function of *khi2*

changes.

First, (17-19) present the sentences 'some causing event lets/causes something...' *Hoo*

has the weak causative meaning, 'let/allow.' The verb types that allow *khi2* to follow

the verbs in the causative *hoo* constructions are restricted, they will be discussed

below.

(17) *i/*tsi le si iam   hoo   A-Ming   khuan khi   a

    he/this experiment   hoo   A-Ming   sleep khi

   '*He/*This experiment made A-Ming fall asleep unexpectedly'

   *他/*這個實驗 hoo 阿明睏去阿

(18) a. *i/*khai kuan   phainn khi   hoo   moo a poo a   mng   khui khi   a

    he/ bottom   malfunction   hoo   tomb's   door   open khi

   '*He/*The malfunctioning bottom made the door of the tomb become open

   unexpectedly' *他/*開關壞去 hoo 墓阿埔的門開去阿

(19) a. i / soh a   sang khi   hoo A-Ming tsau khi   a   他/[繩子鬆去]hoo 阿明跑去阿

    he/rope   loose   hoo A-Ming run khi

   'He/The looseness of the rope made A-Ming run away'

   b. i/ tsiau lang a   phua khi   hoo tsiau a   pue khi a 他/[鳥籠破去]hoo 鳥阿飛去阿

    he/ bird cage   broken   hoo   bird   fly   khi

   'He/The broken bird cage made the bird fly away '

c. i/ ioh a   khong sio tse   hoo kau a   si khi   a 他/藥放太多 hoo 狗阿死去阿

   he/medicine put too much hoo dog   die khi

   'He/Putting too much medicine made the dog dead'

d. i/i soh a   kiu sio an   hoo   soh a   ton   khi   a

   he/rope   lug too tight hoo   rope   become two pieces   khi

   'He/His lugging the rope too tightly made the rope become two pieces'

   他/他繩子拉太緊 hoo 繩子斷去阿

In terms of verb classification, we observe that some variations cannot co-occur with

weak causative *hoo*. The verb *khuan/睏* 'sleep' is classified as an unergative verb in

(17). The verbs, *khui/開* 'open' and *khainn/關* 'close' in (18) are ergative verbs. The

verbs in (19a-c) are unaccusative verbs. The verb in (19d) is thought of an

unaccusative because it can be placed after a light verb to modify the state of an

action. Only unaccusative verbs in (19) are able to occur with *khi2*. The original

function of *khi2* remains, and allows it to denote the resultant state of an event, though

the event outcome may not match the speaker/subject's expectation.

In the grammatically correct sentences of (20), the *hoo* is passive. The patients/themes

in (20) are placed in the structural subject position, through NOP movement. The

agents cannot be omitted or eliminated. *Khi2* in these sentences brings about a change

of state, as denoted by a verb that matches the limitation of passivization mentioned

by Lisa Cheng, James Huang, Audrey Li, and Jane Tang (1996). Passivation is

possible only with verbs which are accomplishments.

However, the ungrammaticality of (20a-f) in the passive *hoo* construction remains.

When the activity or stative verbs occur with *khi2*, the combination denotes the

resultant state after a change of state. Thus, it is reasonable to infer that (20a-f) are

ungrammatical because the verbs in (20a-c) cannot describe the resultant state of

disappearance, and the resultant states in (20d-f) are unknown or uncertain. The

examples in (20g-j) present the resultant state of the objects' disappearance by the

transfer of possession or manner of verbs.

(20) a. *phainn lan   hoo A-Ming   thai khi   a   *歹人 hoo 阿明殺去阿

        bad   guy   hoo A-Ming   kill khi

        '*The bad guy was killed away by A-Ming'

   b. *A-Hua   hoo A-Ming   phah khi   a   *阿明 hoo 阿明打去阿

       A-Hua   hoo A-Ming   hit   khi

       '*A-Hua was hit away by A-Ming'

c. *A-Hua   hoo A-Ming   me khi   a   *阿明 hoo 阿明罵去阿

   A-Hua   hoo A-Ming   scold khi

   '*A-Hua was scolded away by A-Ming'

d. *tian iann   hoo A-Ming   khann khi   a   *電影 hoo 阿明看去阿

   movie   hoo A-Ming   see   khi

   '*The movie was seen away by A-Ming'

e. *im kah   hoo A-Ming   thiann khi   a   *音樂 hoo 阿明聽去阿

   music   hoo A-Ming   listen khi

   '*The music was listened away by A-Ming'

f. *ing ku   hoo A-Ming   oh khi   a   *英文 hoo 阿明學去阿

   English   hoo A-Ming   study khi

   '*English was studied away by A-Ming'

g. kiu   hoo A-Ming   that khi   a   球 hoo 阿明踢去阿

   ball   hoo A-Ming   kick khi

   'The ball was kicked away by A-Ming'

h. pong   hoo A-Ming   tsiah khi   a   飯 hoo 阿明吃去阿

   rice   hoo A-Ming   eat   khi

   'The rice was all eaten by A-Ming'

i. lan kheh   hoo A-Ming   kiu khi   a   客戶 hoo 阿明拉去阿
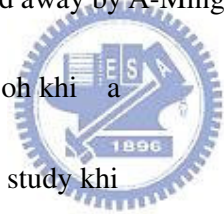
client   hoo A-Ming   take khi

'The clients was all taken away by A-Ming'

j. tsheh   hoo A-Ming   theh khi   a   書 hoo 阿明拿去阿

book   hoo A-Ming   take khi

'The book was taken away by A-Ming'

In brief, no matter how the syntactic structure of the *hoo* sentences change, *khi2*

always brings about an unexpected resultant state.

Chapter 3

Previous analyses

The literature reviewed in this section is organized chronologically. We begin

with Ke's (1991) analysis in section 3.1. Section 3.2 and section 3.3 present the

analyses of Zhang (2001) and Chen (2006), respectively.

3.1 Shu-Jun Ke (1991)

According to Ke (1991), two types of *qu1* and two types of *qu2* exist in Chinese.

In (20) and (21), the b sentences define the discrepancies between different types of

qu1: *qu1* in (20b) can be followed by a location or a goal noun phrase, while *qu1* in

(21b) cannot. She further asserts that *qu1* in sentences like (20a) is a canonical verb,

whereas *qu1* in sentences like (21a) is considered an auxiliary verb, without

influencing the argument structure. *Qu1* in (20b) functions as an auxiliary verb that

can be tested by several ways: (i) An auxiliary verb may occur as the A element in

A-not-A questions, (ii) An auxiliary verb may be negated, (iii) An auxiliary verb is

subcategorized as a verb phrase, just as a transitive verb taking a verb phrase as a

complement, (iv) An auxiliary verb cannot take an object, (v) An auxiliary verb does

not take aspect markers and (vi) An auxiliary verb can be omitted without affecting

either the grammaticality of the sentence or the integrity of the whole syntactic

structure (for details, refer to Ke, p.31-27).

(20)a.   Ta   qu   kan dian ying   le.

       he   went   see movies   Sentence Final le

       'He went to see the movies.'

  b.   Ta   qu   tai bei   kan dian ying   le.

       he   went   Taipei   see movies   Sentence Final le

       'He went to Taipei and saw the movies.'

(21) a.   Wo   cai   bu   qu   xiang xin   ha de hua.

       I   not   go   believe   his words

       'I am not going to believe his words.'

  b. * Wo   cai   bu   qu tai bei   xiang xin   ha de hua.

       I   not   go Taipei   believe   his words

       'I am not going to Taipei to believe his words.'

Semantically, only a [+human] NP in sentences like (21a) can be the subject of the

modal-like *qu1*. Also, *qu1* participates in semantic selectional restriction of the matrix

subject, proven by the nonhuman subject in (22a), which cannot be followed by the

modal-like *qu1*. The inherent meaning of the two types of *qu1* is concerned with

motion and direction. They denote the subject's purposes for their preceding VPs.

(22) a. *Hong shui   qu   chong duan   le   qiao liang.

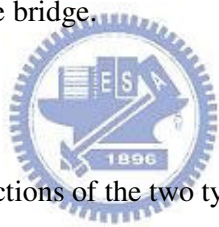   food   go   damage   LE   bridge

      'The flood went to damage the bridge.'

   b. Hong shui   chong duan   le   qiao liang.

      flood   damage   LE   bridge

      'The flood damaged the bridge.'

She also refers to the various functions of the two types of *qu2*. For instance, *qu2* in

(23a-b) is different from that in (24a-b). In (23), *qu2* is only allowed to be placed after

a noun phrase, while *qu2* in (28) can occur after a noun phrase, or after a verb phrase.

Additionally, *qu2* in (23a) is a clitic marker, which is phonologically weakly stressed

and unable to occur alone syntactically, marking the directional tendency of the

structural subject's action. In (24a-b), the form of *qu2* has two subtypes. They are

only followed by transmission verbs such as *jie* 'borrow,' *ji* 'mail,' *song* 'send' and *na*

'take,' as shown in (24a) and (24b). In (24a), *qu2* is analyzed as a verb to form a serial

verb construction with the verb preceding *qu2,* because *qu2* can be followed by a

location or goal noun phrase, whereas *qu2* in (24b) is taken as a phase marker to

construct a V-C compound. In terms of semantics, however, the two *qu2s* all display

the direction of the object after an action.

