BEI AND THE PASSIVE IN CANTONESE

by

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Abstract

This paper studies the nature of the BEI-construction in Cantonese, with Mandarin as the standard language of comparison. Although the BEI-construction has been much studied in Mandarin, the same in not true for Cantonese.

Although this construction has traditionally been termed a "passive", I will show that it can have a different range of semantic interpretations in Cantonese. I argue that BEI is not confined to passive, but is used under certain circumstances to form a causative construction as well. The differences in behaviour between passive-BEI and causative-BEI can be seen in tests with anaphoric binding. I conclude that while the passive structure is mono-clausal, the causative structure must be bi-clausal.

The Cantonese BEI-constructions have an obligatory agent-phrase which cannot be dropped. This differs from Mandarin and the challenge is to find an account for this phenomenon, especially if we are to claim that this construction is a passive. The optionality of the agent phrase is characteristic of passives and yet Cantonese deviates from this norm. I argue that passive in Cantonese is a syntactic process and predict that only transitive verbs may participate in this construction. I utilize the universal v-VP structure on transitive verbs, proposed by Chomsky (1995), to guarantee that the external theta role must be retained.

I also examine the much debated status of BEI which is used in the BEI-construction. Although this construction can be used to derive both a passives and a causatives, it does not necessarily mean that two separate BEIs must be posited. I conclude that BEI can be treated as a category-neutral element which can interact in both causative and passive structures. To support this proposal I appeal to the functional versus lexical distinction of categories and projections.

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Chapter 1: Introduction

In the linguistic world many studies have been conducted on the Chinese languages. Surprisingly, for the last twenty years very few of these studies have looked at the Cantonese dialect in particular, but instead focused on Mandarin. Although the Chinese dialects share a uniform writing system, the grammars of the individual dialects are not the same. Though most of the grammatical relations that hold of Mandarin also hold of Cantonese, there are still quite a few syntactic differences between these two non-mutually intelligible dialects. The goal of this paper is to analyze one such aspect: the passive construction in Cantonese.

1.1 Preliminary Look at the BEI-Construction

It is generally assumed, from studies conducted in Mandarin, that the passive is signaled by the presence of the word BEI. In both Mandarin and Cantonese, this item carries the approximate meaning translated by the preposition "by" when followed by an agent NP. The identity of BEI itself remains unclear. This item 'BEI' used in Mandarin to signal the passive also translates as BEI in Cantonese as well, with the exception of a difference in tone. Most of the Mandarin BEI-constructions have exact equivalents in Cantonese, except that the words are pronounced differently. One must keep in mind that although the sentences are still written the same way in the orthography for both dialects, the pronunciations of individual words are different. Example (1) illustrates some BEI-constructions in the two dialects. These sentences all carry a passive interpretation.

(1)[1]:   (N.B. Mandarin and Cantonese BEI have different tones.)

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[1] Abbreviations used in this paper

ADJ = adjectival marker	ADV = adverbial marker	PL = plural
CL = noun classifier	LP = linking particle	PRT = sentence particle
NEG = negation marker	PFV = perfective aspect	V-PRT = verbal particle

Mandarin[2]		Cantonese
a) Wong pian le Lee		c) a Wong gwai jo a Lee
Wong cheat PFV *Lee*	**Active**	CL *Wong cheat* PFV CL *Lee*
'Wong cheated Lee.'		'Wong cheated Lee.'
b) Lee bei Wong pian le		d) a Lee bei a Wong gwai jo
Lee BEI Wong cheat PFV	**Passive**	CL *Lee BEI* CL *Wong cheat* PFV
'Lee was cheated by Wong.'		'Lee was cheated by Wong.'

The Mandarin passive sentence, signaled by the presence of BEI, can also appear without an Agent NP following BEI. That is, the subject (external theta role) of the active transitive verb can be omitted, as in (2a). However, the same sentence in Cantonese (2b), with omission of the Agent phrase, is ungrammatical.

(2)   Mandarin   Cantonese

a) Lee bei pian le		b) * a Lee bei gwai jo
Lee BEI cheat PFV		CL *Lee BEI cheat* PFV
'Lee was cheated.'		'Lee was cheated.'

The ungrammaticality of (2b) leads one to ask why and how the BEI-construction in Cantonese is different from the one in Mandarin, and whether it is the same construction at all. One might easily dismiss this behavior of BEI in Cantonese as a dialectal difference, but how can one explain the obligatoriness of the agent phrase if the BEI in (2b) is the same as the BEI in (2a) and the sentence is a passive? Previous analyses of the BEI-construction (Chu 1973, Cheng 1988, LaPolla 1988, Y.H.Li 1990, E.W.Li 1994, etc.) have all based their studies on the Mandarin BEI-construction which allows omission of the Agent NP. These analyses are not adequate to analyze BEI in Cantonese because the Agent NP cannot be omitted. The rest of this paper is dedicated to probing into the structure of the BEI-construction and also into the status of BEI itself. I will address the following questions:

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[2] The orthography I have used for the Mandarin and Cantonese examples in this paper are not standard pin-yin conventions. They are broad transcriptions only.

1) Is the BEI-construction a passive? Can it be something else?
2) Is the Cantonese BEI-construction the same as the Mandarin BEI-construction
3) If the answer to (2) is 'no', then in what ways are they different?
4) What is the nature and status of BEI in Cantonese?

