SYNTACTIC STRUCTURE OF KA-CONSTRUCTION IN TAIWANESE SOUTHERN MIN*

Barry Chung-Yu Yang
National Tsing Hua University

This study proposes a syntactic account for the ka-construction in Taiwanese Southern Min. The thematic properties of ka are subsumed under one general light verb predicate encoding affectedness, instead of being traditionally viewed as four thematic markers, i.e., a Patient/Theme marker, a Goal marker, a Source marker, and a Benefactive/Adversative marker. Meanwhile, ka is more “lexical” than its seeming counterpart ba of Mandarin Chinese so that ka takes ka-NP as its own argument and assigns a theta role to it. This suggests that ka-NP be base-generated at where it is on the surface structure. A historical perspective favoring ka's conjunction heritage is provided to further confirm our proposal. The apparent strong evidence for the raising of ka-NP is then explained by the Null Operator (NOP) movement approach. We show that the NOP approach correctly predicts that the four thematic senses that ka is endowed are simply an effect of secondary predication via strong binding. Our analysis also accounts for three major differences between Taiwanese ka and Mandarin ba in terms of the bare-verb taking potential, the non-ba/ka-counterpart, and the referentiality of ka/ka-NP.

1. Introduction

Over the years, ba-construction in Mandarin Chinese has always been one of the most studied topics among the linguistic literature. Due to its complex properties and distributions, a satisfactory account is yet to characterize and thus to cover all the phenomena observed so far. Probably it is because much endeavor is denoted to such a hard task that few linguists pay attention to its near counterpart, ka-construction in Taiwanese Southern Min, which manifests even more puzzling phenomena.2

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2 Unless necessary, we will use the cover term “Taiwanese” or “Southern Min” interchangeably to stand for “Taiwanese Southern Min” for ease of exposition.

As will be disclosed later in this paper, treating Taiwanese ka as a counterpart of Mandarin ba is only apparent. That is, ka and ba are not etymologically derived from the same source. Also, ka is not derived from ba. Though the younger generations of Taiwanese tend to use ka as a counterpart of
Previous works, though not many, have helped to generalize the distribution of ka-construction, which sheds some light on the properties of ka. Generally speaking, ka may serve as a Patient/Theme marker, a Goal marker, a Source marker, and a Benefactive/Adversative marker, according to the theta relation between the main predicate and the ka-NP (Teng 1982, Hung 1995, Tsao 2003). Further, ka may be subsumed into one general category as the Undergoer marker (Tsao 2003) or as a light verb encoding AFFECT (Li 2001, Lin 2001).

Though the general patterns of ka are already familiar to us, they are still limited to the descriptive content. Less is known to us on the syntactic structure of ka, which I believe may provide a more explanatory account and contribute to the understanding of ka-construction. Meanwhile, several questions are still pending. Why is ka so polysemous in serving as four thematic markers? Which syntactic position is ka-NP originated from? That is, is ka-NP base-generated at where it is on the surface structure, or does it undergo raising from the canonical object (or indirect object) position? Why the ka-construction is “less strict” than the ba-construction in the sense that it may allow ka-NPs of various theta roles (at least four as mentioned above), different referentiality, and independent argument status. This study will propose a syntactic structure of ka-construction to further account for the three questions raised above.

The paper is organized as follows. Section 2 introduces the general distribution of ka-construction. Section 3 focuses on the properties of ka. Section 4 brings forth a syntactic account for the phenomena observed. Section 5 takes a historical perspective to explore the complementation module encoded in the ka-construction. Section 6 discusses three differences between Taiwanese ka- and Mandarin ba-construction. Section 7 concludes our analysis.

2. The distribution of ka-construction

Teng (1982) provides a systematic observation on ka-sentences, which leads to Hung’s (1995), Cheng and Tsao’s (1995), and Tsao’s (2003) generalization. In general, ka may serve as the Patient/Theme marker in (1), the Goal marker in (2), the Source marker in (3), and the Benefactive/Adversative marker in (4):

(1) a. Guah ka i. phah-si e. a.4 (Patient)
   I KA him beat-dead Perf.5
   伊打死 e 纔
   ‘I beat him to death.’

b. I ka hit-pun cheh be-tiau e a. (Theme)
   he KA that-CL book sell-out Perf.
   伊把那本書賣掉 e 續
   ‘He sold that book out.’

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4 The Taiwan Language Phonetic Alphabet (TLPA) is adopted throughout this paper.
5 Perf. = perfective aspect marker; CL = classifier; Rel. = relativization marker.
For a ditransitive verb, it is usually the indirect object that undergoes raising.

In examples (1-3) the ka-NP has a strong connection with the gap ‘e’ in each example. The theta role of the ka-NP seems to be assigned by the main predicate, e.g. in (1a) the predicate phah-si (打死) ‘beat-dead’ assigns a Patient role to the ka-NP il (他) ‘him’, in (2a) the predicate ka (教) ‘teach’ assigns the Goal role to the ka-NP Asan (阿三) ‘Asan (proper noun)’. Due to such a relationship between the main predicate and the ka-NP, a raising approach is therefore naturally adopted (Hung 1995, Tsao 2003). That is, the ka-NP is generated at the canonical object position6 (the empty category manifested by ‘e’ above) to get the theta role assigned by the main predicate. It then undergoes raising to the preverbal position, a caseless position. The insertion of ka here has its own right to guarantee the ka-NP against being caseless. That is, ka is regarded as a preposition which can assign a case to the preverbal ka-NP.

However, the raising approach is not without problems. Firstly, note that in the fourth type, the Benefactive/Adversative construction, e.g. (4), there is no gap following the main predicate. A raising approach would not have a say in accounting for such a construction. Secondly, an immediate question arises in how the theta role of the ka-NP is assigned. Since the main predicate has been saturated by all the arguments in the fourth type, it is not possible for the main predicate to take any extra argument and assign an extra theta role accordingly.

Thirdly, it is not obvious why the ka-NP has to raise to the preverbal

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6 For a ditransitive verb, it is usually the indirect object that undergoes raising.
position. As is well known, the NP-raising has to be triggered by certain morphological considerations. The raising construction is one case, and the passive construction is the other. Both are case-driven:

(5)  a. It seems that John is a good student.
    b. John, seems t₁ to be a good student.
    b. John, was hit t₁ by Bill.

In (5b) and (6b) the NP John raises to get a case because it is originated at a caseless position (due to the inertness of the infinitive and the case-absorption of the passive morphology respectively). Following the same vein, it would be quite a puzzle if the ka-NP has to undergo raising when no triggering factors exist. For one thing, the ka-construction belongs to neither the raising construction as in (5) nor the passive construction as in (6). For another, it is not obvious whether Chinese languages do have raising predicates like seem and be likely and it is still arguable whether Chinese clauses have the finite/nonfinite distinction. Moreover, it is argued convincingly that Chinese passive construction is different from the English be-passives in that the syntactic subject in the former is base-generated at where it is on the surface structure whereas in the latter it undergoes raising from the object position (Huang 1999).

Summarizing, the raising approach does not seem to be well-grounded because on the one hand there is no launching site for the ka-NP in the fourth type and on the other hand there is no triggering factor around to facilitate the raising.

In the next section we will investigate further into the properties of ka, which may shed some light on the syntactic structure of ka-construction and will lead up to a “base-generated” approach to cover all the phenomena we have explored in this paper.

3. The properties of ka

Treating ka as a preposition might have the benefit in assigning a case to the preverbal ka-NP. Yet, it brings forth a problem in terms of case theory. In other words, it fails to account for why the original case of the ka-NP assigned by the main predicate is ‘absorbed’ so that it has to move upward to get a case assigned by ka. Also, since the insertion of ka has nothing to do with theta role assignment but case assignment, how come it would be categorized as the Patient/Theme marker, the Goal marker, the Source marker, and the Benefactive/Adversative marker, all of which are theta-related? It may be simply for the ease of classification to formulate four theta marking potentials. Yet, it may also provide us an alternative to treat ka as a theta role assigner, an approach which I will pursue later in this paper. For now, let’s concentrate on the preposition/raising approach.