(23) a. Ta   kan dian ying   qu   le.

      he   see movies   went   Sentence Final le

      'He went to see the movies.'

   b. *Ta   kan   qu   le   dian ying.

      he   see   went   LE   movie

      'He saw the movies.'

(24) a.   Ta   na   le   yi ben shu   qu   le.

      he   take LE   a   book   went   Sentence Final le

      'He took a book and leave/go to somewhere.'

   b.   Ta   na   qu   le   yi ben shu.

      he   take   went   LE   a   book

      'He took away a book.'

Although Ke (1991) points out that one *qu1* can be an auxiliary verb, and can be

tested using various methods, the "A-not-A test" fails in Taiwanese. We cannot

determine whether a verb falls into the auxiliary category in Taiwanese, if one of the

tests is not available. In Ke's (1991) analysis, *qu1* denotes the purpose for performing

an action, because of the agent's intention to cause the event. However, *qu1* denoting

the purpose still cannot interpret the usage of *khi1* in (10-12) and (14), where *khi1*

does not denote the subject's intention or purpose.

In Ke's (1991) interpretation, *qu2* is also thought of as a phase marker, which forms a

V-C compound with its preceding verb. The verbs which can follow *qu2* are

semantically restricted to the category of transmission verbs. However, the

interpretation does not explain why some transmission verbs cannot co-occur with

khi2, as in (15j), nor does it interpret the grammaticalities of (16a-j). Therefore, Ke's

(1991) analysis of *qu*s in Chinese does not include an analysis of Taiwanese *khi1* and

khi2.

3.2 Niina Zhang (2001)

Zhang (2001) refers to *qu* in the Qu-Predicate Construction, as shown by (25), as

the head of a functional phrase higher than AspP, but lower than NegP. First, Zhang

compares (25a) and (25b) to point out that *qu* in (25a) is a directional motion verb,

base-generated at V and can be followed by an aspect marker. However, *qu* in (25b),

unlike regular verbs, cannot have an aspect suffix, and is base-generated at that

position for aspect markers, unavailable for an aspect suffix.

(25) a. Baoyu   qu   guo   xiang gong.

    Baoyu   went   experiential marker   Hong Kong

    'Baoyu has ever been to Hong Kong.'

  b. Baoyu   qu   (*{le/zho/guo})   kan   le   dian ying.

    Baoyu   qu   aspect marker   see   LE   movie

                    /progressive marker

                    / experiential marker

    'Baoyu went to see movies.'

She further asserts that the removal of *lai* or *qu* does not bring any change in meaning,

as shown by (26a), and that *lai* and *qu,* which are interchangeable, do not show strong

semantic contrast.

(26)   Ni men   (lai/qu)   yan jiu yan jiu kan   ze me   jie jue.

    you (plural)   come/go   study   how   solve

    'You guys discuss and find out the solution.'

In (27), the negation marker occurs before *qu* and proves that the position of *qu* is

lower than NegP. She assumes that *lai* and *qu* behave like English auxiliaries (Roberts

1998). English auxiliary verbs do not have an argument structure, and thus are not

concerned with theta-role assignment, as in the Lai/Qu-Predicate construction.

(27)   Baoyu   mei   qu   zhao   ni.

    Baoyu   not   go   find   you

    'Baoyu didn't go to find you.'

Zhang (2001) argues that post-predicate *qu* is placed in the higher structural position

than the predicate, proven in comparison of (28) and (29). In (28), Answer 1 of the

question is appropriate, because it contains the highest verb *xiang* 'want.' However,

Answer 2 of the question is inappropriate, because it lacks the highest verb *xiang*.

Thus, She assumes that the post-predicate *qu* in (29), which behaves like *xiang*, is the

highest verbal element.

(28) Question: Da Bao   xiang   mai shu   ma   ?

           Da Bao   want   buy book   question marker

           'Does Da Bao want to buy books?'

Ans1: Dui, ha   xiang   mai.

      yes   he   want   buy

      'Yes, he want to buy books.'

Ans2: #Dui, ha   mai   (shu).

      yes he   buy   book

      'Yes, he buys books.'

(29) Question: Da Bao   kan   dian ying   qu   le   ma   ?

         Da Bao   see   movie   go   LE   question marker

         'Did Da Bao go to see the movies?'

Ans1: Dui, ha   qu   le.

      yes   he went   Sentential Particle le

      'Yes, he went to see the movies.'

Ans2: Dui, ha   kan   dian ying   qu   le.

      yes he   see   movie   go   Sentential Particle le

      'Yes, he went to see the movies.'

Ans3: Dui, ha   qu   kan   dian ying   le.

      yes he   go   see   movie   Sentential Particle le

      'Yes, he went to see the movies.'

Ans4: #Dui, ha   kan   dian ying   le.

yes he   see   movie   Sentential Particle le

‘Yes, he saw the movies.’

It is also proven in the comparison between (30) and (31) that to Zhang (2001), the

structural position of the post-predicate *qu* is higher than the predicate. It c-commands

the predicate, following Kanye's (1994) analysis of an element asymmetrically

c-commanding its complement.

(30) a. Lao Li   xiang   shui jiao, Lao Gao   ye   xiang   pro$_i$.

      Lao Li   want   sleep   Lao Gao   also   want

      ‘Lao Li wants to sleep, and Lao Gao does, too.’

   b. *Lao Li   xiang   shui jiao, Lao Gao   ye   e$_i$ shui jiao.

      Lao Li   want   sleep   Lao Gao   also   sleep

      ‘Lao Li wants to sleep, and Lao Gao does, too.’

(31) a. Lao Li   [kan dian ying] qu le,   Lao Gao   ye   qu   le.

      Lao Li   see   movie   go LE   Lao Gao also   go   LE

      ‘Lao Li went to see the movies, and Lao Gao did, too.’

   b. *Lao Li [kan dian ying] qu le,   Lao Gao   ye [kan dian ying] le.

Lao Li   see   movie   go LE   Lao Gao also see movie   LE

'Lao Li went to see the movies, and Lao Gao did, too.'

Moreover, Zhang asserts that *qu* in the Predicate-Qu Construction is raised and

adjoins to the sentence-final particle le in the T position. She argues that the

simultaneous occurrence of the pre-predicate *qu* and the post-predicate *qu* in the

Predicate-Qu Construction implies the existence of a movement chain, that is, the two

*qu*s can be spelled out at PF. However, the pre-predicate *qu* is established as the tail

copy of the chain, using the HMC rule that a head element moves across another

lower head element. The pre-predicate *qu* is sometimes optional, even semantically

interchangeable with *lai*.

Though Zhang (2001) points out the pre-predicate *qu* is like an English auxiliary verb

structurally, she does not explain how the pre-predicate *qu* functions semantically.

Khi1 in (7-8) and (14) denotes the subjects' purpose. It passes the syntactic tests

Zhang (2001) provides for the pre-predicate *qu* as an auxiliary verb, but without the

precise semantics of the pre-predicate *qu*, it is still questionable whether *khi1*

functions like the pre-predicate *qu* in every aspect. Additionally, the examples Zhang

(2001) offers do not apply to other cases of *khi1*, such as in (11-13) and (15).

In terms of the post-predicate *qu*, she mentions that the position of *qu* is higher than

that of its predicate, and even adjoins to the left of sentential particle *le*. As for

Taiwanese *khi2* in the *hoo* constructions, however, her analysis is irrelevant. We find

that *khi2* in (32a) and (33a) cannot be parted from *theh/*拿 'take' or left stranded in

the higher position. The solid combination of the verb and *khi2* cannot be separated,

as shown by (32b)'s ungrammaticality.

(32) a. *Tsheh [hoo   (jong)   theh   khi]   a, pih   ma   hoo   (jong)

     book   hoo someone take   phase   pen also   hoo   someone

     *書 [hoo (人) 拿] 去 阿，筆麻 hoo (人)

     khi   a

     khi

     去阿

     'The book is taken away by someone, and the pen is, too.'

  b. * Tsheh [hoo   (jong)   theh   khi]   a, pih   ma   hoo   (jong)

     book   hoo someone   take   khi   pen   also   hoo   someone

     *書 [hoo (人) 拿] 去 阿，筆麻 hoo (人)

theh　　　　a.

take

拿阿

'The book is taken away by someone, and the pen is, too.'

(33) a. *Tsheh　khi　　　hoo　　(jong)　theh.　　書去 hoo(人)拿

　　　book　khi　　　hoo　　someone　take

　　　'The book was affected by someone's taking.'

b.　Tsheh　hoo　　(jong)　　theh　　khi　　a.　　書 hoo(人)拿去阿

　　book　hoo　　someone　take　　khi

　　'The book was taken away by someone.'

c.　Tsheh　khi　　hoo　(jong)　theh　khi　a.　書去 hoo(人)拿去阿

　　book　khi　　hoo someone　take　khi

　　'The book was affected by someone's taking it away.'