1.2 Theoretical Assumptions

My analysis will mostly be presented within the framework of Government and Binding,
initiated by Noam Chomsky (1981, 1982, 1986).   However, I will also include some
discussion from the more recent Minimalist framework developed by Chomsky (1993, 1995).
To address the controversial debate regarding word order in the Chinese languages I will be
adopting Kayne's (1994) proposal of a Linear Correspondance Axiom which forces a fixed
word order for all languages.

Government and Binding is a version of generative syntax which places much emphasis
on the explanation of abstract universal principles of grammar rather than the development of
language-particular rules. The main levels of representation for this model of grammar are
depicted in Diagram 1:

Diagram 1:   D-structure
                                     |
                                S-structure
                                  ⁀
              Phonetic Form (PF)   Logical Form (LF)
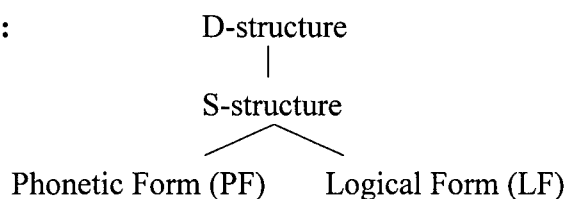
A general movement rule called Move α, relates the D-structure (underlying structure) level
of representation to the S-structure level (surface structure). PF and LF act as the interface
between acoustic/articulatory features and semantic features, respectively, to the formal
grammar.

To constrain the application of Move α GB-Theory contains several semi-autonomous
modules: X-bar Theory, Theta Theory, Bounding Theory, Government Theory, Case Theory,

Binding Theory and Control Theory. The reader is referred to Chomsky (1981, 1986) or

Aoun (1985) for a more comprehensive discussion of the above.

The Minimalist Program (Chomsky 1995) is Chomsky's latest development towards a

universal theory of grammar. It essentially involves the same basic notions as Government

and Binding but approaches the formal grammar in a different way. Diagram 2 depicts the

main stages of a derivation within the Minimalist framework:

Diagram 2:   Numeration

$$\Sigma \ \ (\text{Spell-Out})$$

A-P interface   C-I interface
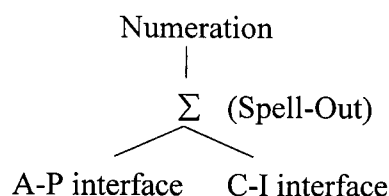
A main component of Minimalism is the *generative procedure*. It consists of a single lexicon

and a computational system, C_{HL}. An array of lexical choices called the *numeration* is

mapped by C_{HL} to a pair (π, λ) which contain the features of lexical items. π is the PF

representation which is interpreted at the A-P (articulatory-perceptual) interface; λ is the LF

representation interpreted at the C-I (conceptual-intentional) interface; elements interpreted

at one interface cannot be interpreted at the other. At some stage Σ of the derivation, C_{HL}

will split the derivation (Spell-Out) into two parts, forming π and λ, to be interpreted within

their respective components. The mapping and structure building processes are mediated by

a complex set of operations called *Select, Merge, Move* and *Erase/Delete*. There is also an

intricate *Checking Theory* which can apply to the derivation in both the covert and the overt

syntax. The reader is referred to Chomsky (1995) for a more thorough discussion of the

applications of the *generative procedure* in the Minimalist Program.

1.3 Some Notes Regarding Chinese: Mandarin versus Cantonese

This next section will set out some preliminaries about the Chinese language relevant to the ensuing discussion I will address my assumptions regarding word order, the different particles used in Mandarin and Cantonese, and also some facts relating to the binding of anaphors.

1.3.1 Chinese Word Order

The issue of Chinese word order has been a widely debated topic for many years. Huang (1982) presents detailed arguments that Mandarin Chinese is essentially head initial, with the exception of noun phrases which are head final. To circumvent the controversial debate of head-final versus head-initial I will be adopting Kayne (1993) who proposes a Linear Correspondence Axiom (LCA) which imposes a strict linear order for terminal elements via asymmetric c-command. Chomsky (1995) comments that "order reflects structural hierarchy universally by means of the LCA...any category that cannot be totally ordered by LCA is barred. From Kayne's specific formulation, it follows that there is a universal specifier-head-complement (SVO) order and that specifiers are in fact adjuncts." (Chomsky, 1995:335). Kayne's specifications appear compatible with what we observe as the surface order of Mandarin and Cantonese sentences. The canonical order of elements in Mandarin and Cantonese is Subject-Verb-Object, although other orders are possible. Since word order is not the main topic of this paper I now depart from this problem and will be assuming a strict specifier-head-complement structure from this point forward.

(3)　　　　　Mandarin　　　　　　　　　　　　Cantonese
　　　　S　　　V　　　O　　　　　　　　　　S　　　V　　　O
　　a) wo huwei- tswo nei jien shi　　　b)　ngoh wuh- joe go geen si
　　　　I will - do that CL thing　　　　　*I will - do that CL thing*
　　　'I will / am going to do that thing.'　　　'I will / am going to do that thing.'

1.3.2 Chinese Particles

Chinese is not a morphologically rich language. Most of the morphology is conveyed either by word order alone or by an elaborate selection of particles. For example, the Cantonese pronoun *keuih* (Mandarin *ta*) can be used for both masculine and feminine subjects or objects. Therefore, it can mean "he" (3rd person masculine, singular, nominative case), "she" (3rd person feminine singular, nominative case), "him" (3rd person masculine, singular, accusative case) or "her" (3rd person feminine singular, accusative case). Similarly, *ngoh* (Mandarin *wo*) can stand for either "I" (1st person singular, nominative case) or "me" (1st person singular, accusative case). Word order and position in relation to the verb reveal whether these pronouns stand for subject or object because they have no overt case marking.