Being a preposition, ka together with its complement ka-NP would be expected to behave like a prepositional phrase. Such is not attested. The so-called PP “ka+NP” cannot undergo preposing to the sentence initial position in (9) while it is usually observed so for putative PPs as in (7) and (8):
   Asan to Abing very polite
   阿三[對阿明]真客氣
   ‘Asan is very polite to Abing.’

b. [Dui Abing] Asan ciann khekhi.
   to Abing Asan very polite
   [對阿明]阿三真客氣
   ‘To Abing, Asan is very polite.’

    Abing at Taipei buy one-CL house
    阿明[在臺北]買一間厝
    ‘Abing bought one house in Taipei.’

b. [Ti Taipei] Abing be cit-king chu.
    at Taipei Abing buy one-CL house
    在臺北阿明買一間厝
    ‘In Taipei, Abing bought one house.’

(9) a. *[Ka Asan] Abing phah-si a.
    KA Asan Abing beat-dead Perf.
    [ka 阿三]阿明打死矣
    ‘Abing beat Asan to death.’

b. *[Ka hit-bun cheh] Abing be-tiau
    KA that-CL book Abing sell-out Perf.
    [ka 那本書]阿明賣掉矣
    ‘Abing sold that book out.’

c. *[Ka Asan] Abing ka ingbuen.
    KA Asan Abing teach English
    [ka 阿三]阿明教英文
    ‘Abing teaches Asan English.’

d. *[Ka Asan] kengchat huat lak-pah kho.
    KA Asan policeman fine six-hundred dollar
    [ka 阿三]員警罰六百塊
    ‘The policeman fined Asan for six hundred dollars’

e. *[Ka gua] Asan cau-khi.
    KA me Asan run-away
    [ka 我]阿三走去
    ‘Asan ran away (on me)’ or ‘I was affected by Asan’s running away.’

Meanwhile, if “ka+NP” is a PP, it should not be able to pass the following coordination test. Yet, as it turns out, the examples below are all grammatical, contrary to prediction. This is also a drawback to the preposition/raising approach.
(10) a. Abing ka Asan phah sann e, Abi mennng ku, Abing KA Asan beat three time Abi scold two sentence (to cao-khi a).
    then run-away Perf.
    阿明 阿三打三下，阿美罵二句，(就走去了)
    ‘A-meng beat Asan three times, scolded Abi two sentences, then he went back.’

    Abi cheat five-hundred dollar then run-away Perf.
    那個壞人 阿三搶三百元，阿美騙五百元，(就走去了)
    ‘That bad guy robbed Asan of three hundred dollars, Abi of five hundred dollars, then he ran away.’

c. Kengchat ka cit-e lang huatlak-pah kho, hit-e policemanKA this-CL person fine six-hundred dollar that-CL lang kuainn sann kang. person shut-in three day 員警 阿美罰六百塊，那個人關三天
    ‘The policeman fined this person for six hundred dollars, jailed that person for three days.’

Since the preposition/raising approach is not plausible, we are left with what *ka* is. One way to solve it is to explore into *ka*’s properties with respect to theta role assignment. We may start form the Benefactive/Adversative usage in (4) (repeated below). The *ka*-NP in such a usage is in a “dangling” status since there is no gap in the main predicate for the *ka*-NP to be reconstructed back. All the main predicates have already been saturated by their own arguments:

(4) a. Abu ka Asan se sann. mother KA Asan wash clothes
    阿母 阿三洗衫
    ‘Mother washes clothes for Asan.’

b. Asan ka gua cau-khi.
    阿三 野跑去
    ‘Asan ran away (on me)’ or ‘I was affected by Asan’s running away.’

Therefore, it is not possible for the *ka*-NP to be reconstructed back to the object position of the main predicate as in the (a) examples of (11-12), or to the other position such as the topic position in the (b) examples of (11-12). That is, there is no “non-*ka*-counterpart” for the Benefactive/Adversative construction.

(11) a. *Abu se sann Asan. mother wash clothes Asan
    阿母 阿三
    ‘Mother washes clothes for Asan.’
b. *Asan, abu se sann.
   阿三，阿母洗衫
   'Asan, mother washes clothes.'

    阿三走去我
    'Asan ran away (on me)’ or ‘I was affected by Asan’s running away.’

b. *Gua, Asan cau-khi.
    我，阿三走去
    ‘I, Asan run-away

Now, if the ka-NP in the Benefactive/Adversative construction can only remain at where it is on the surface structure, how does it get the theta role? After all, ka as a preposition cannot assign a theta role to the ka-NP. How, then, will the ka-NP meet the Theta Criterion (Chomsky 1981, 1986). This is one of the major differences that Taiwanese ka-construction distinguishes itself from Mandarin ba-construction where the non-ba-counterpart exists as (13) shows (Sybesma 1999, Li 2001):

(Mandarin)

(13) a. Wo ba juzi bo-le pi.
    我 BA tangerine peel-Perf. skin
    ‘I peeled the skin of the tangerine.’

b. Juzi, wo bo-le pi.
    tangerine I peel-Perf. skin
    ‘Tangerine, I peeled the skin of it.’

Now that we have shown there is no gap for the ka-NP to be reconstructed back, in order to fulfill the Theta Criterion, the burden of theta role assignment naturally falls upon ka. In this sense, ka is more like a verb than a preposition. In the remaining part of this paper, we will suggest that the ka-NP be base-generated at where it is on the surface structure as ka’s own argument.

Treating ka as a verbal element is not unprecedented. Both Lin (2001) and Li (2001) take ka as a light verb encoding AFFECT which exerts affectedness on its object, the ka-NP. By comparing with Mandarin ba, Li (2001) suggests that ka is more lexical in terms of theta role assignment. That is, while the Taiwanese ka can directly assign a thematic role to the ka-NP, the Mandarin ba has no such capability. Such a property accounts for why the ka-NP may stand as ka’s argument in the Benefactive/Adversative construction. In what follows, I will continue to treat ka as a light verb following Lin (2001) and Li (2001). As for the position of ka-NP, though Li suggests in a footnote that the ka-NP may either be base-generated or raised, I will depart from her by

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7 Even though we assume that the complex predicate VP or vP can compositionally assign a theta role to its “outermost” object (Huang 1999) and the preposition ka can assign a case to it, still [ka+NP] does not form a constituent as the test in (9) and (10) show. Therefore, the preposition account for ka is not plausible.
maintaining a principled base-generation approach. We will discuss Li’s (2001) and Lin’s (2001) analyses in the next section. Before that, let’s see another phenomenon that the light verb approach may explain.

A light verb approach explains why ka cannot stand alone as a full-fledged verb. Tsao (2003) originally uses the following examples to argue that ka should be treated as a preposition instead of a verb. In (14) ka is on a par with the (替) ‘for’ and wi (為) ‘for’ by taking a benefactive object. In (15), however, both the (替) and wi (為) can be full-fledged verbs and thus can stand alone, whereas ka cannot stand alone as the (替) and wi (為) do.

(from Tsao 2003: 123)

(14)  
I ka /the/wi gua se pue-a.  
he KA/for/for me wash glass  
伊 ka/替/為我洗杯子  
‘He washes glasses for me.’

(15)  
a. Li the gua ho m?  
you for me good not  
你替我好不？  
‘Will you do it for me or not?’

b. Gua bo wi li si be wi siang?  
I not for you be will for whom  
我替你為誰？  
‘If I am not (doing it) for you, whom am I (doing it) for?’

c. *Li ka gua ho m?  
you KA me good not  
你 ka 貼我好不？  
‘Will you do it for me or not?’