Zhang (2001) also mentions that the pre-predicate *qu,* which can be omitted, is the tail

copy of the chain. Little importance is given to the semantic interpretation of

pre-predicate *qu*. However, her argument is proven wrong when we apply her analysis

to the examples in (33). Her analysis only applies to *khi1* and *khi2* in (33c) and (33b).

In her analysis, (33a) has to be grammatical, but it is not. Additionally, the HMC rule

is violated because the position of *khi2* is lower than that of *khi1* in (33c). Therefore,

khi1 cannot be the tail copy of *khi2*. We are unable to use her analysis to explain (33),

and think that the two *khi*s in Taiwanese have different syntactic and semantic

functions.

3.3 I-Chun Chen (2006)

Chen (2006) discusses the function of *khi2* as a phase marker, and *khi2* expresses

the speaker's viewpoint. Moreover, the Hoo+VP+Khi2 construction further conveys

the speaker's negative attitude (the speaker is most likely an affectee) towards the

event, because the speaker cannot control the event, or it is beyond the speaker's

expectation. Chen (2006) also asserts that the meaning of *khi2* originates 'away from

the speaker' and extends to 'subside/fade away' and 'to be unperceivable,' and to 'out

of the speaker's control or expectation.'

She classifies the verb types which can occur with *khi2*: an activity motion verb, like

intransitive verbs, such as *tsau/走* 'walk,' *hin/行* 'proceed,' *thiau/跳* 'jump,' *pue/飛*

'fly,' *pe/爬* 'crawl,' *lau/流* 'flow;' transitive verbs, such as *theh/提* 'carry,' *pua/搬*

'move,' *kia/寄* 'send,' *oo/挖* 'dig,' *san/送* 'give as a gift,' or *liah/抓* 'catch.' When

an activity motion verb occurs with *khi2*, it denotes the meaning 'X makes the object

Y move to the place Z.' If the activity motion verb is an intransitive, X is equal to Y. If

it is a transitive, X is not equal to Y.

The verb variation is stative (including an adjective), such as *bo/*無 'disappear,' *am/*

暗 'dark,' *tsian/*靜 'quiet,' *siau/*消 'flat,' *suan/*散 'scattered,' *kuan/*冷 'cold,' *te/*短

'short,' *san/*瘦 'thin,' *si/*死 'dead,' *khuan/*睏 'sleep,' *huan/*昏 'fainted' (with the

meaning 'subside/fade away or static') and *ta* 乾/*tam* 澹 'dried/wet,' *khui* 開/*kuainn*

關 'open/closed,' *tshau/*臭 'stinky,' *ng/*黃 'ripe,' *to/*倒 'collapsed' (with neutral

lexical meanings or the speaker's negative attitude). When a stative verb occurs with

khi2, it denotes a change of state and its completion with the speaker's negative

attitude. The third verb variation has a resultant complement, like *sio phainn/*燒壞

'heated and broken,' *sio tiau/*燒掉 'fired.' When the third verb variation occurs with

khi2, it denotes the completion of a state and expresses the speaker's subjective or

negative attitude.

If Chen's analysis is adopted, *khi2* will have two diverse meanings: one is a

directional reading; the other denotes the completion of a change of state. However, a

better way is to clarify the unified meaning of *khi2*, so we make small modifications,

and argue that the combination of activity verbs and *khi2* can refer to the change of

state from existence to disappearance. This is because the combination does not emphasize the object's direction, but the object's final resultant state. For example, *A-Ming tsau khi a/阿明走去阿* 'A-Ming ran away' does not mean 'A-Ming went to some place Z,' or **A-Ming thiau khi a/*阿明跳去阿* '*A-Ming jumped to some place Z' would make sense if directionality were the focus. Additionally, in Chen's analysis, when the activity motion verbs occur with *khi2*, they derive the meaning 'X makes the object Y move to the place Z,' but the intransitive motion verbs, which occur with *khi2,* do not need an X to make Y move, such as *tsui lau khi a/水流去阿* 'The water flowed away' (X=Y≠agent). This demonstrates some anomalies of the meaning she provides. Examples with the transitive activity motion verbs include: *??phue hoo A-Ming kia khi a/??信 hoo 阿明寄去阿* '??The letter was sent by A-Ming.' This sentence does not define the final destination of the letter.

Therefore, after our modification, those verbs which can occur with *khi2* refer to a resultant state. The meaning of *khi2* 'the event outcomes are beyond the speaker's or the speaker's control or expectation' is derived.

Chapter 4

Proposal

Section 4.1 addresses theories that can be applied to *khi1* as preliminaries, as well as the analysis of the various usages of *khi1*. Section 4.2 concerns theories that can be applied to *khi2* as preliminaries and the analysis of *khi2* in the NP+V+Khi2 and *hoo* constructions.

4.1 The different uses of *khi1*

4.1.1 Preliminaries for the first type of *khi1*

We are going to introduce Liang's (2007) interpretation about the process of becoming a purpose marker for Chinese qu and Barbier's (2005) explanation for modals and their syntactic orders. We discover that the first type of *khi1* functions like Chinese *qu* and becomes a purpose marker. Besides, the syntactic position of the first type of *khi1* is higher than verbs but lower than epistemic modals, and this *khi1* is semantically interpreted as similarly as root modals. It matches Barbier's statements, so we view the first type of *khi1* as root modals.

4.1.1.1 The emergent process of the purpose marker *Lai* or *Qu*

Liang (2007: 163-208) mentions that the purpose marker *lai* or *qu* has already

existed in the serial verb construction 'lai/qu + EVENT.' When *lai* or *qu* doesn't

express the agent's movement from place A to place B, it functions as the purpose

marker, and is followed by the VP, emphasizing the agent's desire or hope.

In ancient Chinese, a serial verb construction 'lai/qu + EVENT' whose EVENT

contained a verb phrase as the focus of the semantic interpretation, denoting the

agent's leaving for somewhere to do something, once existed. In (34), *lai/qu* is a

canonical deictic verb, which is followed by an optional location noun phrase, the

destination at which the speaker stands after the agent's movement from somewhere

and the place where the action is happening.

(34) a. Liang   fa,   wei   yu zei   he,   yi niu yu zei   yi shi,

       rice   lack   pretend and thief   cooperate use cow and thief   change food

       zei   lai   qu niu,   niu ze   ben   huan.

       thief   purpose marker   take cow   cow then   run   back

       糧乏，偽與賊和，以牛與賊易食，賊來取牛，牛輒奔還

       'We lack rice and pretend to cooperate with the thieves. We exchange food

with the thieves by cows. When the thieves come to take cows, cows will

finally run back.'

b. Xiao xing zhe   qu   mai cai,   zhi wu   bu hui.

servant   purpose marker buy vegetables   until afternoon not back

小行者去買菜，至午不回

'The servant went to buy vegetables. He will not be back until afternoon.'

However, in (35), *lai/qu* no longer expresses the agent's movement. We cannot take

lai/qu as a deictic verb when it is followed by an omitted location NP. The main

function of *lai/qu* is to make the VP become the core of the action, stressing the

agent's subjective will. Thus, *lai/qu* can be a purpose marker.

(35) a. Xue zhe   xu shi   ba   sheng ren zhi yan   lai   qiong jiu,   jian de

Scholar   need   BA   saint's   words   purpose marker   study   see

shen   xin   yao   ru ci, zuo shi   yao   ru ci.

body mind   need   so   behaviors   need   so

學者須是把聖人之言來窮究，見得身心要如此，做事要如此

'Scholars needs to study the saints' words. And practice it physically and

psychologically, even in behaviors.'

b. Quan ran   ba   yi ji   si yi   qu   kan   sheng xian zhi shu

   all   BA   self   thoughts   purpose marker   read   saint's   book

, ru he   kan de chu.

 how   figure out

'If we understand the words in the saints' books by our own twisted

explanations, how can we figure out the meanings?'

全然把一己私意去看聖賢之書，如何看得出！

Lai/Qu in Chinese is still different from *go* in English. *Lai/Qu* cannot be further

grammaticalized as *go* can be in English, nor can it function as a grammatical marker

of futurity. In addition to activity verbs like *visit* and *buy* in (36b) and (36c),

respectively, stative verbs, such as *like* in (36d), can be followed by *go*, implicating

the de-emphasis of the subject's will and purpose, to outstand the external speaker's

subjective judgment.

(36) a. I *am going* home. (main verb)

   b. I *am going to* visit Mrs. Pumphrey. (main verb)

   c. I *am going to* buy a new carriage. (main verb/ grammatical markers of

   futurity)

d. You'*re going to* like this book. (grammatical markers of futurity)

Nevertheless, *lai/qu* in Chinese maintains strong semantic features, [+volition] and

[+control] that make lai/qu hold onto its lexical meaning. Therefore, (37) is

ungrammatical if *qu* is used in a future sense.

(37) *Ni   hui   qu   xi huan   zhe ben shu.[4]

   you will   purpose   like   this book

          marker

   'You are going to like this book.'