(4)　　　Mandarin　　　　　　　　　　　　Cantonese

　　a) wo ai ta　　　　　　　　　　　　**b)** ngoh ngoi keuih[3]
　　　　I love 3p　　　　　　　　　　　　*I love* 3p
　　　　'I love him/her'　　　　　　　　　　'I love him/her.'

　　c) ta ai wo　　　　　　　　　　　　**d)** keuih ngoi ngoh
　　　　3p *love me*　　　　　　　　　　　　3p *love me*
　　　　'He/she loves me.'　　　　　　　　　'He/she loves me.'

In this section I will discuss some of the main particles that are of interest to the ensuing discussion. I have assembled all nominal prefixes (such as *a* to be discussed below), verbal and aspect particles, question particles and sentence particles together under the one general title of 'Particles'. The fine distinctions among them have no noticeable influence on the

current topic. In particular I will be discussing the perfective aspect particle (PFV), the linking particle (LP), the noun classifier particle (CL), and the utterance particle (PRT). The Cantonese particles are not easily translatable into English and they also differ from Mandarin as well. Matthews and Yip (1994) comments that:

> Cantonese is especially rich in particles, having some thirty basic forms compared to seven in Mandarin...The particles do not correspond straightforwardly to those in Mandarin, although their functions are broadly similar. Moreover, combinations of two or more particles occur readily in Cantonese, whereas in Mandarin only *le* combines with other particles...In casual conversation, many sentences seem incomplete without one or more final particles; in broadcasting, by contrast, they are reduced to a minimum, whether to save time or to preserve a higher degree of formality.
> ...Given that it is difficult or impossible to define the function of particles without reference to the speech context, it is arguable more accurate to treat them as associated with individual utterances rather than sentences. Moreover, particles may be used with phrases and fragments which do not form complete sentences.
>
> Matthews & Yip (1994: 338-339)

The first two particles, the perfective aspect and the linking particle, are quite straightforwardly translatable from one dialect to the other. Their corresponding forms are exemplified in (5) below. I have given the most widely used form for each particle. Others may be used for the same purpose but the difference will not impact the discussion regarding the passive construction.

(5)   Mandarin   Cantonese
Perfective Aspect   **-le**   *Perfective Aspect*   **-jo**
a) ta   lai - le   **b)** keuih lai - jo
    3p *come*-PFV   3p *come* -PFV
    'He came.'   'He came.'

Linking Particle   **de**   *Linking Particle*   **ge**
c) sihuan wo de ren   **d)** tsounyi ngoh ge   yun
    like me LP *people*   *like   me* LP *people*
    'The people who like me.'   'The people who like me.'

---

³ For ease of exposition I will only use "he" or "him" for glosses involving the 3rd person pronoun, although as noted above the feminine form is the same.

The *perfective aspect* is attached to a verb to convey a completed action. It is often accompanied by a time adverbial, such as *kumyak* 'yesterday', to restrict the time of the event, as Chinese verbs carry no Tense marking. I will return to a discussion of the time adverbials in Section 6.1. The perfective aspect is often used in BEI-constructions, but several other aspect markers, such as the progressive *gun*, is also possible.

The *linking particle* acts as a relativizer linking two NPs together, much in the same fashion as *that* in English.

The latter two particles, noun classifier and sentence particle occur in Cantonese but not in Mandarin. Since both of these particles are used in Cantonese casual speech it is not surprising that they do not show up in Mandarin, where the spoken speech is often the same as the written speech. In conversational Cantonese, the noun prefix *a-* (which I have included as part of the class of Noun Classifiers) appears before proper names and kinship terms to denote familiarity. In Mandarin examples, such as (1) from above, the reader should note that this particle is not present:

(1)   <u>Mandarin</u>   <u>Cantonese</u>

    a) __ Wong pian le __ Lee   c)   <u>a</u> Wong gwai jo <u>a</u> Lee
       Wong cheat PFV   *Lee*   **Active**   <u>CL</u> *Wong cheat* PFV <u>CL</u> *Lee*
      'Wong cheated Lee.'   'Wong cheated Lee.'

Cantonese also has a much wider range of utterance particles, which occur at the end of a sentence or utterance, than Mandarin. They are best conveyed in English by changes in intonation. There is usually no correspondant for these particles in Mandarin except perhaps for *ba*, which is used informally to accompany an invitation or a polite request; *a* to accompany questions; and *de* in exclamations.

(6)   <u>Mandarin</u>   <u>Cantonese</u>

    a) chiŋ tswo ba!   **b)** tsiŋ tso la!
       please sit PRT   *please sit* PRT
       'Please sit down!'   'Please sit down!'

    c) ni bo - shufu   a?   **d)** neih mh - suufok   ah?
       you not comfortable PRT   *you not comfortable* PRT
       'Are you ill?'   'Are you ill?'

    e) hou de!   **f)** ho ge!
       good PRT   *good* PRT
       'Great / sure!'   'Great / sure!'

    g) ni tswotien chu nali ___?   **h)** nieh kumyak heui bin <u>jek</u>?
       you yesterday go where ___   *you yesterday go where* PRT
       'Where did you go yesterday anyways?' 'Where did you go yesterday anyways?'

Notice that the particle in the Cantonese example (6h) has no correspondant in Mandarin.

However, the particle *a* can be inserted at the end of (6g) and combined with raising

intonation to form a question.