However, such examples do not exclude the possibility of treating ka as a light verb, since a light verb cannot itself stand alone either as exemplified in (16). Both the Mandarin passive marker bei and Taiwanese passive marker ho have been analyzed as a light verb in Huang (1999) and Cheng et al. (1996) respectively. The following examples show that they cannot stand alone as a full-fledged verb:

(Mandarin)

(16)  
a. Zhangsan bei Lisi da-le ma?  
Zhangsan BEI Lisi beat-Perf. Q  
‘Was Zhangsan beaten by Lisi?’

b. *Zhangsan bei Lisi le.  
Zhangsan BEI Lisi Perf.  
‘Zhangsan was by Lisi.’

c. *Bei le.  
BEI Perf.  
‘BEI.’ (passive maker)

d. *[Zhangsan bei Lisi] hao-bu-hao?  
Zhangsan BEI Lisi good-not-good  
‘Is it good or not that Zhangsan is by Lisi?’
We have demonstrated that the traditional preposition/raising approach for \( ka \) is not plausible in terms of theta role assignment, constituency test, and raising triggering factor. We have also suggested that the light verb approach should be a good start to re-investigate the \( ka \)-construction since on the one hand it does not contradict with the traditional preposition approach while on the other hand it may cover more phenomena that the preposition/raising approach cannot. Meanwhile, we have also proposed that the \( ka \)-NP be base-generated on the surface structure, contrary to the preposition/raising approach. In the following section, we would like to show that the apparent raising of the \( ka \)-NP can still be account for, once the Null Operator (Chomsky 1981, Cheng et al. 1996, and Huang 1999) analysis is adopted.

4. The structure of \( ka \)-construction

As is already noted in the previous section, Li (2001) and Lin (2001) treat \( ka \) “as a light verb encoding AFFECT” and I am going to adopt their proposal that \( ka \) may serve as a light verb. However, both authors do not explain why \( ka \) may be endowed with the potential to assign four apparently different theta roles, which nevertheless will be one of the main points in this section. Also, though both authors propose a syntactic structure for the \( ka \)-construction, they are different from mine as will be disclosed later. Let’s start with their proposals first.

Li (2001:39(90)) proposes a complex “double vP-shell” structure (18) for the \( ka \)-construction. She suggests that \( ka \) in the upper vP-shell is more like a lexical V head which may independently assign a theta role to the \( ka \)-NP, NP2, which consequently is base-generated in the upper vP-shell instead of raising from within the lower vP-shell. In this way, she can explain why \( ka \) may take an additional argument in the Benefactive/ Adversative construction.
Yet, she did not explain how come the ka-NP may end up with four different theta roles, especially when the linking from the main predicate, V3, of the lower vP-shell is disconnected by her proposal that the ka-NP is base-generated instead of being raised. In other words, if the ka-NP is not raised from the lower vP-shell after being assigned a corresponding theta role from the main predicate, we have no idea why it would manifest four different theta roles related to the main predicate.

Meanwhile, Lin (2001) adopts the Lasonian VP-shell and treats ka as an overt realization of the light verb AFFECT (321:(65)) (see also Cheng’s et al. (1996) for their source double object construction):

(19) a. Ong-e ka Taiwan Ginhang qīū pe-paban.
    Ong-e KA Taiwan Bank rob eight-million
    'Ong-e robbed eight million dollars from Taiwan Bank.'

b. 

In (19) the main predicate qīū ‘rob’ does not raise to the light verb position since it is already occupied by a lexically spelled-out light verb ka. The light verb ka in turn takes the lower VP as its complement. The ka-NP, Taiwan Ginhan
'Taiwan Bank', is base-generated at the lower Spec-VP serving as an internal subject of the complex predicate qiū pe-pan 'rob 8 millions'. Lin suggests that the common semantic feature encompassing the ka-NP is affectedness. As for the four different theta roles manifested on the ka-NP, he proposes, somewhat vaguely, that they "arise from the semantics/pragmatics of the predicate as a whole" (p. 319), without further elaboration.

In this study, I follow Li (2001) and Lin (2001) in treating ka as a light verb encoding AFFECT and the ka-NP as an in-situ noun phrase being affected. Yet, I explore further into the thematic relationship between the ka-NP and the main predicate, which both Li (2001) and Lin (2001) do not account for. My proposal is that the four apparent different theta roles manifested on the ka-NP should be attributed to a natural result of secondary predication introduced by lambda abstraction in the same vein as Huang (1999). In this regard, the ka-NP serves as the external argument of the complex predicate introduced by lambda abstraction and is predicated by the complex predicate. I will elaborate more on this issue later. Before that, let's investigate into the apparent raising phenomenon of the ka-NP first.

In the previous section we suggest that the ka-NP should be base-generated right after ka since ka may independently assign a theta role to it. Yet, proposing so would raise an immediate problem for the status of the gap, i.e., the empty category 'e', as in (1-3), if we treat the ka-NP as base-generated. The gap in question behaves more like a trace for the following reasons. Firstly, to postulate a null pronominal pro at the gap position is not plausible since it cannot be overtly realized as exemplified in (20) below. Next, to treat it as a bound-variable will also be ruled out for the same reason (Huang 1984):


阿明 ka 阿三, 打死伊, 啊 'Abing beat Asan to death.'

b. *Abing ka Asan, ka i, ingbuen. Abing KA Asan teach him English

阿明 ka 阿三, 教伊, 英文 'Abing teaches Asan English.'

c. *Kengchat ka hit-e lang i, huat i, lak-pah kho. policeman KA that-CL person fine him six-hundre dollar

員警 ka 那個人, 警伊, 六百塊 'The policeman fined that man for six hundred dollars.'

Finally, since both pro and variable are not plausible for the gap position, we are left with the trace account. That is, the empty category should be a trace, the consequence of movement/raising. The following island effect further testifies the trace account. As are clearly demonstrated below, the raising of the ka-NP from the complex NP island is blocked:

(21) a. *Abing ka Abi, phah [e] [e'] khiphen t i, e ang. Abing KA Abi beat cheat Rel. person

阿明 ka 阿三, 打[e', 欺騙 t]的人, 'Abing beat the person who cheated Abi.'
b. *Abing ka Asan, be [DP [CP e] phuephing t_i] e cheh].
Abing KA Asan buy criticize Rel.book
阿明 ka 阿三, 購 [e] 批評 t_i] 的書.
‘Abing bought the book that criticizes Asan.’

Abing KA Asan ask Abi beat Rel.event
阿母 ka 阿三, 問阿明 [[阿美打 t_i] 的代詛]
‘Mother asked Abing the event that Abi hit Asan.’

bad-person KA that-CL child cheat Asan

[rel[CP e] etang kiu t_i] e cinn,
may save Rel.money
壞人 ka 那個囝仔, 騙阿三[e, 可以救 t_i]的錢.
‘The bad guy cheated Asan of the money that may save that child.’

Note that the Benefactive/Adversative usage can not be included in the tests above because there is simply no gap for us to test.

Meanwhile, we may follow Huang (1999) to test if the movement/raising is an A- or A’-movement. It is well known that A-movement is restricted to stricter locality requirement, while A’-movement allows some unbounded dependency between the landing site and the launching site of a moved element. The following dependency between the landing site and the launching site of a moved element.

The following dependency between the landing site and the launching site of a moved element.

(22) a. I ka Asan, kio lomuann phah-si t_i a.
he KA Asan ask bully beat-dead Perf.
伊 ka 阿三, 叫順便打死 t_i 美
‘He asked a bully to beat Asan to death.’

b. I ka hit-puen cheh, kio Abing be -tiau t_i a.
he KA that-CL book ask Abing sell-out Perf.
伊 ka 那本書, 叫阿明賣掉 t_i 美
‘He asked Abing to sell that book.’

c. I ka ie kiann, chian lausu ka t_i ingbuen.
he KA his son hire teacher teach English
伊 ka 伊的眾仔, 讓老師敎 t_i 英文
‘He hired a teacher to teach his son English.’

d. I ka hit-e lang, kio kengchat huat t_i lak-pah kho.
he KA that-CL person ask policeman fine six-hundreddollar
伊 ka 那個人, 叫員警罰 t_i 六百塊
‘He asked the policeman to fine that man six hundred dollars.’