4.1.1.2 Modals and their syntactic orders

Barbiers (2005) mentions a great deal of research on the distinction between

epistemic and root interpretations of modals. Epistemic modals have a class of

interpretations, involving a speaker-oriented, matrix-subject oriented qualification or

modification of the truth of a proposition in embedded clauses. Root modal

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[4] Ta   hui   qu   xihua   na zhong   nu hai zi   ma?   他會去喜歡那種女孩子嗎？
  He   hui qu   like   that kind   girl
  'Is it possible for him to love that kind of girl?'

Hui/會 in this sentence does not present future sense. It functions like an epistemic modal and
expresses the possibility of the truth of the proposition. The speaker of the sentence imposes his
judgment on the subject's love that makes the subject become an affectee of the loving event.
Actually, *qu* still denotes the subject's will to love the girl and is interpreted as a purpose marker.

interpretations involve the will, ability, permission or obligation to perform some

action or bring about some state of affairs. However, the two readings are not easily

distinguishable in sentences, such as the example given in (38):

(38) John must be home at six o'clock.

    Epistemic: '(Given what I, the speaker, know), I conclude that John will be home

        at six o'clock.'

    Root: 'John is obliged to be home at six o'clock.'

Although the two interpretations are semantically ambiguous, they are distinguishable

in syntactic structures. Scholars have used many syntactic tests to differentiate

epistemic modals from root modals. However, several scholars (McDowell (1987),

Brennan (1993), Cinque (1999), Cormack and Smith (2002) and Butler (2003))

cannot clearly determine whether modals are auxiliaries or verbs. Their conclusion is

that the syntactic positions of epistemic modals are higher than those of root modals.

The syntactic positions of modals are higher than those of verbs. The exact syntactic

position of modals remains mysterious.

4.1.2 Analysis of the first type of *khi1*: *khi1* is a purpose marker

Referring back to section 2.1, the examples in (6-7), repeated in (39-40) show that

khi1 followed by activity verbs or the combinations of activity verbs and resultant

complements (excluding *tioh/到*) denotes the subjects' intention or will to do

something.

(39) a. I　　khi　　be　　　phua　san　　　他去買破衣

　　　he　khi　　buy　　ragged clothes

　　　'He bought ragged clothes'

　　b. I　　khi　tsiah　phainn khi a　mih 他去吃壞掉的食物

　　　he　khi　eat　　　　stinky　　food

　　　'He ate stinky food'

　　c. I　　khi　lon　tshia　他去撞車

　　　he　khi　hit　car

　　　'He hit a car'

　　d. I　　khi　khuann　kui a pa 他去看鬼魅

　　　he　khi　see　　　　ghost

　　　'He saw ghosts'

(40) a. I   (tiau kong)   khi   ka   khong khue   tsoh liau 他(故意)去 ka 工作做完

　　　he (intentionally) khi   ka   job   finish

　　　'He finished the job'

　　b. I   (tiau kong)   khi   ka   mih   puann   liau liau 他(故意)去ka東西搬光光

　　　he (intentionally) khi   ka   thing   move   all

　　　'He moved away all the things'

　　c. I   (tiau kong)   khi   long   si   jong   他(故意)去撞死人

　　　he (intentionally)   khi   hit   dead   someone

　　　'He hit someone and the guy died'

　　d. I   (tiau kong)   khi   ka tng   tian   suan 他(故意)去剪斷電線

　　　he (intentionally)   khi   sever   electric wire

　　　'He severed the electric wire'

　　e. I   (tiau kong)   khi   tsha to   te   他(故意)去翻倒茶

　　　he (intentionally)   khi   upset   tea

　　　'He upset tea'

Examples (13a-d), repeated in (41a-d) present the subjects' control or intention, but

the subjects are affected in some way. A location NP cannot be placed after *khi1*,

showing that *khi1* no longer denotes an agent's movement from one place to another.

Instead, *khi1* exhibits the agents' purposes to cause the events, though the subjects are possibly affected in (41a-d), and the events are under the agents' control.

(41) a. I   (tiau kong)   khi   hoo   A-Ming   phah   他(故意)去 hoo 阿明打

   he   intentionally   khi   hoo   A-Ming   hit

   'He intentionally got hit by A-Ming'

   b. I   (tiau kong)   khi   hoo   A-Ming   tsao   a   他(故意)去 hoo 阿明跑阿

   he   intentionally khi   hoo   A-Ming   run away

   'He intentionally had A-Ming running away on him'

   c. i   (tiau kong)   khi   hoo   A-Ming   khoan tioh   i e   pibit

   he   intentionally   khi   hoo   A-Ming   see   his   secret

   'He intentionally had A-Ming discovering his secret'

   他(故意)去 hoo 阿明看到他 a 祕密

   d. I   (tiau kong)   khi   hoo   tshia   lon tioh   他(故意)去 hoo 車撞到

   he   intentionally   khi   hoo   car   hit

   'He intentionally got hit by a car'

According to Liang (2007), the original meaning of Chinese *qu* is further extended from expressing the agent's movement, to the agent's subjective will as a purpose

marker. This makes the VP following Chinese *qu* become the core of the action.

Chinese *qu* still maintains strong semantic features [+volition] and [+control]. *Khi1* in

(39-41) expresses the agent's purpose to control one event, correspondent to the

properties of Chinese *qu* that Liang (2007) observes.

Because *khi1* is placed higher than a lexical verb and allowed to be omitted, it is

categorized as a functional category, and denotes the subject's control and volition.

The semantic interpretation of *khi1* is like that of a root modal (Barbiers 2005),

involving 'will/volition.' Barbiers also mentions the difficulty of determining the

exact syntactic position of a root modal as an auxiliary or a verb. Thus, we consider

that the syntactic position of *khi1* is like that of a root modal, which is higher than a

lexical verb. *Khi1* is not viewed as an auxiliary because Taiwanese, unlike English,

does not have apparent inflectional systems. *Khi1* is still not used as a verb (see

Huang's frame in The Syntax of Chinese: 226-227).

The relative syntactic position of *khi1* is like that of a root modal. It is lower than an

epistemic modal but higher than a lexical verb, according to the fine-grained

distinctions of modal positions, offered by Cormack and Smith (2002) and Cinque

(1999). Also, the semantic interpretation of *khi1* is like that of a root modal, the 'will'

to perform some action or bring about some state of affairs.

4.1.3 The preliminary for the second type of *khi1*: affectees and voice heads

Then, we are going to introduce Hole's framework for affectee voice heads. We will

apply his views to assume the second type of *khi1* as an affectee voice head, and this

khi1 introduces an extra affectee argument, the structural subject.

Hole (2006) adopts Dowty's (1991) proto-role approach and further argues that an

affectee has a thematic relation, which combines proto-agent properties

(sentience/consciousness) and proto-patient properties (causal affectedness) in

eventualities involving causation. Hole (2006) follows Krazter's (1996) framework in

account of extra argumentality, and mentions that the affectee arguments are

introduced by an affectee voice head. Like agents, extra arguments are introduced by

an agentive voice head. Affectee arguments are like agent arguments, and are

therefore unexpected, if we consider the canonical argument structure of each verb

and the thematic relations associated with eventualities encoded by the verbs. In other

words, affectee arguments do not correspond to an argument position specified by the

verb. Their thematic roles are introduced independently of the verb, but the extra

arguments may fulfill syntactic functions that are assumed by more deeply embedded

arguments. Through event identification, an affectee argument, like an agent argument,

is introduced in the specifier of the voice phrase as a participant in the event specified

by the VP. Therefore, the denotation of the affectee voice head is as follows:

(42) $[[Aff^0]] = \lambda x. \lambda e.$ x is an affectee in e

    Event identification (Kratzer 1996:122)

f	g	==>	h
$<e,<s,t>>$	$<s,t>$		$<e,<s,t>>$
(denotation and semantic	(denotation	(event	(denotation
type of the agentive voice	and	identification)	and
head[5] $Voice^0$)	semantic type		semantic type
	of VP)		of voice')

Hole (2006) argues that extra arguments are subjects, direct objects or objects with

subject-like properties. Consider (42) first, if extra arguments are subjects. The extra

arguments *ta* 'he' denote the whole, and their referents of the embedded arguments

constitute a part of the whole. The extra arguments have proto-agent properties and

proto-patient properties simultaneously. They have a thematic relation to the events

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[5] The agentive voice head here is replaced by Aff^0.

where they occur:

(43) a. *ta*   diao-le   hen duo   toufa

    He fall-PRF   very much   hair

    'A lof of his hair fell out. / He fell very much hair'

  b. *ta*   duan-le   tui   le

    he   break-PRF   leg   PRT

    'He broke his leg'

Extra arguments may also be objects coming from passivization, but are not adjuncts
or modifiers:

(44) *w*o   bei   chi-le   yi-ge   dangao

    I   PASS   eat-PRF   1-CL   cake

    'I suffered from someone eating a cake of mine'

Also, extra arguments can be objects with subject-like properties, such as nominative

arguments in German:

(45) a. Ihm   juckt   die   Kopfhaut

       him.DAT   itches   the.NOM   scalp

       'His scalp itches'

   b. Ihr   druckt   der   Magen

      her.DAT   presses   the.NOM   stomach

      'Her belly hurts'