1.3.3 Anaphor Binding: Long-distance versus Local

I will be assuming the standard Binding Theory from the Government and Binding

framework.

> **Binding Theory**
> **(A)** An anaphor is A-bound in its governing category.
> **(B)** A pronoun is A-free in its governing category.
> **(C)** An R-expression is A-free.
>
> PRO is ungoverned
>
>   Chomsky (1981: 188, 191)

(5) (i)   α is X-bound by β if and only if α and β are coindexed, β c-commands α, and β
          is in an X-position.
   (ii) α is X-free if and only if it is not X-bound

…(5) define "bound" and "free" with "X" replaced by "A" or "Ā".

                                          Chomsky (1981:185)

Governing category is defined as:

> β is a *governing category* for α if and only if β is the minimal category containing

α, a governor of α, and a SUBJECT accessible to α.

...the subject of an infinitive, an NP or a small clause...is a SUBJECT.

Chomsky (1981: 209-211)

In addition to these principles, binding also requires that the antecedent c-command the pronoun or anaphor.

Generalized C-command
α c-commands β iff α does not dominate β and every γ that dominates α dominates β

Chomsky (1986:8)

Pronouns in both Mandarin and Cantonese are subject to Principle B.

(7)   <u>Mandarin</u>   <u>Cantonese</u>
   a)* ta_i sihwan ta_i **b)*** $keuih_i$ tsouŋyi $keuih_i$
    3p like 3p   3p like 3p
    'He_i likes him_i.'   'He_i likes him_i.'

   c) ta_i sihwan ta_j **d)** $keuih_i$ tsouŋyi $keuih_j$
    3p like 3p   3p like 3p
    'He_i likes him_j.'   'He_i likes him_j.'

In the above examples the governing domain is the matrix IP. Both (7a) and (7b) violate Principle B because the pronoun is bound within the governing domain of IP.

The anaphors of the Chinese languages are a bit more intriguing. Mandarin literature states that the self-anaphor *ziji* 'self' can be locally or long-distance bound to a subject. However, the compound reflexive, such as *ta-ziji* 'himself', made up of the pronoun *ta* '3rd person' and the reflexive *ziji* 'self', is locally bound only. The following Mandarin examples are taken from Huang and Tang (1991: 263-282)[4]. They have been re-numbered for ease of exposition. I have placed a ☙⃰ on the left-hand side of some examples because of several inconsistencies to be discussed below.

   I) a) $Zhangsan_i$ renwei [$Lisi_j$ hai-le $ziji_i$]
     b) $Zhangsan_i$ renwei [$Lisi_j$ hai-le $ziji_j$]
      '$Zhangsan_i$ thought that $Lisi_j$ hurt $himself_{i/j}$'

---

[4] Henceforth H&T

II) a) Zhangsan$_i$ renwei [Lisi$_j$ hai-le ta-ziji$_{*i}$]
   b) Zhangsan$_i$ renwei [Lisi$_j$ hai-le ta-ziji$_j$]
      'Zhangsan$_i$ thought that Lisi$_j$ hurt himself$_{*i/j}$'

III) a) Zhangsan$_i$ renwei [wo$_j$ hai-le ziji$_{*i}$]
    b) Zhangsan$_i$ renwei [wo$_j$ hai-le ziji$_j$]
       'Zhangsan$_i$ thought that I$_j$ hurt myself$_{*i/j}$'

IV) a) Ni$_i$ renwei [Zhangsan$_j$ dui ziji$_{*i}$ meiyou xinxin]
    b) Ni$_i$ renwei [Zhangsan$_j$ dui ziji$_j$ meiyou xinxin]
       'You$_i$ think that Zhangsan$_j$ has no confidence in self$_{*i/j}$'

V) a) Wo$_i$ renwei [women$_j$ yinggai dui ziji$_{*i}$ you xinxin]
   b) Wo$_i$ renwei [women$_j$ yinggai dui ziji$_j$ you xinxin]
      'I$_i$ think that we$_j$ should have confidence in self$_{*i/j}$'

VI) a) Women$_i$ renwei [ta$_j$ dui ziji$_{*i}$ meiyou xinxin]
    b) Women$_i$ renwei [ta$_j$ dui ziji$_j$ meiyou xinxin]
       'We$_i$ think that he$_j$ has no confidence in self$_{*i/j}$'

? VII) a) Zhangsan$_i$ shuo wo$_k$ zhidao [Lisi$_j$ chang piping ziji$_{*i}$]
       b) Zhangsan$_i$ shuo wo$_k$ zhidao [Lisi$_j$ change piping ziji$_{*k}$]
       c) Zhangsan$_i$ shuo wo$_k$ zhidao [Lisi$_j$ chang piping ziji$_j$]
          'Zhangsan$_i$ said that I$_k$ knew that Lisi$_j$ always criticized self$_{*i/j/*k}$'

VIII) ♣*a) Zhangsan$_i$ shuo [Wangwu$_k$ zhidao [Lisi$_j$ chang piping ziji$_i$]
      ♣*b) Zhangsan$_i$ shuo [Wangwu$_k$ zhidao [Lisi$_j$ chang piping ziji$_k$]
        c) Zhangsan$_i$ shuo [Wangwu$_k$ zhidao [Lisi$_j$ chang piping ziji$_j$]
           'Zhangsan$_i$ said that Wangwu$_k$ knew that Lisi$_j$ always criticized self$_{i/j/k}$'

IX) a) Zhangsan$_i$ di xin biaoshi [Lisi$_j$ hai-le ziji$_{*i}$]
    b) Zhangsan$_i$ di xin biaoshi [Lisi$_j$ hai-le ziji$_j$]
       'Zhangsan$_i$'s letter indicates that Lisi$_j$ hurt self$_{*i/j}$'

X) a) Zhangsan$_i$ shuo [ruguo Lisi$_j$ chang piping ziji$_i$], ta jiu bu qu.
   b) Zhangsan$_i$ shuo [ruguo Lisi$_j$ chang piping ziji$_j$], ta jiu bu qu.
      'Zhangsan$_i$ said that if Lisi$_j$ criticized himself$_{i/j}$, then he won't go.