Now we face a dilemma. On the one hand, the ka-NP is base-generated at where it is on the surface structure as the previous section shows. On the other hand, it appears to have undergone movement that is evidenced in the tests above. Nevertheless, such a déjà vu dilemma reminds us of the Null Operator (NOP) analysis in (23) (Chomsky 1981), (24) (Cheng et al. 1996) and (25) (Huang 1999):
(23)  I bought a car, [OP, [ to drive t₁.]

(Taiwanese Southern Min)
(24)  a. Gua chiunn cit-siu kua, [OP, [Pro ho [i tian t₁ ]]].
   [I sing one-CL song] HO he listen
   [我唱一首歌, [OP, [Pro ho [没聽 t₁ ]]]
   ‘I sing one song for you to listen to.’
   b. I, ho [OP, [gua phah-si t₁ a]].
   [he HO I beat-dead Perf.]
   [伊, ho [OP, [我打死 t₁ 美]]]
   ‘He was beaten to death by me.’

(Mandarin)
(25)  Zhangsan, bei [OP, [Lisi da-le t₁ ].
   Zhangsan BEI Lisi beat
   張三, 被[OP, [李四打了 t₁ ]]
   ‘Zhangsan was beaten by Lisi.’

The above examples have all been analyzed as involving A'-movement of a null operator (OP) in the embedded clause and a base-generated noun phrase in the matrix clause. A co-indexation between the noun phrase and the null operator is established via strong binding. In this regard, the noun phrase in question may remain in-situ while the trace in the embedded clause is attributed to the null operator movement.

The NOP approach serves just right to account for the raising puzzle of Taiwanese ka-construction here. I will thus apply such an approach to my analysis:

(26)  a. Gua ka t₁ [OP, [Pro phah-si t₁ a]].
   [I KA him beat-dead Perf.]
   我 ka 伊 [OP, [Pro 打死 t₁ 美]]
   ‘I beat him to death.’
   b. Abing ka Asan [OP, [Pro ka t₁ ingbuen]].
   [Abing KA Asan teach English]
   阿明 ka 阿三 [OP, [Pro 教 t₁ 英文]]
   ‘Abing teaches Asan English.’
   c. Kengchat ka hit-e lang [OP, [Pro huant t₁ lak-pah]
      policeman KA that-CLperson fine six-hundred khol].
      dollar
      呂警 ka 那個人罰 e 六百塊
      ‘The policeman fined that man for six hundred dollars.’

Note that the NOP approach still holds for the Benefactive/Adversative sentences if we assume with Cheng et al. (1996) that such construction involves an ‘outermost object’ bearing the theta role Indirect Affectee. The outermost object then undergoes NOP movement to the IP-adjoined position to form a lambda predicate which in turn is predicated of the ka-NP:
The syntactic structures I propose for the *ka*-construction are as follow. For the construction where a gap exists, I propose the following structure (28) where the upper VP-shell is akin to Li’s (2001) while the lower VP-shell is a secondary predicate induced by the Null Operator Movement:

(28) a. Gua ka Abing, [OP₁ [Pro phah ₆]].
    I Ka Abing beat
    'I beat Abing.'

    b. For the non-gapped construction, i.e., the Benefactive/Adversative construction, I propose the following structure where, following Huang (1999), a null “outermost object” is adjoined to the lower VP-shell, VP₃, as its object. It then undergoes Null Operator movement to the VP₃ adjoined position, turning the whole VP₃ as a complex predicate:

(29) a. I ka gua cau-khi.
    he KA I run-away
    'He ran away (on me).’ Or ‘I was affected by his running away.'
The NOP approach also sheds light on the seemingly polysemous property of \textit{ka}. Recall that \textit{ka} may serve as four thematic markers, i.e., the Patient/Theme marker, the Goal marker, the Source marker, and the Benefactive/Adversative marker, as are already manifested in (1-4). It is not plausible if we simply recognize those four properties as built within the lexicon of \textit{ka} because doing so will increase the labor in storing the lexicon. Moreover, the speaker will have to decide which property of the four best fits the context during language processing when dealing with the four-way uses of \textit{ka}. Independent constraints or restrictions have to be assumed in order to regulate the four uses/properties of \textit{ka}. It is laborious again. The lexicon approach thus will not have a say in terms of language acquisition.

Now, if we simply treat \textit{ka} as a general predicate (a light verb) encoding AFFECT in its lexicon, which only exerts the affectedness on its object, the \textit{ka}-NP, the ease of labor in processing the lexicon will render such an approach a much more promising one. Also, we do not have to assume any independent constraint or restriction to regulate the four uses of \textit{ka}. As for how the four thematic marking functions can be achieved, I suggest that they are natural consequences of the secondary predication achieved by the NOP movement. To put it more specifically, the null operator movement manifested in (30b) has turned the proposition [Pro phah-si $e_i$ a]] in (30a) into a lambda predicate (30c), which in turn is predicated of the \textit{ka}-NP i 'him' to reinforce the properties denoted by the lambda predicate unto the \textit{ka}-NP via strong binding (Chomsky 1986, Cheng et al. 1996, Huang 1999). The sentence (30) is then interpreted roughly as “I affected him by rendering him the properties of being an x such that I beat up x”.

(30) a. Gua ka $i$, [Pro phah-si $e_i$ a]].

\begin{verbatim}
I KA him beat-dead Perf.
我 ka $i$, [Pro 打死 $e$ ]
\end{verbatim}
'I beat him to death.

b. Gua ka \[OP, [Pro phah-si \ t_i a].\]
c. Gua ka \[\lambda, x [Pro phah-si \ x a].\]

Since the \textit{ka-NP} acquires the properties denoted by the lambda predicate, the thematic relationship between them is established as a natural consequence. No independent rule or constraint is needed to explain the thematic properties of the \textit{ka-NP}. This is a satisfactory result since it leads to a greater ease of labor during the process of language acquisition.

If I am on the right track, the Taiwanese \textit{ho}-construction and the Mandarin \textit{bei}-construction analyzed under the NOP movement approach by Cheng et al. (1996) and Huang (1999) should also manifest the polysemous behavior. Such is well attested in the following examples. All the NPs in question (the NP that is predicated of) yield the thematic relation with the lambda predicate formed by NOP movement:

\textbf{(Mandarin \textit{bei}-passive)}

(31) a. \textit{Zhangsan} bei Lisi da-si le. (Patient)
\textit{Zhangsan} BEI Lisi beat-dead Perf.
‘Zhangsan was beaten to death by Lisi.’
b. Na-ben \textit{shu} bei Zhangsan mai-diao le. (Theme)
that-CL book BEI Zhangsan sell-out Perf.
‘That book was sold by Zhangsan.’
c. Na-\textit{ge ren} bei Zhangsan ma-le yi-dun. (Goal)
that-CL person BEI Zhangsan scold-Pref. one-CL
‘That person was scolded by Zhangsan severely.’
d. \textit{Zhangsan} bei jingcha fa-le liu-bai kuai. (Source)
\textit{Zhangsan} BEI policeman fine-Perf. six-hundred dollar
‘Zhangsan was fined for six-hundred dollars by a policeman.’