The extra arguments in (43-45) can be both affectees and possessors of the more

deeply embedded arguments in the absence of overt possessor DPs. Hole (2006)

mentions that the extra arguments are encoded as possessors, because the presupposed

relation of possession holds between the referent of the extra argument and the

referent of the more deeply embedded argument. Extra arguments cannot encode the

possessor role. Hole (2006) proposes that the relationship between the more deeply

embedded argument and the extra argument should be modeled by means of voice, as

mentioned above, and 'binding.' This means that the extra argument 'binds' the

unsaturated variable of the c-commanded noun in the DP, that is the possessum or part

of the referent, of the extra argument. Using the predicate abstraction rule and variable

identification, the identity of the extra argument as both the possessor referent of the

more deeply embedded argument and the affectee referent is ensured:

(46) Sie   will   [dem   Jungen [$_{vp}$ den   Kopf   streicheln]]

She   wants   the.DAT   boy   the   head   stroke

'She wants to stroke the boy's head'

lit. 'She wants to stroke ^{dat}the boy ^{acc}the head'

The VP denotation of (46) is given in (47). This example has one unsaturated

argument position for the event argument. It provides the assignment function *g*

mapping the index 5 to the boy after predicate abstraction, as shown in (48). Finally,

we combine the VP denotation of (48) with *Aff^0* for variable identification and get the

outcome in (49). Therefore, the affectee is also the possessor of the head, that is, the

affectee referent plays a role in the denotation of VP.
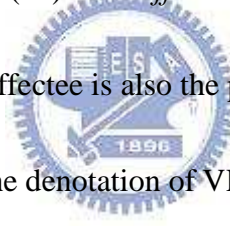
(47) [[den Kopf streicheln]] = λe. stroke g(5)'s head (e)

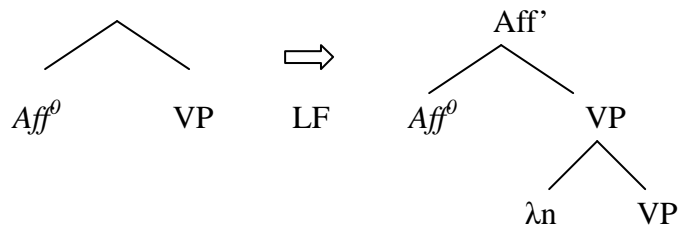(48) [[den Kopf streicheln]]$^{[5→x]}$ = λxλe. stroke x's head (e)

(49) [[*Aff^0* den Kopf streicheln]]$^{[5→x]}$ =λxλe. stroke x's head (e) & affectee(x)(e)

(50) Function of *Aff^0*:

a. Denotation: [[*Aff^0*]] = λxλe. x is an affectee in e

b. Predicate abstraction:

c. Variable identification: f(Aff^0)   g(VP)   ==>   h(Aff')

$<e,<s,t>>$ $<e,<s,t>>$ $<e,<s,t>>$

Variable identification (Hole 2005)

f	g	==>	h
$<e,<s,t>>$	$<e,<s,t>>$		$<e,<s,t>>$
(denotation and	(denotation and	(variable	(denotation
semantic type	semantic type	identification)	and
of the affectee	of VP after		semantic type
voice head $Aff^{0)}$	predicate abstraction)		of Aff')

4.1.4 Analysis of the second type of *khi1*: *khi1* is an affectee voice head

As previously mentioned in section 2.1, *khi1* in (10-12), repeated in (51-53) and (14),

repeated in (54) denotes that the structural subjects are affectees in events.

60

(51) I   khi   puat to   a 他(*故意)/(不小心)去跌倒阿

    he khi   fall down

    'He (the affectee) fell down'

(52) a. I   (*tiau kong)/(bo se li)   khi   long tioh   tshia

    he (*intentionlly)/(unintentionally)   khi   hit   car

    'He (*intentionlly)/(unintentionally) hit the car'

    他(*故意)/(不小心)去撞到車

    b. I   (*tiau kong) /(bo se li)   khi   tsiah tioh   phainn khi a   mih

    he (*intentionlly)/(unintentionally)   khi   eat   stinky   food

    'He (*intentionlly)/(unintentionally) ate stinky food'

    他(*故意) /(不小心)去吃到壞去 a 食物

    c. I   (*tiau kong) /(bo se li)   khi   be tioh   phua   san

    he (*intentionlly)/(unintentionally)   khi   buy   ragged   clothes

    'He (*intentionlly)/(unintentionally) bought ragged clothes'

    他(*故意) /(不小心)去買到破衣

    d. I   (*tiau kong) /(bo se li)   khi   siam tioh   io

    he (*intentionlly)/(unintentionally)   khi   twist   waist

    'He (*intentionlly)/(unintentionally) twisted his waist'

    他(*故意) /(不小心)去閃到腰

61

e. I   khi   siu tioh   siong hai 他去受到傷害

   he   khi   suffer   hurt

   'He was hurt'

f. I   khi   liang tioh   bat to 他去冷到肚子

   he   khi   cold   belly

   'He had a cold because his belly was exposed'

(53) a. I   sih tshiu   khi   phah si   A-Ming 他失手去打死阿明

   he   unintentionally   khi   beat   dead A-Ming

   'He unintentionally beat A-Ming dead'

b. I   (bo se li)   khi   long   si   jong   他(不小心)去撞死人

   he   unintentionally   khi   hit   dead   someone

   'He unintentionally hit someone dead'

c. I   (bo se li)   khi   ka tng   tian   suan 他(不小心)去剪斷電線

   he unintentionally   khi   sever   electric wire

   'He unintentionally severed the electric wire'

d. I   (bo se li)   khi   tsha to   te 他(不小心)去翻倒茶

   he   unintentionally   khi   upset   tea

   'He unintentionally upset tea'

(54) a. I   (bo se li)   khi hoo A-Ming   tsao khi   a

   he   unintentionally   khi hoo A-Ming   run away   a

   'He (the affectee) had A-Ming running away on him'

   他(不小心)去 hoo 阿明跑去阿

   b. i   (bo se li)   khi hoo A-Ming   khoan tioh i e pibit

   he unintentionally   khi hoo A-Ming   see   his secret

   'He (the affectee) had A-Ming discovering his secret'

   他(不小心)去 hoo 阿明看到他 a 祕密

   c. I   (bo se li)   khi   hoo tshia lon tioh   他(不小心)去 hoo 車撞到

   he   unintentionally   khi   hoo car   hit

   'He (the affectee) got hit by a car'

   d. Ben khi hoo A-Ming jia liau liau a   飯去 hoo 阿明吃光光阿

   rice khi   hoo A-Ming eat   all

   'All the rice was eaten by A-Ming'

Those characteristics of being affectee arguments, shown by the examples in (51-54)

match up with our discussion in section 4.1.1.3. Extra affectee arguments should have

proto-agent properties and proto-patient properties, and can be subjects, objects or

objects with subject-like properties (nominative arguments).

According to the classification of the syntactic presentation of extra arguments, we categorize extra arguments into three types, shown as follows:

(55) Type A: extra arguments are subjects

a. I   khi   puat to   a 他(*故意)/(不小心)去跌倒阿

   he khi   fall down

   'He (the affectee) fell down'

b. I   khi   lon tioh   tshia 他去撞到車

   he   khi   hit   car

   'He (the affectee) hit a car'

c. I   khi   lon tioh   kha 他去撞到腳

   he   khi   hit   leg

   'He (the affectee) hit his leg'

d. I   khi   hoo A-Ming   tsao khi   a   他去 hoo 阿明跑去阿

   he   khi   hoo   A-Ming   run away   a

   'He (the affectee) had A-Ming running away on him'

e. i   khi   hoo   A-Ming   khoan tioh   i e   pibit. 他去hoo阿明看到他 a 祕密

   he khi   hoo   A-Ming   see   his   secret

   'He (the affectee) had A-Ming discovering his secret'

64

(56) Type B: extra arguments are direct objects via passivization

   a. I   khi   hoo tshia lon tioh (kha)   他去 hoo 車撞到(腳)

     he khi   hoo car   hit   (leg)

     'He (the affectee)/his leg got hit by a car'

(57) Type C: extra arguments as objects with subject-like properties (nominative

   arguments)

    a. I e kha khi lon tioh a   他的腳去撞到阿

     his   leg khi   hit

     'His leg (he as the affectee) got hit'

   b. I e io   khi siam tioh a   他的腰去閃到阿

     his waist khi   twist

     'His waist (he as the affectee) got twisted'

The affectee arguments in (55a) and (55b) do not correspond to argument positions

characterized by the verbs. Their thematic roles are not introduced by the verb, but

they follow syntactic functions, assumed by the more deeply embedded arguments.

Following Hole's adopting Kratzer's (1996) framework of the agentive voice head by

event identification, we can define the subject as the extra affectee argument,

introduced by an affectee voice head through event identification to express the

relation between the extra argument (the affectee) and the event referring to a causal

affectee. Therefore, we can take the denotation of $[[khi1]]$ as that of $[[Aff^{0}]]$.