Huang & Tang (1991: 263-282)

The above examples demonstrate that the bare reflexive *ziji* can be both long-distance and locally bound to a subject. However, when the reflexive is long-distance bound all potential antecedent NPs must be identical in person (i.e. 1st, 2nd, 3rd) and number features (i.e. singular, plural). The reflexive in (I) can be bound both locally and long-distance because the potential antecedents are both 3rd person singular nouns. However, the compound reflexive shown in (II) is strictly locally bound only. Examples (III) to (VI) and (X) show that long-distance binding is not possible if the available antecedents do not have the same person or

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number features. In the case of (IX) long-distance binding is not possible because the antecedent is a possessor which is part of a larger DP and as such cannot c-command the reflexive.

I verified H&T's findings with native Mandarin speakers and found some interesting results. While the speakers presented no counter-evidence to refute H&T's claims, they did find (VII) and (VIII) rather hard to process because the anaphor is too deeply embedded within the structure. I have place a '?' before (VII) because speakers found that it was hard to understand and commented that no one would actually say such utterances. However, there was a general consensus that the anaphor could be long-distance bound in these cases. However, none of my consultants agreed with H&T's predictions regarding the examples in (VIII), hence the ♦* symbol. According to the speakers, they preferred the anaphor to be locally bound in these cases and the long-distance binding was impossible to get. However, because the speakers did accept long-distance binding of the self-anaphor in the simpler sentences, and also (with difficulty) in (VII), I suspect that they may not be able to get the appropriate readings in (VIII) because the sentences are too complex to process for speakers who are untrained in linguistics. Therefore, the general conclusion is that H&T's claims regarding long-distance binding of the reflexive *ziji* are valid.

A descriptive Cantonese grammar text by Matthews and Yip (1994) affirms that the behavior of the reflexives in Mandarin also translate over into Cantonese. That is, the bare reflexive, translated as *tsigei*, can be both long-distance and locally bound; the compound reflexive, translated as *keuih-tsigei*, is locally bound, However, all the judgment from native speakers that I consulted are contrary to this literature in regards to

the bare reflexive. The following examples are translations of the sentences taken from

H&T. I have also included the ☜※ symbol beside any examples where speakers'

judgments are contrary to Matthews and Yip.

i) ☜※a) John$_i$ yingwei [Paul$_j$ hoy-jo tsigei$_i$]
   b) John$_i$ yingwei [Paul$_j$ hoy-jo tsigei$_j$]
   'John$_i$ thought that Paul$_j$ hurt himself$_{i/j}$'

ii) a) John$_i$ yingwei [Paul$_j$ hoy-jo keuih-tsigei$_{*i}$]
   b) John$_i$ yingwei [Paul$_j$ hoy-jo keuih-tsigei$_j$]
   'John$_i$ thought that Paul$_j$ hurt himself$_{*i/j}$'

iii) a) John$_i$ yingwei [ngoh$_j$ hoy-jo tsigei$_{*i}$]
   b) John$_i$ yingwei [ngoh$_j$ hoy-jo tsigei$_j$]
   'John$_i$ thought that I$_j$ hurt myself$_{*i/j}$'

iv) a) Neih$_i$ yingwei [John$_j$ duey tsigei$_{*i}$ mouh xeuŋsum]
   b) Neih$_i$ yingwei [John$_j$ duey zigei$_j$ mouh xeuŋsum]
   'You$_i$ think that John$_j$ has no confidence in self$_{*i/j}$'

v) a) Ngoh$_i$ yingwei [ngohdeih$_j$ yinggoy duey tsigei$_{*i}$ youh xeuŋsum]
   b) Ngoh$_i$ yingwei [ngohdeih$_j$ dui tsigei$_j$ youh xeuŋsum]
   'I$_i$ think that we$_j$ should have confidence in self$_{*i/j}$'

vi) a) Ngohdeih$_i$ yingwei [keuih$_j$ duey tsigei$_{*i}$ mouh xeuŋsum]
   b) Ngohdeih$_i$ renwei [keuih$_j$ dui tsigei$_j$ meiyou xeuŋsum]
   'We$_i$ think that he$_j$ has no confidence in self$_{*i/j}$'

vii) a) John$_i$ wa ngoh$_k$ zhidoe [Paul$_j$ siŋyuk peiping tsigei$_{*i}$]
   b) John$_i$ wa ngoh$_k$ zhidoe [Paul$_j$ siŋyuk peiping tsigei$_{*k}$]
   c) John$_i$ wa ngoh$_k$ zhidoe [Paul$_j$ siŋyuk peiping tsigei$_j$]
   'John$_i$ said that I$_k$ knew that Paul$_j$ always criticized self$_{*i/j/*k}$'