\textbf{(Taiwanese \textit{ho}-passive)}

(32) a. \textit{Asan} ho Abing phah-si a. (Patient)
\textit{Asan} HO Abing beat-dead Pref.
\textit{阿明打死阿三}
‘Asan was beaten to death by Abing.’
b. Hit-puen \textit{cheg} ho Asan be-tiau a. (Theme)
that-CL book HO Asan sell-out Perf.
\textit{那本書阿明賣掉阿三}
‘That book was sold by Asan.’
c. Abing ho Asan ka engbuen. (Goal)
Abing HO Asan teach English
\textit{阿明教阿三英語}
‘Abing was taught English by Asan.’
d. Abing ho kengchat huat-lak-pah kho. (Source)
Abing HO policeman fine six-hundred dollar
\textit{阿明員警罰六百塊}
‘Abing was fined six-hundred by a policeman.’
(33) a. Gua ca cit-lia kiu ho Asan thak. (Patient)
   I bring one-CL ball HO Asan kick
   'I bring one ball for Asan to kick.'

b. Gua chiunn cit-shu kua ho li thiann. (Theme)
   I sing one-CL song HO you listen
   'I sing one song for you to listen to.'

c. Abing chua Asan ho lausu ka engbuen. (Goal)
   Abing bring Asan HO teacher teach English
   'Abing brings Asan for the teacher to teach English.'

d. Guahai Abing ho kengchat huat lak-pah kho. (Source)
   I harm Abing HO policeman fine six-hundreddollar
   'I cause Abing to suffer from being fined six-hundred dollars by the policeman.'

The thematic roles shown in the parentheses above are not the canonical thematic roles assigned by the predicates in the matrix clause. They are only meant to show the thematic relations between the secondary predicates and the NPs that are predicated of. This does not mean that the NPs in question are assigned theta roles by the secondary predicates. These NPs have their own theta role. Take (31a). It has been convincingly argued in Huang (1999) that the syntactic subject Zhangsan is base-generated at the subject position and it takes the Agent (or Experiencer) role since a subject-oriented adverb guyi 'intentionally' denoting agentivity may be added to modify the subject:

(34) Zhangsan guyi bei Lisi da-shang le.
    Zhangsan intentionally BEI Lisi beat-hurt Pref.
    'Zhangsan intentionally got beaten by Lisi such that he was hurt.'

Now, by secondary predication, the NP that is predicated by the lambda predicate seems to acquire the secondary thematic role from it. That is the reason why when the subject-oriented adverb guyi 'intentionally' is deleted, the syntactic subject seems to be over-ridden with the patient role deriving from the object position of the verb da-shang 'beat-hurt' via secondary predication, which leads some linguists to treat Chinese passive construction as a raising construction on a par with English one. That is also the reason why Taiwanese ka may be mistakenly regarded as four different thematic markers.

Meanwhile, we know that the tough construction in English is traditionally dealt with the NOP analysis (Chomsky 1981). Following the reasoning above, the NPs that are predicated of are expected to have the thematic senses exerted from the secondary predicates. Obviously it is the case in the following examples. As the thematic roles in the parentheses show, the subjects underlined seem to have a second theta role besides their canonical one, Theme.

(35) a. John is too tough to beat up e1. (Patient)
b. The problem is easy (for you) to solve $e$. (Theme)
c. John is too stubborn (for us) to teach $e$ the recycling. (Goal)
d. The sly John is hard (for the government) to fine $e$ any money. (Source)

Also, in English some verbs, e.g. *get*, *make*, are too broad in meaning that it is not easy to find a word-to-word translation to Chinese. With the NOP movement analysis, it is now clear to us why the argument taken by *get* may have a second “flavor” in thematic role hooked up to the secondary predicate:

(36) a. Bill is trying every way to get John to hit $e$ in the face. (Patient)
b. I will get a car to drive $e$. (Theme)
c. The teacher has got some students to teach $e$ morality. (Goal)
d. The government is trying hard to get John to fine $e$ a great fortune. (Source)

To conclude, treating *ka* as a a light verb encoding AFFECT in its lexicon, which only exerts affectedness on the *ka*-NP, is favorable due to the ease of labor in terms of language acquisition. No further constraint or restriction is required to regulate the four uses of *ka*. The four thematic marking functions are simply natural consequences of the secondary predication achieved by the NOP movement.

One might ask whether there is any difference if we want to pair *ka* with Mandarin *bei* and Taiwanese *ho*. Or is it possible for *bei* or *ho* to have a Benefactive/Adversative NP? My reply comes as following. In fact *ho* in Taiwanese Southern Min does have an Adversative NP in the so-called Adversative Passive (Huang 1999). Consider the following:

(29) a. I ka gua cau -khi.
    he KA I run-away
    ‘He ran away (on me).’ Or ‘I was affected by his running away.’

(from Huang (1999: 482(106c)), see also (462(71), and the diagram in (492(130)))

(37) Gua bosiosim ho i cau-chut-khi a.
    I carelessly HO him run-out-away Perf.
    ‘Due to my carelessness, I had him running away (on me).’

The difference between *ka* and *ho* is that while *ka*-NP gua ‘I’ in (29a) is the Adversative NP being predicated by the secondary predicate in *ka*-construction, in *ho*-construction (37) it is the matrix subject gua ‘I’ that is predicated by the secondary predicate. Moreover, the fact that both *ka* and *ho* may allow an extra argument, the Adversative NP, seems to me that they are not yet fully grammaticalized into a functional head, at least less grammaticalized than *bei* in Mandarin Chinese.

As for the reason why its Mandarin counterpart does not have the Adversative construction, I have no clear answer for that. Obviously, the
Adversative construction is prominent in Taiwanese, but not so in Mandarin Chinese. We may assume that the light verb ka and ho in Taiwanese are not so grammaticalized as ba and bei in Mandarin Chinese. That is, ka and ho in Taiwanese are more lexical like a verb whereas ba and bei are more functional like an auxiliary. Meanwhile, according to Huang (1999), the adversely affected object is the “outermost object” of the VP. In this regard, the more lexical ka and ho may independently license the existence of the outermost object. Such a stipulation is confirmed by the following examples where the adversative noun phrases in Mandarin Chinese are licensed by a lexical verb, gei ‘give’ in (38) and rang ‘let’ in (39), though not by ba or bei:

(38) a. Ni daodi gei/*ba wo pao dao nar qu le?
you on-earth give/BA I run to where go Pref.
‘Where on earth did you go (on me)?’
b. Na-ge xiao-tou jingran gei/*ba wo pao-le.
that-CL thief unexpectedly give/BA me run-Pref.
‘That thief unexpectedly run away (on me).’
(39) Wo rang/*bei ta (gei) pao-le.
I let/BEI him give run-Pref.
‘I was affected by (or suffering from) his running away.’

In the above examples, an adversative NP wo ‘I’ is added and independently licensed by the lexical verb gei ‘give’ and rang ‘let’ respectively. The adversative NP here has almost the same meaning as those in ka-construction and ho-construction, all of which denote some individuals affected by or suffering from certain events.