$[[khi1]] = [[Aff^{0}]] = \lambda x.\lambda e.$ x is an affectee in e

Event identification (Kratzer 1996:122)

f	g	==>	h
$\langle e,\langle s,t\rangle\rangle$	$\langle s,t\rangle$		$\langle e,\langle s,t\rangle\rangle$
(denotation and semantic	(denotation	(event	(denotation
type of the agentive voice	and	identification)	and
head[6] Aff^{0})	semantic type		semantic type
	of VP)		of voice')

The denotation of (55a) is:

[[I   khi   puat to   (他去跌倒)]]

$=[[khi1]]([[puat to]])([[I]])$

$= [\lambda x.\lambda e.$ x is an affectee in e$](\lambda e.$ fall down(e))(he)

$= [\lambda x. \lambda e.$ fall down (e) & affectee(x)(e)] (he)

$= 1$ iff there is an event of falling down, and he was the affectee in the event

---

[6] The agentive voice head here is replaced by Aff^{0}.

The denotation of (55b) is:

[[I   khi   lon tioh   tshia(他去撞到車)]]

= [[*khi1*]] ([[lon tioh   tshia]]) ([[I]])

= [λx.λe. x is an affectee in e](λe. hit a car(e))(he)

= [λx. λe. hit a car(e) & affectee(x)(e)] (he)

= 1 iff there is an event of hitting a car, and he was the affectee in the event

In (55c-d), (56) and (57a-b), the assigned thematic relations of the extra arguments are

dependent upon the events of the sentences where they occur. That is, the extra

arguments (the subjects, direct objects via passivization or nominative arguments) are

the affectees in the events, but not the possessors, which have a presupposed

possession relation between the extra arguments and the referent of the more deeply

embedded argument. To ensure the affectee referent is identical to the possessor

referent of the more deeply embedded argument, we adopt Hole's (2005) framework

but not Krater's (1996) framework only for extra arguments. Predicate abstraction is

used to assign function g mapping the index 5 to the extra arguments. Then, through

the combination of the VP denotation after predicate abstraction and the affectee voice

head *khi1*, the variable is identified, and the relationship between the extra argument,

the event and the more deeply embedded argument is characterized.

Variable identification (Hole 2005)

f	g	==>	h
$<e,<s,t>>$	$<e,<s,t>>$		$<e,<s,t>>$
(denotation and	(denotation and	(variable	(denotation
semantic type	semantic type	identification)	and
of the affectee	of VP after		semantic type
voice head $Aff^{0)}$	predicate abstraction)		of Aff')

The denotation of (55c) is:

[[I   khi   lon tioh   kha(他去撞到腳)]]

= [[*khi1*]]([[lon tioh   g(5)'s kha]])([[I]])

= [[*khi1*]]([[lon tioh   kha] $^{[5\rightarrow x]}$)([[I]])

= [λx.λe. x is an affectee in e](λe. hit x's leg(e))(he)

= [λx. λe. hit x's leg(e) & affectee(x)(e)] (he)

= 1 iff there is an event of hitting his leg and he was the affectee in the event

The denotation of (55d) is:

[[I   khi   hoo   A-Ming   tsao   khi   a (他去 hoo 阿明跑去阿)]]

= [[*khi1*]]([[g(5) hoo   A-Ming   tsao   khi   a]])([[I]])

= [[*khi1*]]([[hoo   A-Ming   tsao   khi   a]] $^{[5→x]}$)([[I]])

= [λx.λe. x is an affectee in e](λe. x had the thief running away on him(e))(he)

= [λx. λe. x had A-Ming running away on him(e) & affectee(x)(e)] (he)

= 1 iff there is an event that he had A-Ming running away on him and he was the

   affectee in the event

The denotation of (56a) is:

[[I   khi   hoo   tshia   lon tioh   (kha) (他去 hoo 車撞到(腳))]]

= [[*khi1*]]([[hoo   tshia   lon tioh   g(5) (kha)]])([[I]])

= [[*khi1*]]([[hoo   tshia   lon tioh   (kha)]] $^{[5→x]}$)([[I]])

= [λx.λe. x is an affectee in e](λe. x (x's leg) was hit by the car(e))(he)

= [λx. λe. x (x's leg) was hit by the car(e) & affectee(x)(e)] (he)

= 1 iff there is an event that he (his leg) got hit by the car and he was the affectee in

   the event

The denotation of (57a) is:

[[I e   kha   khi   lon tioh   a (他 a 腳去撞到阿)]]

= [[I   khi   lon tioh   kha (他去撞到腳)]]

= the denotation of (55b)

=1 iff there is an event of hitting his leg and he was the affectee in the event

4.2 The use of *khi2*

4.2.1 Preliminaries

We are going to introduce Liang's (2007) interpretations about the evolements of

Chinese post-verb *qu* and Lin's (2004) "perfective states" in Mandarin verbal system.

We will apply the two's views to analyze *khi2* in order to present the syntactic

changes of sentences where *khi2* occurs and take *khi2* as a perfective marker to bring

about a resultant state.

4.2.1.1 The evolement and generation of Chinese *Qu*

According to Liang (2007), the generation of the directional complement

constructions started in mid-ancient times (from Six Dynasties to Tang Dynasty).

They evolved and grammaticalized from the directional serial verb constructions in

ancient Chinese.

During the Chin and Han Dynasties, *qu* in the V + Qu + LP (locational phrase)

construction like (58-b) was still treated as the main verb.

(58) a. Tao   qu   san zhong.   逃去山中

        escape   go   mountains

        'escape and go to the mountains'

     b. Chu   qu   qi she.   出去其舍

        out   leave   the house

        'go out and leave the house'

The word *er* 'then' could be inserted between the verb preceding *qu* and *qu*, shown as

(59), so that the entire construction would be viewed as directional serial verb

constructions.

(59) a.   Tao   er   qu   san zhong.   逃而去山中

        escape   then   go   mountains

        'escape and go to the mountains'

     b. Chu   er   qu   qi she.   出而去其舍

        out   then   leave   the house

        'go out and leave the house'

In (58) or (59), *qu* denotes the final point of movement or the starting point of

departure.

As time went on, the V + Qu + LP (locational phrase) construction became the V + LP

+ Qu construction during the Six Dynasties. The new construction could not be

considered the directional complement construction, however, because the word *er*

'then' can be placed between the verb preceding *qu* and *qu*. The locational phrases in

(60) refer to the final points of the movements, namely the agent's destination. *Qu*

was thought to be losing its structural independence, so it was combined with the verb

and the locational phrase to represent a complete action. This made *qu* gradually

evolve into a directional complement.

(60) a. Yi   ha chu   qu. 移他處去

     Move   other place   to

     'move to other places'

   b. Hai   jia   qu.   還家去

     go   home   to

     'go home'

Moreover, Liang also mentions the evolvement of the directional complement constructions. During the Six Dynasties, if the object occured as a patient, it was only placed between two verbs, but never after them, as in the NP1 + Vt (transitive verbs) + NP2 + Qu/Lai (verb) construction. However, in some contexts, the object can be placed before the agent as the topic, like the NP2 (topic) + NP1 + Vt + Qu/Lai construction in (61). When we observe the sentence excluding the topic, *qu/lai* can still represent the agent's movement and *zei tou chi qu/賊頭持去* 'the thief held and left' can be interpreted as *zei tou chi er qu/賊頭而持去* 'the thief held and then left'. However, when the entire sentence is taken into consideration, *she zhong cai wu/舍中財物* 'the properties in the house' in (61) is the main element we want to describe, and the rest of the sentence is the statement for the topic. The main function of *qu* converts from describing the agent's actions to denoting the directional movement of the topic, so *chi qu/持去* 'hold and leave' combines as a syntactic element. Thus, in these times, the directional complement constructions formed because *qu* was grammaticalized and did not denote the agent's action. *Qu* in (61) cannot share the same subject with the verb *chi/持* 'hold.'
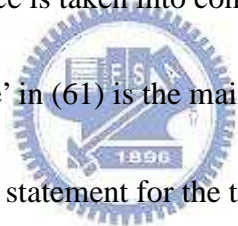
(61) She   zhong   cai wu,   zei tou   chi   qu. 舍中財物，賊頭持去

    house   in   properties   thief   hold away

'The properties in the house were taken away by the thief.'

Liang (2007) discovered that the use of the T (topic) + S + Vt + Lai/Qu construction during the Han Dynasty was driven by pragmatics and linguistic analogy. The directional verbs in the primitive form are transitive directional verbs, such as *chu* 'out' in (62a), which form serial verb constructions with their preceding verbs. The underlying objects are moved to the topic position, and *zhi/*之 'treated as pronouns' fills the object position, as shown in (62a). The square brackets represent the subject position. The object is raised as the topic in the transitive serial verb construction. This kind of construction is further analogized: intransitive verbs *lai/qu* can be used in the same way as (62b), and the verb preceding *qu* and *qu* mainly refers to the topic. This form occurred frequently during the Tang Dynasty, so *lai/qu* became a typical directional complement.

(62) a. Pu   ren ye [   ] zhu chu zhi.   普人也[   ] 逐出之

      common people also   expel out pronoun

      'Common people are also expelled out.'

  b. E   zhe   [   ] ze chi   qu.   惡者[   ] 輒斥去

      evil people   then repel away

'Evil people are repelled away then.'