viii) ☜※ a) John$_i$ wa Max$_k$ zhidoe [Paul$_j$ siŋyuk peiping tsigei$_i$]
   ☜※ b) John$_i$ wa Max$_k$ zhidoe [Paul$_j$ siŋyuk peiping tsigei$_k$]
   c) John$_i$ wa Max$_k$ zhidoe [Paul$_j$ siŋyuk peiping tsigei$_j$]
   'John$_i$ said that Max$_k$ knew that Paul$_j$ always criticized self$_{i/j/k}$'

ix) a) John$_i$ ge xeuŋ byeiusi [Paul$_j$ hoy-jo tsigei$_{*i}$]
   b) John$_i$ ge xeuŋ byeiusi [Paul$_j$ hoy-jo tsigei$_j$]
   'John$_i$'s letter indicates that Paul$_j$ hurt self$_{*i/j}$'

x) ☜※a) John$_i$ wa [yueguo Paul$_j$ siŋyuk pieping tsigei$_i$], keuih jow mh-heuy.
   b) John$_i$ wa [yueguo Paul$_j$ siŋyuk pieping tsigei$_j$], keuih jow mh-heuy.
   'John$_i$ said that if Paul$_j$ criticized himself$_{i/j}$, then he won't go.

The above examples show a consistent pattern. Speakers find the long-distance binding of the bare reflexive completely unacceptable (hence ✦*), contrary to what M&Y notes. M&Y claim that (i b), where the reflexive is long-distance bound, should be possible. However, this is not verified by speaker's judgments. While we can use the same argument that the potential antecedents in some of the examples do not match in person and number, this still will not explain the ungrammaticality of (i a), (viii a, b) and (x a). The speakers also disagreed with the following Cantonese example taken from Matthews and Yip (1994:84):

> A - Mah$_i$ wah Mihng-jai mh sik jiugu jihgei$_i$
> CL *grandma say Ming-boy not know take-care self*
> 'Grandma says Ming doesn't know how to take care of her.'
>
> <div align="right">Matthews & Yip (1994: 84)</div>

According the judgments I received, the reflexive cannot be long-distance bound with *A-Mah*; *Mihng-jai* is the only available antecedent[5]. Therefore, the reflexive is bound locally. I did not encounter any processing problems with the Cantonese examples as I had with the Mandarin examples.

Reflexives which act as possessors in DPs must also be locally bound:

xi) a) John$_i$ yingwei [Paul$_j$ hoy-jo tsigei$_{*i}$ go tsey]
b) John$_i$ yingwei [Paul$_j$ hoy -jo tsigei$_j$ go tsey]
  John think Paul hurt-PRT *self* CL *son*
'John$_i$ thought that Paul$_j$ hurt self$_{*i/j}$'s son.'

xii) a) John$_i$ wa Max$_k$ zhidoe [Paul$_j$ siŋyuk peiping tsigei$_{*i}$ go tsey]
b) John$_i$ wa Max$_k$ zhidoe [Paul$_j$ siŋyuk peiping tsigei$_{*k}$ go tsey]
c) John$_i$ wa Max$_k$ zhidoe [Paul$_j$ siŋyuk peiping tsigei$_j$ go tsey]
  John say Max know Paul always critisize self CL *son*
'John$_i$ said that Max$_k$ knew that Paul$_j$ always criticized self$_{*i/j/*k}$'s son.'

---

[5] However, it was pointed out to me by a consultant that when such a sentence is read out in a formal context, or in narratives, the long-distance binding with *A-Mah* is possible. This possibility may be attributed to the similarity of Mandarin speech with written texts. However, only local binding is possible in colloquial Cantonese speech.

xiii) a) John$_i$ wa [yueguo Paul$_j$ siŋyuk pieping tsigei$_{*i}$ go tsey], keuih jow mh-heuy.
  b) John$_i$ wa [yueguo Paul$_j$ siŋyuk pieping tsigei$_j$ go tsey], keuih jow mh-heuy.
    John say if   Paul always critisize self CL son   3p then not go
    'John$_i$ said that if Paul$_j$ criticized self$_{*i/j}$'s son, then he won't go.

The anaphor binding facts of Mandarin and Cantonese are summarized below:

  (i) The bare reflexive in Mandarin, *ziji*, can be local or long-distance bound
       as long as the potential antecedents agree in person and number.
  (ii) The compound reflexive in Mandarin, *ta-ziji*, is locally bound only.
  (iii) The bare reflexive in Cantonese, *tsigei*, is locally bound only.
  (iv) The compound reflexive in Cantonese, *keuih-tsigei*, is locally bound only.

In a later section I intend to use the local nature of the bare reflexive in Cantonese in several tests for binding in different structures. These tests will demonstrate that the BEI-passive construction in Cantonese must be in a mono-clausal structure, consisting of one binding domain.

The previous section was meant to point out some differences in the translations between Mandarin and Cantonese, since Mandarin will be the standard language of comparison in this thesis.