5. From coordination to complementation: a historical perspective

From a historical perspective, Lien (2002) points out that ka in most cases can be a Benefactive marker, a Goal marker, and a Source marker, whereas only in few cases can it be a Patient marker in Li Jing Ji (荔鏡記), an earliest extant text of Southern Min (1566 AD). What is surprising is that the canonical behavior of disposal construction, such as the ba-construction in Mandarin Chinese, is to mark its object as Patient. Lien’s suggestion immediately excludes the possibility that ka and ba are etymologically derived from the same source (see also Cheng & Tsao 1995), or that ka is derived from ba, or that ka is the counterpart of ba, though the younger generations of Taiwanese tend to use ka as a counterpart of ba (Lien 2002: fn. 23). Moreover, tracking back to the usage of ka in literature, Wu (1996) and Lien (2002) point out that ka is derived from the conjunction kang (_TESTS) dating back to “the late Tang and Five Dynasties period (the mid-eighth to tenth century) and possibly an earlier time” (Lien 2002:207, and references therein) and maintains its conjunction function until Min dynasty. Meanwhile, Cheng and Tsao (1995) also suggest the conjunction origin of ka. They suggest that ka may be derived from the conjunction kap (_tests) of the commitative usage. Both Lien’s and Cheng & Tsao’s studies are further steps away from the Mandarin disposal ba since ba is never derived from a conjunction, but a lexical verb instead.
Studies from the previous literature (Cheng & Tsao 1995, Wu 1996, and Lien 2002) bring support to our analysis in this paper. Firstly, the proposal that ka-NP is base-generated instead of being raised from the complement position of the main verb is now plausible since ka originates from the conjunction usage which obligatorily takes an in-situ object to be conjoined with. Secondly, ka's conjunction heritage also confirms the proposal (also Li’s (2001)) that ka is more lexical with respect to its potential to take its own argument ka-NP and to independently assign a theta role to it. For one thing, the conjunction naturally takes an object argument. For another, according to Lien (2002:207) “had in Middle Chinese times developed to a stage at which it expresses the execution of action with respect to the object that takes on various semantic roles except patient (Wu 1996: 242)”. Meaning, the ka-NP is able to get a theta role from ka with the advent of ka's capability in exerting actions (affectedness in our term). Finally, the fact that ka may take a patient object in Modern Taiwanese Southern Min, especially among younger generations, is not its inherent property or a heritage from its traditional usages. Instead, it is simply a “borrowed usage” from the widely-used Mandarin disposal ba (Lien 2002). The canonical disposal usage in Taiwanese Southern Min is to resort to ciong (將). The difference is that ciong is used in a more literary way while ka stands for the colloquial expression among the younger generations.

If the above arguments are reasonable, ka in Taiwanese Southern Min has undergone a major drift from the conjunction usage to the complementation usage. Such complementation usage is what our analysis strongly endorses in previous sections since we propose that the ka-NP be a base-generated argument of ka and that a complementation module (secondary predicate) be encoded in the ka-construction. Meanwhile, Mei (2003) proposes that there should have been a grammatical change in the history of Chinese that brought the phrase structure of Chinese from dominantly coordinating in Ancient Chinese to dominantly subordinating in Middle Chinese and afterwards. Though due to the limit of the dialectal literature we can only trace ka back to the Middle Chinese period as manifested in Wu's (1996) work, ka at that time have already had the various thematic marking capability (except for the Patient marking ) (Lien 2002: 207) as well as its original conjunction usage. Such a phenomenon roughly conforms to Mei’s observation, only that the phrase structure of ka-construction has developed from coordination to complementation instead of subordination.

6. An account on the differences between ka and ba

In spite of their similarities, it is generally agreed that Taiwanese Southern Min ka is different from Mandarin ba in three major aspects:
i) Bare-verb taking potential: ka can take a bare verb whereas ba can not. In (40a) the main verb da ‘beat’ can not stand alone in Mandarin ba-construction while in (40b) the main verb phah ‘beat’ can do so in Taiwanese ka-construction.

(Mandarin)
   I BA Zhangsan beat
   ‘I beat Zhangsan.’
b. Gua ka Abing phah.
   我 ka 阿明打
   'I beat Abing.'

ii) Non-ka-counterpart: ka does not always have a non-ka counterpart, while ba always does. In (41b) the ba-NP Zhangsan is reconstructed back to the object position and in (42b) the ba-NP juzi ‘tangerine’ to the topic position. Note that the position where the ba-NP is reconstructed back does not have to be the canonical object position. The issue here is that the ba-NPs in question can have non-ba-counterparts.

(Mandarin)

(41)  a. Wo ba Zhangsan ma-le yi-dun.
      I BA Zhangsan scold-Perf. one-CL
      'I scolded Zhangsan severely.'
   b. Wo ma-le Zhangsan yi-dun.
      I scold-Perf. Zhangsan one-CL
      'I scolded Zhangsan severely.'

(42) a. Wo ba juzi bo-le pi.
      I BA tangerine peel-Perf. skin
      'I peeled the tangerine.'
   b. Juzi, wo bo-le pi.
      tangerine I peel-Perf. skin
      'Tangerine, I peeled off the skin.'

However, in Taiwanese ka-construction the (Benefactive/Adversative) ka-NPs as in (43a) and (44a) can not be reconstructed back to any position. The main predicates have already been saturated and the additional arguments, gua ‘I’ in (43) and Abing in (44), cannot be licensed without ka. Even the topic position, a position typically immune from grammatical constraints, say, case requirement, does not guarantee the ka-NP as (43b) and (44b) show. That is to say, the ka-NP does not always have the non-ka-counterpart.

(Taiwanese Southern Min)

(43) a. I *(ka) gua cau-khi.
      he KA I run-away
      伊 ka 我走去
      'He ran away (on me).'</n>
'Mother washes clothes for Abing.'

b. * Abing, abu se sann.
   Abing, mother washes clothes
   阿明，阿母洗衫
   Abing, mother washes clothes.'

iii) Referentiality of the ba/ka-NP: the ba-NP tends to be definite or specific, or even generic ("strong" NPs in Barwise and Cooper's 1981 term) but never non-specific, whereas the ka-NP can be non-specific. In (45) the NP ren 'person' in Mandarin is referred to either a specific or definite person. In (46) the NP lang 'person' in Taiwanese may be referred to a nonspecific person:

(Mandarin)
(45) Zhangsan ba ren da-le yi-dun.
   Zhangsan BA person beat-Perf. one-CL
   'Zhangsan beat a certain/the person severely.'

(Taiwanese Southern Min)
(46) a. Abu ka lang se sann.
    mother KA person wash clothes
    阿明,阿母洗衫
    'Mother washes clothes for someone.'

b. Hit-e siu-e tian-tian ka lang o-pe menn.
    that-CL lunatic often-often KA person black-write scold
    彼個啲仔常常,人黑白罵
    'That lunatic often scolds people for nothing.'

c. Asan si-ke khi ka lang tau-sann-kang.
   Asan everywhere go KA person help
   阿三四界去,人打相共
   'Asan goes everywhere to help people.'

The bare NP lang 'person' in (46) has a nonspecific reading\(^8\) similar to the existential reading as "sm-one" in contrast to the quantificational reading akin to the strong reading as "SOME-one" (Milsark 1974, Diesing 1992). For the nonspecific reading, the person in question can be anyone. There is no presupposed individual to be referred to. So in (46a) mother can wash clothes for anyone; in (46b) that lunatic can scold anyone; and in (46c) Asan can help anyone.

We now try to account for the three differences between Mandarin ba and Taiwanese ka. The first difference, i.e., the potential to take a bare verb, and the third one, i.e., the referentiality of ba/ka-NP, can be accounted for together. Here Liu's (1997) aspectual analysis provides a very good start. She suggests that 'ba sentence requires its predicate to denote a bounded event or situation' and the 'bounded situations' are achieved through the addition of various forms

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\(^8\) The bare-NP lang 'person' in (46) has another logophoric reading similar to 'myself' in Taiwanese. We will focus on the nonspecific reading here instead of the logophoric one.
to the bare verb as are usually observed in the *ba*-construction.\(^9\)

(47) a. \(V + \) complement
b. \(V + de\)
c. \(V + \) retained object
d. \(V + \) perfective marker *le*
e. \(V + PP\) (durative or locative)
f. \(V +\) quantified phrase
g. \(V + yi + V\)
h. \(V +\) durative marker *zhe*
i. Adv + V

That’s why *ba* cannot take a bare verb form. As for the question why *ba*-NP has to be at least specific, she suggests a semantic mapping (Krifka 1989, 1992, Dowty 1991, and Filip 2001) or dependency in her term between the telicity denoted by the bounded situations on the predicate and specificity on the *ba*-NP. That is, the ‘bounded’ predicate would require its NP argument to be specific. The syllogism is quite simple. The *ba* sentence requires its predicate to be ‘bounded’ predicate. The ‘bounded’ predicate requires its NP argument to be specific. That’s why the *ba*-NP is (at least) specific. Sybesma (1999) has similar observation and he concludes that ‘the definiteness of the [ba-]NP is related to the nature of the predicate involved’ (Sybesma 1999:174).