It was further advanced, and became a passive form with the subject denoted by the passive marker, *bei* 'by', represented in (63a-b), in which the verb preceding *qu* and *qu* form the directional complement construction in a kind of V-C compound.

(63) a. Pi dai   bei   zei   dao   qu.   皮袋被賊盜去

      bag   passive marker   thief   steal   away

      'The bag was stolen away by the thief.'

  b. Bubu   qu xiang   sheng deng   qian,   hu ran   ben

      step   go to   holy   lantern front   suddenly   passive marker

      步步趨向聖燈前，忽然被

      hu   jie   qu.

      tiger   get   away

      虎拽去

      'Go to the front of the holy lantern step by step, and suddenly the holy

       lantern was taken away by the tiger.'

According to Liang (2007), *qu* finally represented a phase complement, behind the main verb, expressing that the acts or states are accomplished. At first, *qu* with its original meaning 'leave,' and its preceding verb formed serial verb constructions to denote actual or concrete movement from one place to another. Gradually, *qu* was semantically extended to express the meaning 'after/and then' in the V + Qu + VP construction. Then, the combination of V and Qu was advanced to denote the accomplishment of acts, as in (64a), where *lao qu* 'get old' and time adverbs are used to express the state of getting old year by year. Without the time adverbs to describe *fo fa* 'the thoughts of Buddhism' in (64b), the entire element of the noun phrase, has gone, representing the final state of Buddhist thoughts. However, the change of the construction is not caused by the semantic expansion of the verb, but by the syntactic shift of the object moving to the topic position. *Qu* was originally an intransitive verb. After *qu* combines with the main verb, they become the V + Qu construction, where the object cannot be followed by them. Therefore, it is uncommon to see the V + Qu + O (object) form.
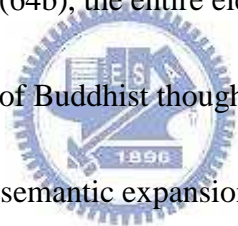
(64) a. Yi nian   yi nian   lao   qu.   一年一年老去

     one year one year   old   get

     'getting old year by year'

b. Yi,　　　　　 fo fa　　　　　　 yi hou　 dan bo　 qu　 ye!

　 Ah, the　　 Buddhist thoughts　　　 later　 weaken　 get

　　 'Ah! The Buddhist thoughts will be gone later!' 噫，佛法已後澹薄去也！

4.2.1.2 Perfective states in Mandarin verbal system

Lin (2004) mentions certain features of the Chinese verbal system, one of which

is the presence or absence of the particle *le* that exhibits a state/change of state

contrast, suggesting that inchoativity must be contributed by *le*. Like many Chinese

linguists, he takes *le* (verbal *le*) as a perfective marker for 'perfective states.' At first,

he argues over the organization of the Mandarin verbal system. He shows that

Mandarin primitive verb types are activity and state verbs, and state verbs become

achievement verbs with the addition of *le*. Further, he provides the progressive and the

"stop" test to prove verbal *le* that coverts states into achievements. The two

diagnostics are summarized below:

(65)	compatible with progressive?	complement of *stop*
state	no	no
activity	yes	ok
accomplishment	yes	ok
achievement	maybe ([ok]is winning, *is noticing)	bad

When they are applied to Mandarin sentences, all change of state predicates in Chinese seem to be incompatible with the progressive and the complement of *stop*, shown as (66) and (67).

(66) a. *Lisi   zheng zai   pang   le   liang   gong jing

      Lisi   in process of   fat   LE   two   kilograms

      intended: 'Lisi is in the process of gaining two kilograms.'

   b. *bo li   zheng zai   sui   le   man   di

      glass   in process of   shatter   LE   whole floor

      intended: 'The glass is in the process of shattering all over the floor.'

(67) a. *Lisi   ting zhi   pang le liang   gong jing

      Lisi   stop   fat LE two kilograms

      intended: 'Lisi stopped gaining two kilograms.'

   b. *bo li   ting zhi   sui   le   man   di

      glass   stop   shatter LE whole floor

      intended: 'The glass stopped shattering all over the floor.'

Therefore, he concludes that the events *Lisi pang le liang gong jing/李四胖了兩公斤*

and *bo li sui le man di/玻璃碎了滿地* are achievements. Change of state predicates,

stemming from underlying stative verbs in Chinese, denote achievements.

Although the evidence shows that a stative verb turns into an achievement with the

addition of verbal *le*, a question still exists concerning the inchoative *le* and the

perfective *le,* and whether they share a phonological matrix. Inchoativity is concerned

with situational (lexical) aspect, whereas perfectivity is concerned with viewpoint

aspect. He mentions that it has been noted by Chung and Timberlake (1985:217) and

Comrie (1976:19) that, cross-linguistically, the same form used to mark the perfective

aspect is often used to signal the inception of a new state with stative verbs. He shows

examples in Russian and French (Lin, 2004:83-84) to indicate that it is no coincidence

that the same form used to mark perfectivity is also used to signal inchoativity with

stative verbs cross-linguistically. An ideal analysis should explain how the

combination of the perfective aspect with a stative verb gives rise to a change of state

reading cross-linguistically.

Therefore, Lin assumes Klein's (1994) model of aspect as logical relationships

between the interval of time during which an event takes place (TSit, the situation

time) and the time interval about which a sentence makes an assertion (TT, topic time).

The perfective can be defined as TSit⊆TT. Then, he adopts Dowty's definition of

states:

(68) If α is a stative predicate, then α (x) is true at all moments within *I*. (Dowty,

1979:166)

Based on these assumptions, a perfective state is to be interpreted in the following

diagram, demonstrating that situation time must be contained in topic time with the

perfective aspect. In other words, an internal exists near the beginning of the TT and

near the end of the TT, where the state does not hold:

(69)

However, not all languages behave in this manner, when we look at French examples:

(70) a. Hier,   Anne   fut   triste

yesterday   Anne   be-PAST-PERF   sad

'Anne became sad yesterday.'

b. Hier,   Jeanne   sut   la   reponse

yesterday   Jeanne   be-PAST-PERT   the   answer

'Jean came to know the answer yesterday.'

He mentions that French native speakers cannot get the meaning of Anne getting over

the sad feeling sometime later in (70a). It is also impossible to interpret (70b).

Because of the problems derived from the diagram in (69), Lin proposes that

"perfective states" center on the presence of a covert inchoative verbalizing head v_δ,

which gives rise to the change of state reading, shown in the following time-course

$(\text{TSit} \subset \text{TT})$[7] diagram that captures the interpretation of a stative verb viewed

perfectively:

(71)
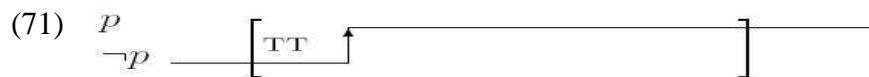
Once a state is converted into a change of state by v_δ, the perfective marker *le* can

apply to the resulting state when it combines with stative verbs. Whether the transition

of a change of state is punctual or gradual is irrelevant if the transition is contained

within the TT. Therefore, sentences such as (72) can be explained well.

(72) ta   gao   le   san   gung fen

    he   tall   LE   three   centimeter

    'He grew three centimeters.'

---

[7] The situation time refers to the transition from $\neg$ p to p.

4.2.2 The use of *khi2* in the NP+V+Khi2 construction and in the *hoo*

    constructions

According to Liang (2007), we know that the subject/topic in a construction with *qu*

has been changed from an animate creature to an inanimate noun phrase. The

construction with *qu* alters from active to passive, and the verbs placed with *qu* in the

construction evolve from intransitive verbs to transitive verbs. Additionally, the

function of Chinese *qu* develops from being a lexical verb with a lexical meaning to

being a phase complement, expressing that the acts or states have been accomplished.

Further, the passive marker is added and the object is raised to the subject position to

form passive constructions, such as (63a), repeated in (73).

(73)   Pi dai   bei   zei   dao   qu. 皮袋被賊盜去

      bag   passive marker   thief   steal   away

      'The bag was stolen away by the thief.'

Because of the evolution of Chinese *qu*, it is reasonable to assert why NPs in the

NP+V+Khi2 constructions, such as (15d-e) and (16), repeated in (74) and (75)

respectively, cause events to happen autonomously. The obvious change in the type of

NPs is the transition from animate NPs to inanimate NPs in the NP+V+Khi2

construction. V+Khi2 becomes a syntactic constituent, and *khi2* in the NP+V+Khi2

construction is used as an intransitive verb.