1.4 An Outline of the Thesis

This thesis will study the nature of the BEI-construction in Cantonese and make comparisons with the same construction in Mandarin. I will show that under different sets of conditions, this construction can derive (i) utterances with a passive interpretation; and (ii) utterances with a causative interpretation as well. This behavior is surprising in that on the one hand, passives are known to suppress a theta role, while on the other hand, causatives are known to introduce an extra theta role into the structure. The BEI-construction in Mandarin does not exhibit the ability to render these dual interpretations. I argue that although two different interpretations are possible, there is no need to postulate the existence of two

different BEIs in Cantonese. I maintain that the BEIs in both structures are the same element. The passive and causative structures are generated by a Functional projection containing a null Functional head, and a Lexical projection containing a null Lexical head, respectively. I will also discuss an equivalent alternative strategy whereby BEI itself assumes both tasks because of its specialized feature matrix. I argue that the categorial status of BEI in previous analyses have always been indeterminate because it carries a unique combination of categorial features. Using the binding facts above, I will show that the BEI-passive construction is necessarily mono-clausal while the BEI-causative construction is bi-clausal. This prediction is consistent with my argument that passive is generated by a Functional projection and causative is generated by a Lexical projection. Following Grimshaw (1990), a functional projection above a lexical projection (in this case VP) are extended projections of the lexical head and do not induce another independent domain of their own. On the other hand then, the formation of a new lexical projection can serve to mark the beginning of a new clause.[6]

The progression of the thesis is organized as follows. In Chapter 2 I will do a comparison of the BEI-construction in Mandarin and Cantonese and comment on the apparent obligatory nature of the Agent phrase.

Chapter 3 examines the different types of passives available in Cantonese, with a special focus on what is termed the "Indirect Passive". The different semantic interpretations available with this type of passive launches us into the discussion of whether the Cantonese BEI-construction would be better analyzed as involving a causative structure instead.

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[6] I am grateful to Michael Rochemont for pointing this out to me.

Chapter 4 investigates the nature of the item BEI. I use tests adapted from A.Y.H. Li (1990) to test whether BEI can be classified as a preposition or a verb. This section also explores the properties of the Cantonese passive and causative interpretations that can be rendered by a BEI-construction.

Chapter 5 examines two previous analyses of the BEI-construction in Mandarin. I argue that these analyses cannot be adopted into Cantonese because they will not adequately handle the pattern of data associated with the BEI-construction in Cantonese.

In Chapter 6 I will establish the syntactic structure of the BEI-construction. I will review A.Li (1990)'s discussion of the placement of time adverbials, instrumentals and patients to determine the location of BEI within a tree structure. I will consider several different possible structures for BEI but will eventually argue that the Functional versus Lexical difference is the best solution. The consequences of such a proposal will also be reviewed.

In Chapter 6 I will apply the analysis of the Cantonese BEI-construction to Mandarin and comment on any differences.

The final chapter will summarize the points made in this paper.

Chapter 2: The BEI-construction in Mandarin and Cantonese

As previously mentioned, the BEI-construction in Mandarin has been accepted by many as the passive construction (Chu 1973, Xiaobo 1991, Po-Ching & Rimmington 1997, etc.) The BEI-construction is essentially a sentence that contains the particle BEI followed by an optional NP. The basic form of this 'passive' construction is [Object + BEI + Subject + verb]. The NP in initial position corresponds to the underlying object of an active sentence, and usually bears the thematic role of Patient. The NP following BEI corresponds to the

subject of an active sentence, and bears the thematic role of Agent of the verb. BEI in these

passive sentence is often translated as "by" in English.

M[7] **(8)** a) Lisi pian - le   Zhang   *Active*
            Lisi cheat-PFV *Zhang*
            'Lisi cheated Zhang.'

         b) Zhang BEI Lisi pian-le   *Passive*
            Zhang BEI *Lisi cheat*-PFV
            'Zhang was cheated by Lisi.'

Although there are Mandarin sentences lacking BEI which are best translated into

English using the passive construction, they do not carry the same semantic flavour or

characteristics as BEI-passive constructions. While BEI-constructions can be dynamic

passives, these BEI-less constructions only carry the meaning of statives. Verbs which

participate in the BEI-construction usually cannot be used in these statives. The only

exception I know of, and which has been noted in by Chu (1973:445) is the verb *chi* 'eat'

(Cantonese *sik*). An additional constraint is that BEI-passives are normally associated with

an adversative reading, while there is no such requirement on the statives.

M (9) a) pingguo bei chi   -le
             apple   BEI *eat* PFV
             'The apple was eaten.' (by someone)

         b) pingguo chi -le
             apple eat PFV
             'The apple was eaten.' (describing the state of the apple)

         c) * shu   bei chuban -le
             book BEI *publish* PFV
             'The book was published.' (by someone)

         d) shu   chuban -le
             book publish PFV
             'The book was published.' (describing the state of the book)

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[7] I will be adopting the convention of listing **M** for Mandarin examples, **C** for Cantonese examples and **E** for English examples from this point forward.

(9a) would be used in a situation where someone was adversely affected because the apple had been eaten. It is unnatural to use (9b) in the same situation because it only describes the physical state of the apple, and not the effect of its having been consumed. Also, notice that a verb such as *chuban* 'publish' cannot be used in a BEI-construction. Without digressing into an elaborate discussion about BEI-less passives I will be assuming that this class of statives are different from the BEI-constructions. For the rest of the paper, I will only concentrate on those passives which involve the morpheme BEI. The reader is referred to Cheng (1986) for further discussion of these BEI-less constructions.

In Mandarin, the agent NP can sometimes be left out. Because the NP, if present, must immediately follow BEI, previous analyses have suggested that BEI serves to introduce the agent. (Peyraube 1989; Li 1994; Matthews & Yip 1994, among others) Example (10) below illustrates that nothing can intervene between BEI and the overt agent NP. The time adverbial *zuotian* 'yesterday' can be inserted before the BEI-phrase (10a, c) or after the BEI-phrase (10d) as long as it does not intervene between BEI and the NP following it (10b). If there is no overt agent NP, some speakers find it acceptable to have the time adverbial immediately after BEI[8] (10e).