However, assuming Liu’s analysis we would still have to explain why Mandarin *ba* would require its predicate to be ‘bounded’ whereas Taiwanese *ka* would not?\(^9\) We may attribute such a phenomenon to the idiosyncratic properties of *ka* and *ba* respectively. Yet, such postulation does not seem to be a satisfactory one. After all, leaving everything unaccounted for to the lexicon does not explain anything. I agree with Liu’s insight that the specificity of the *ba*-NP is related to the boundedness of predicate type via semantic mapping. However, it is not enough to cover the Taiwanese *ka*-construction. In what follows I would like to provide a syntactic account for the differences between *ba* and *ka* and suggest that both the syntactic structure and the semantic mapping play a role in the specificity of the *ba/ka*-NP.

Huang (1982, 1984, 1994) proposes that the referential (or at least specific) NP is situated at the position as the sister of *V*’ (or SpecVP, adopting the VP-shell notion) instead of the sister of *V* (V-complement). That is, the object NP is licensed to be referential (or specific) once it situates at the SpecVP position, as required by the independent Postverbal Structure Constraint (PSC) (Huang 1982), a general constraint on Chinese phrase structure. Now, when it comes to the *ba*-NP, regardless of the raising or control issue, the *ba*-NP would

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\(^9\) I believe that Liu’s analysis is basically right, except that he suggests that the telicity in Chinese verbal phrase may be derived from the addition of a direct object just as its counterpart in English. Yet, I think that the telicity in Chinese should be further ensured by either the resultative construction or the perfective verbal *le*. That is, the telicity of a verbal phrase or a sentence in Chinese is quite strict that the sole addition of a direct object to the verbal predicate is not sufficient to yield a bounded event (This conforms to Li’s (2003) observation, only that she does not point out the telicity may be contributed by either the resultative construction or the verbal *le*). We will not discuss the specific details here.
end up at the SpecVP position as both the raising or control approaches would agree. Such position is the referential position as proposed by Huang.

(48) a. Zhangsan ba gou ti-le yi-jiao.
    Zhangsan BA dog kick-Perf. one-leg
    ‘Zhangsan kicked the dog once.’

b. Lisi ba shoupa ku-shi-le.
    Lisi BA handkerchief cry-wet-Perf.
    ‘Lisi cried such that the handkerchief was wet.’

(49)

In other words, the referential/specific reading of the ba NP is not licensed by ba itself but by the argument position SpecVP which in turn, we propose, is licensed by the boundedness/telicity of the main predicate as one of the types in (47).

Let’s now turn to the ka-construction in Taiwanese Southern Min. Following the phrase structure proposed in (28b) (or the simplified version (50)), it is clear that the ka-construction is more ‘analytic’ in that it has a double VP-shell structure, in contrast to ba’s single VP-shell:

(50) (simplified version)

a. Taiwanese ka-construction

b. Mandarin ba-construction
The structural difference between ka and ba has one significant point. That is, the ka-NP is farther away from the main predicate than the ba-NP is. The ka-NP and the main verb are of different VP-shells whereas the ba-NP and the main verb are within the same VP-shell. In the ka-construction the lower VP-shell is “closed off” by the null operator and is turned into a lambda predicate being predicated of the ka-NP which in turn is higher up in the upper VP-shell.

Let’s see how this structure difference would explain the first difference and the third difference between ba and ka, i.e., the bare-verb taking potential and the referentiality of the ba/ka-NP. Recall that Huang (1982, 1984, 1994) suggests that the referential (or at least specific) NP be situated at the position SpecVP which is licensed by the boundedness/telicity of the main predicate. For the ka-construction, though the ka-NP is situated at the SpecVP in the upper VP-shell, this VP-shell is not the canonical VP-shell consisting of the main predicate. The SpecVP position in the upper VP-shell, then, does not have to be licensed by the main predicate situated in the lower VP-shell. It is licensed, instead, by the more “lexical” ka. Now, since ka is always in its bare form, it naturally renders its ka-NP as nonreferential/nonspecific, adopting the semantic mapping analysis (Krifka 1989, 1992, Dowty 1991, Filip 2001, and Liu 1997). Meanwhile, since the main predicate in the lower VP-shell is not responsible in licensing the ka-NP in the upper VP-shell, the main verb naturally can appear in its bare verb form.

As for the Mandarin ba-NP, as is suggested in the above tree diagram, it is within the same VP-shell as the main predicate. Recall that Liu (1997) suggests that ba sentence would require its predicate to denote a bounded event or situation and we further suggest that it is the position of SpecVP, a referential position, that needs to be licensed by a bounded/telic predicate. The bounded/telic predicate in Mandarin ba-construction can never be expressed with a single bare verb form.10 This accounts for their first difference.11

Now, since the main verb in the ba-construction can never be of bare-verb form, i.e., it has to be bounded/telic, the main verb will then turn the ba-NP into specific by semantic mapping since they are close enough. On the other hand, because the ka-NP is too far away from the main verb (recall that the lower VP-shell has been “closed off” by the null operator), the ka-NP naturally does not need to be licensed by the main predicate. It is then the “more lexical” ka that is in charge here. Since ka is always in its bare form, the ka-NP then can be licensed to be nonspecific. This accounts for the third difference. In a word, it is due to the difference in the phrase structure, or more specifically the distance, between the ba/ka-NP and the main predicate that causes the first and third difference mentioned in this section.

Let’s now turn to the second difference (the non-ba/ka-counterpart)

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10 Even the standard achievement verb like ying ‘win’ or jian ‘meet’ whose boundedness is built-in within the lexicon cannot be used in the ba-construction since the ba-construction is typically used in the disposal usage which would exert some actions or affectedness on the ba-NP in question. That is, the bare achievement verb in (Modern) Mandarin Chinese cannot appear in the ba-construction.

11 The fact that ba has a deeper connection (semantic mapping) to the telicity of the main verb (Krifka 1989, 1992, Dowty 1991) whereas ka is less so may be due to their different origins. That is, ba originates from verb while ka from conjunction.
which is easier to solve. As is already mentioned before, ka is more lexical than ba in that ka can independently take its own argument and assign the corresponding theta role, Affectee, to it. The phrase structures (28b) and (50a) clearly show that the ka-NP is an independent argument licensed by ka and the ka-NP has little to do with the argument structure of the main predicate situated within the lower VP-shell. That is why the ka-NP can not always be “reconstructed” back. There is simply no launching site for the ka-NP. This analysis amounts to saying that the ka-construction is not derived from the non-ka-construction. They are of two different structures, none of which is derived from the other.

If the ka-NP is an independent argument of ka instead of the main predicate, we may expect that a predicate with all its arguments saturated may still take an extra argument once ka is added. Such is well attested as exemplified in the following examples:

(one-place predicate)
(51) a. Abi cau-khi a.
   Abi run-away Perf.
   'Abi ran away.'

b. Abi ka gua cau-ki a.
   Abi KA me run-away Perf.
   阿美 ka 我走去矣
   'Abi ran away (on me).' Or 'I was affected by Abi's running away.'

(two-place predicate)
(52) a. Abing phah Asan.
   Abing beat Asan
   阿明打阿三
   'Abing beat Asan.'

b. Abing ka Abi phah Asan.
   Abing KA Abi beat Asan
   阿明 ka 阿美打阿三
   'Abing beat Asan for Abi.'

(three-place predicate)
(53) a. Abing sang Abi cit-ki pit.
   Abing give Abi one-CL pen
   阿明送阿美一支筆
   'Abing gave Abi one pen.'

b. Abing ka gua sang Abi cit-ki pit.
   Abing KA me give Abi one-CL pen
   阿明 ka 我送阿美一支筆
   'Abing gave Abi one pen for me.'