(74) a A-Ming   tsau khi   a   阿明跑去阿

      A-Ming   run khi

      'A-Ming ran away unexpectedly'

   b. tsiau a   pue khi   a   鳥阿飛去阿

      bird   fly khi

      'The bird flew away unexpectedly'

(75) a.   kau a   si khi   a   狗阿死去阿

       dog   die khi

      'The dog died unexpectedly'

   b.   tsun   tim khi   a   船沉去阿

      ship   sink khi

      'The ship sunk unexpectedly'

   c.   san   la sap   khi a   衫 la 髒去阿

      clothes   dirty   khi

      'The clothes became dirty unexpectedly'

d. toh po   tam khi   a   抹布溼去阿

    cloth   wet khi

    'The cloth became wet unexpectedly'

e. i a   phainn khi   a   椅阿壞去阿

    chair   ruin   khi

    'The chair broke unexpectedly'

f. san   phua khi   a   衫破去阿

    clothes   rag khi

    'The clothes become ragged unexpectedly'

g. soh a   ton   khi   a   繩子斷去阿

    rope   become two pieces   khi

    'The rope become two pieces unexpectedly'

h. moo a poo a   mng   khui khi   a, hai   i   kiann tsit le

    tomb's   door   open khi   make he   scare

    'The door of the tomb opened unexpectedly, and he was scared'

    墓阿埔的門開去阿，害他嚇一下

i. moo a poo a   mng   kuainn khi   a, hai   i   shut bue khi

    tomb's   door   close khi   make him   out not   go

    'The door of the tomb closed unexpectedly and he could not go outside'

墓阿埔的門關去阿，害他出不去

j. A-Ming khuan khi a   阿明睏去阿

   A-Ming sleep khi

   'A-Ming fell asleep unexpectedly'

Sentences such as (20g-j), repeated in (76) are passive, and need an agent to do the

action and a theme/patient to be done by an agent. The verbs are transitive verbs,

showing the further/present change of the construction with *qu/khi2*, mentioned by

Liang (2007).

(76) a.kiu hoo A-Ming that khi   a   球 hoo 阿明踢去阿

     ball   hoo A-Ming kick khi

     'The ball was kicked away by A-Ming'

   b. pong   hoo A-Ming   tsiah khi   a   飯 hoo 阿明吃去阿

     rice   hoo A-Ming   eat   khi

     'The rice was all eaten by A-Ming'

   c. lan kheh   hoo A-Ming kiu khi   a   客戶 hoo 阿明拉去阿

     client   hoo A-Ming   take khi

     'The clients was all taken away by A-Ming'

d. tsheh   hoo A-Ming   theh khi   a   書 hoo 阿明拿去阿

book   hoo A-Ming   take khi

'The book was taken away by A-Ming'

Additionallly, in unaccusative causatives, such as (19), repeated in (77), where *hoo*
and *khi2* co-occur, only unaccusative compound verbs can appear and *khi2* remains its
function to bring about a resultant state.

(77) a. i / soh a   sang khi   hoo A-Ming tsau khi   a 他/[繩子鬆去]hoo 阿明跑去阿

he/rope   loose   hoo A-Ming run khi

'He/The looseness of the rope made A-Ming run away'

b. i/ tsiau lang a   phua khi   hoo tsiau a   pue khi a 他/[鳥籠破去]hoo 鳥阿飛去阿

he/ bird cage   broken   hoo bird   fly   khi

'He/The broken bird cage made the bird fly away '

c. i/ ioh a   khong sio tse   hoo kau a   si khi   a 他/藥放太多 hoo 狗阿死去阿

he/medicine put too much hoo dog   die khi

'He/Putting too much medicine made the dog dead'

d. i/i soh a   kiu sio an   hoo   soh a   ton   khi   a

he/rope   lug too tight hoo   rope   become two pieces   khi

'He/His lugging the rope too tightly made the rope become two pieces'

他/他繩子拉太緊 hoo 繩子斷去阿

Regardless of whether *khi2* occurs in sentences with *hoo*, *khi2* does not change its function. *Khi2* is a perfective marker and denotes the resultant state after a change of state. This matches up with Liang's (2007) observation that the meaning of Chinese *qu* derives from its lexical meaning to a phase complement, expressing the acts or states, which have been accomplished. *Khi2* is like a perfective morpheme with clear lexical content.

We go back to the basic function of *khi2* when we derive the NP+V+Khi2 construction. The types of the verbs, acceptable in the construction, can be classified into verbs denoting that a change of state occurs. Though some verbs are originally activity verbs, their lexical meanings have not become the focus, because they are placed before *khi2*. Instead, they become the verb+khi2 constituents that denote the disappearance of something by way of running or flying, etc. Stative verbs, which occur with *khi2,* do not simply imply the state of something but denote a change of state. Furthermore, the combination of V+Khi2 becomes an achievement verb. *Khi2* is like a Chinese stative predicate with *le* (Lin, 2004). The combination of V+Khi2 does

not pass the progressive test, nor can it be the complement of *ting zhi/停止* 'stop.'

(78) a. * A-Ming   ti   tsau khi a   *阿明在跑去阿

     A-Ming   progressive marker   run khi

     'A-Ming is doing the action 'running away''

  b. * i a   thing tsi   phainn khi   a   *椅阿停止壞去阿

     chair   stop   broken

     'The chair stopped broken'

The phenomenon is like Chinese 'perfective states,' in which *le* not only exhibits

perfectivity, but also inchoativity. The details can be observed in (79) and (80). The

diagram in (69) can explain (79a) and (80a), but (79b) and (80b), in which *khi2* not

only is a perfective marker but signals inchoativity, can be difficult to interpret. Lin

(2004) refers to his own analysis and provides the diagram in (71). We can use this to

explain (79b) and (80b). The transition of the change of state being punctual or

gradual is not important, so long as the transition is contained within the topic time.

Khi2 as a lexical perfective marker functions like *le* when *le* occurs with stative

predicates, signaling the inchoative sense of a change of state. We can then know that

khi2 refers to the resultant state of something, which would continue or stop after a

change of state, as shown in (79) and (80)[8].

(79) a.   A-Ming   tah kua   tsau khi   a, na ko   tshut hian   a?

A-Ming   just   run khi   why   appear

'A-Ming just ran away, how come he appeared?'

阿明剛剛跑去阿，怎又出現了？

b.   A-Ming   tah kua   tsau khi   a, bo   ko   ton lai kue

A-Ming   just   run khi   no again   come back

'A-Ming just ran away, and never came back'

阿明剛剛跑去阿，沒再回來過

(80) a. i a   tah kua   phainn khi   a, tsi ma   sui li   honn   a

chair   just   ruin   khi   now   fix   good

'The chair was finally broken then, but it is fixed now'

椅阿剛剛壞去阿，現在修理好了

b. i a   tah kua   phainn khi   a, bo lan   lai   siu li

chair   just   ruin   khi   no one come   fix

'The chair was finally broken then, but no one fixed it'

---

[8] We think activity verbs and stative verbs can occur with *khi2*. When activity verbs combine with *khi2*, they imply the resultant state of disappearance by a transfer of possession or by manner of verbs. When stative verbs combine with *khi2*, they imply a change of state and a resultant state arises. We unite the two diverse meanings and view *khi2* as a perfective marker to bring about a resultant state in sentences with activity verbs and stative verbs. Some suggest that *khi2* is not a typical perfective marker and that the use of the activity verb and *khi2* combination should be analyzed in different ways to emphasize the resultant state of disappearance. It needs further studying.
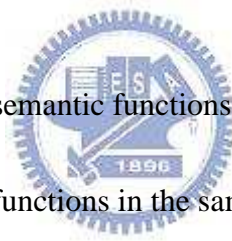
椅阿剛剛壞去阿，沒人來修理

Also, the additional semantic interpretation of khi2 has already mentioned in section

2.2.1. We repeat the conclusion here:

The semantic denotation of *khi2*

For any w, $[[khi2\,(\phi)]]^w = \lambda p \in D_{<s,t>}.\,\lambda x.$[for all worlds w' incompatible with

what x expects in w: p(w')=1], where x is the speaker or the subject.

4.3 Summary

 Khi1 has two syntactic and semantic functions. Though the two types of *khi1* can

occur in the *hoo* sentences, *khi1* functions in the same way. One *khi1* is a purpose

marker, placed in the position of a root modal. The verb phrases, which can follow

this *khi,1* are activity verbs, the combinations of activity verbs and resultant

complements (excluding *tioh/到*) and causative or get-passive *hoo*. The other form of

khi1 is an affectee voice head denoting that the structural subject in the sentence is an

extra affectee argument, which has a thematic relation with the event where it occurs.

It is available in the sentences with achievement verb phrases, the verb phrase

combinations of activity verbs and resultant complements or passive *hoo*

constructions. It implies that the outcome of the event is unfavorable for the structural

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subject, so the structural subject is an affectee participant in the event.

No matter the constructions that *khi2* occurs in, the function of *khi2* is not influenced with changes of constructions or syntactic structures. *Khi2* is a lexical perfective marker, meanwhile, signaling inchoativity and perfectivity to denote the resultant state after a change of state.

Chapter 5

Conclusion

In this thesis, we have discussed the meaning and syntactic position of *khi1* and *khi2*, and how they function in different constructions. The semantic interpretation of *khi1* has changed from its lexical meaning in regular active sentences to having different semantic functions when it occurs in different constructions. Besides, its syntactic interpretation also alters from being a verb to the position higher than verbs. It becomes a root modal or an affectee voice head. On the other hand, the semantic interpretation of *khi2* has changed from its lexical meaning in regular active sentences to denoting a resultant state after a change of state no matter what constructions it occurs in, and its syntactic interpretation also alters from being a verb to being a perfective marker following a verb.

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