In the (b) examples above, though all the predicates are saturated, we can still add one extra argument when ka occurs. On the other hand, the ka-NP in the (b) examples cannot be “reconstructed” back to any position since all the argument positions of the main predicate have been filled as are already demonstrated in
(43) and (44) before. This suggests that the ka-NP cannot always have a non-ka-counterpart, especially in the Adversative/Benefactive construction. Now, assuming our structure in (28b), (29b) or (50a), such a phenomenon is well accounted for. That is, the ka-NP is a base-generated argument of ka in the upper VP-shell and thus it cannot be ‘reconstructed’ back to any position in the lower VP-shell. Its seemingly close kinship with the main predicate is but a disguise of secondary predication guaranteed via strong binding. The missing of non-ka-counterpart is then a natural consequence.

The missing of non-ka-counterpart is best observed in the Benefactive/Adversative construction in Taiwanese. In this paper, I follow Huang (1999:492ff), though he elegantly characterizes the inclusive/exclusive readings of Taiwanese passive construction in terms of the outer/outermost object, one thing is yet to be clarified. How is this extra argument projected? Huang’s explanation is that such an argument, the Indirect Affectee, is an object of the VP, instead of V’ whose object is the Direct Affectee. The Indirect Affectee is then licensed by VP as the object of the VP. Yet, this does not seem to be a plausible account since in that case we would expect that all VPs may have an outermost object serving as the Indirect Affectee:

(Mandarin)

(54) a. Zhangsan pao-zou-le.
   Zhangsan run-away-Perf.
   ‘Zhangsan ran away.’

   b. *Zhangsan wo pao-zou-le.
      Zhangsan me run-away-Perf.
      ‘Zhangsan ran away (on me).’

   c. *Zhangsan ba wo pao-zou-le.
      Zhangsan BA me run-away-Perf.
      ‘Zhangsan ran away (on me).’

As one can easily observe that such a claim is not always true because the outermost object needs some ‘real’ licensors, for example, ka and ho in Taiwanese Southern Min, so that the outermost object may be projected and thus get licensed accordingly:

(Taiwanese Southern Min)

(55) a. Abi *(ka) gua cau-chut-ki.
   Abi KA me run-out-away
   阿美 ka 我走出去
   ‘Abi ran away (on me).’ Or ‘I was affected by Abi’s running away.’

   b. Gua bosiosim * (ho) i cau-chut-k’i a.
      I carelessly HO him run-out-away Pref.
      我不小心, ho 伊走出去矣
      ‘Due to my carelessness, I had him running away (on me).’

The verb cau-chut-ki ‘run-out-away’ is an one-place predicate allowing only one argument to be projected. When additional argument is added, the sentence turns
out to be ungrammatical. As is manifested above, the insertion of the disposal *ba in Mandarin does not help to secure the extra argument. Only *ka and *ho in Taiwanese may serve as the real licensor to secure the extra argument, the outermost object. If we treat *ho and *ka as "more lexical" in terms of argument-taking potential; that is, they both may assign case and theta role to its arguments, the above mentioned problem may be well accounted for.

Cheng et al. (1996) mention that the Taiwanese *ho-passive construction may be dealt with the NOP analysis. They provide examples in terms of resumptive pronoun to show that the *ho-passive is involved with *A'-dependency within which the resumptive pronoun is commonly observed. Consider the parallel between (56) and (57). Both (56b) and (57b) do not allow the resumptive pronoun *i ‘him’ to occur, whereas both (56c) and (57c) do allow so. The relativization in (57) is a typical instance of *A'-dependency. By Analogy, (56) should also involve the *A'-dependency since it patterns with (57). Such a parallel confirms their NOP analysis since the NOP analysis also involves *A'-dependency.

(56) a. I *ho gua phah-siong a.  
   he HO me beat-hurt Perf.  
   ‘He was beaten and hurt by me.’  

b. *I *ho gua phah-siong i a.  
   he HO me beat-hurt him Perf.  
   ‘He was beaten and hurt by me.’

c. I *ho gua ka i phah-siong a.  
   he HO me KA him beat-hurt Perf.  
   ‘He was beaten and hurt by me.’

(57) a. Gua phah-siong e e hit-e lang tng -khi a.  
   I beat-hurt Rel. that-CL person turn-away Perf.  
   ‘That person whom I beat such that he was hurt went back.’

b. *Gua phah-siong i e hit-e lang tng -khi a.  
   I beat-hurt him Rel. that-CL person turn-away Perf.  
   ‘That person whom I beat such that he was hurt went back.’

c. Gu *ka i phah-siong e hit-e lang tng -khi a.  
   I KA him beat-hurt Rel. that-CL person turn-away Perf.  
   ‘That person whom I beat such that he was hurt went back.’

Under our analysis in this paper, the resumptive pronoun in the above examples is just a special case of the *ka-NP which can be independently licensed by *ka and serves as an independent argument of *ka. That is, *ka may itself take an argument. What seems to be a resumptive pronoun in the above examples is nothing but an argument introduced by *ka. In this sense, our analysis helps to maintain the gap analysis in Cheng’s et. al (1996) NOP movement approach when dealing with Taiwanese *ho-constructions.
In sum, in this section we propose that the structure of the Taiwanese *ka*-construction is more articulate than that of the Mandarin *ba*-construction in that the former involves a “double” VP-shell structure while the latter involves “single” VP-shell. Moreover, the *ka*-NP is base-generated in the upper VP-shell and it is licensed by *ka* instead of the main predicate in the lower NP-shell. The main predicate then can be of bare-verb form since it is not responsible for the referentiality of the *ka*-NP situated far above. Next, we adopt the semantic mapping approach (Križka 1989, 1992, Dowty 1991, Filip 2001, Liu 1997) in accounting for the referentiality of the *ka-/ba*-NP. Assuming the more articulate structure, i.e., the “double” VP-shell, it is clear that the *ka*-NP is not regulated by the main predicate. Instead, it is licensed by *ka* in the upper VP-shell. Meanwhile, since *ka* is always in its bare form, the *ka*-NP then can be naturally nonreferential/nonspecific (adopting the semantic mapping analysis. Finally, because *ka*-NP is an independent argument of *ka* and is base-generated in the upper VP-shell, it is quite natural that it does not have to be “reconstructed” back to any other position. That is, the *ka*-NP does not always have the non-*ka*-counterpart.

7. Concluding remarks

This paper is composed of three parts. The first part deals with the polysemy of *ka*. We dispense with the traditional view that *ka* may serve as four different thematic markers. Instead, we suggest the NOP analysis developed in Chomsky (1981), Cheng et al. (1996), and Huang (1999) together with Li’s (2001) and Lin’s (2001) light verb approach should be adopted to account for *ka*’s various thematic marking potential. An articulate structure of “double” VP-shell is proposed accordingly. The second part mentions *ka*’s conjunction heritage from a historical perspective. This part further confirms our idea that the *ka*-NP is an independent argument of *ka* and it is base-generated at where it is on the surface structure. The facts that *ka* is derived from a conjunction and a complementation module is adopted within the *ka*-construction suggest that *ka*’s derivation be roughly in accordance with Mei’s (2003) observation that there has been a grammatical change in the history of Chinese that brought the phrase structure of Chinese from dominantly coordinating to dominantly subordinating in a broad sense. The third part deals with three differences between Mandarin *ba* and Taiwanese *ka*. The structure we proposed in the previous sections successfully accounts for those differences, i.e., the bare-verb taking potential, the non-*ba*-counterpart, and the referentiality of *ka*/ba*-NP. We conclude that the differences are attributed to the proposed structural differences that Taiwanese *ka*-construction enjoys a more articulate phrase structure than the Mandarin *ba*-construction.

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constructions in Taiwanese. Ms.


Contact Information:

Snail mail: Graduate Institute of Linguistics, National Tsing Hua University 101, Sec. 2, Guang-fu Rd., Hsinchu 300 TAIWAN

Email: d918702@OZ.nthu.edu.tw