M (10) a) zuotian Lisi BEI Zhang sha si - le
        yesterday Lisi BEI *Zhang kill die*-PFV
        'Yesterday, Lisi was killed by Zhang.'

      b)* Lisi BEI zuotian Zhang sha si - le
        Lisi BEI *yesterday Zhang kill die*-PFV
                    c.f.
      c) Lisi   zuotian BEI Zhang sha si - le
        Lisi yesterday BEI *Zhang kill die*-PFV

      d) Lisi BEI Zhang zuotian sha si - le
        Lisi BEI *Zhang yesterday kill die*-PFV

---

[8] A. Li (1990) supports this view.

e) ? Lisi BEI zuotian sha si - le
     Lisi BEI yesterday kill die-PFV

Cantonese also has a corresponding passive[9] construction which is signaled by the presence

of the same character, BEI. Although little work has been done on the BEI-construction in

Cantonese, it is generally assumed that it behaves much like its Mandarin counterpart. Thus,

if we translate Example 10 into Cantonese we would expect to get the same results in

grammaticality.

C (11) a) kumyak Leisa BEI a Tseuŋ sak sei - jo
       yesterday Leisa BEI CL Tseuŋ kill die - PFV
       'Yesterday, Leisa was killed by Tseuŋ.'

    b)* Leisa BEI kumyak a Tseuŋ sak sei - jo
       Leisa BEI yesterday CL Tseuŋ kill die - PFV
         c.f.
    c) Leisa kumyak BEI a Tseuŋ sak sei - jo
       Leisa yesterday BEI CL Tseuŋ kill die - PFV

    d) Leisa BEI a Tseuŋ kumyak sak sei - jo
       Leisa BEI CL Tseuŋ yesterday kill die-PFV

    e)* Leisa BEI kumyak sak sei - jo
       Leisa BEI yesterday kill die - PFV

As expected, (11b) in Cantonese, like it's correspondant (10b) in Mandarin, is

ungrammatical. However, notice that unlike Mandarin (10e), (11e) is completely

unacceptable in Cantonese. The ungrammaticality is not simply due to the intervention of the

time adverbial between BEI and the verb, but to a more general constraint. Compare (12) and

(13) below:

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[9] I use 'passive' to refer to sentences where surface subject is construed as the underlying object of the verb and
is being affected in some way by the verb i.e. has the role of patient

(12) Mandarin

a) jincha da   shang - le   tufei
   police hit injured-PFV *thief*   **Active**
   'The police injured the thief'

b) tufei bei jincha da shang-le   **Passive**
   thief BEI *police hit injured*-PFV   **(overt Agent)**
   'The thief was injured by the police.'

c) tufei bei da shang - le   **Passive**
   thief BEI *hit injured*- PFV   **(no overt Agent)**
   'The thief was injured.'

(13) Cantonese

a) ginchak da sheung - jo go chak
   police hit injured -PFV   CL *thief*
   'The police injured the thief.'

b) go chak bei ginchak da sheung - jo
   CL *thief* BEI *police hit injured*-PFV
   'The thief was injured by the police.'

c) * go chak bei   da sheung - jo
   CL *thief* BEI *hit injured* - PFV
   'The thief was injured.'

As previously noted, the agent NP after BEI can be omitted in Mandarin. However, the same does not apply in Cantonese. (13c) shows that omission of the agent NP will render the sentence ungrammatical. The same explanation is offered for (10e) above.

However, consider the following sentences:

Mandarin

(14) a) tufei bei da shang - le   **Passive**
       thief BEI *hit injured*- PFV   **(no overt Agent)**
       'The thief was injured.'

Cantonese

b) * go chak **bei**   da sheung - jo
   CL *thief* BEI *hit injure* - PFV
   'The thief was injured.'

c)   go chak **beih** da sheung -jo
   CL *thief* BEIH *hit injure* -PFV
   'The thief was injured.'

Example (14) above shows that there is a different phonological form of BEI in Cantonese which does not seem to obligatorily require an agent phrase. This BEI is written as *beih* (BEI with a low-level tone). (14c) shows that his special form of BEI must be used if the agent NP is omitted, else the sentence would be ungrammatical (14b). This form of BEI is reserved for formal speech only, such as literary contexts and news reports. In casual, everyday speech only *bei* is used, followed by the agent NP[10].

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[10] In this section I will not discuss cases such as (14a) or (14c) at great length because they conform to the generalization offered by Keenan in regards to passives and omission of the agent phrase. I will return to a fuller discussion of these agentless forms at a later time.

C (15) a) howtseuŋ　　beih　pai heui toywan　　　　　　　　*formal speech*
　　　　school-principal BEIH *send　to　Taiwan*
　　　　'The principal was being sent to Taiwan.'
b) howtseuŋ　　bei　　howgouk　　　　pai heui toywan　　*casual speech*
　　　　school-principal BEI *school-administration send　to　Taiwan*
　　　　'The principal was being sent to Taiwan by the adminstration.'

Because of its restricted use, Matthews and Yip (1994) suggest that its appearance is likely influenced by Mandarin. However, although this phonologically different BEI (*beih*) does not appear to require a following agent NP, it is usually not used in conjunction with an overt agent phrase.

C (16) a) ?? go chak **beih** ginchak da sheung - jo
　　　　CL *thief* BEI *police　hit injure -* PFV

b) go chak **bei** ginchak　da sheung - jo
　　　　CL *thief* BEI *police　hit injure -* PFV

While there is no question that (14c) is the accepted form, (16a) is also understandable but might cause the listener to assume that the speaker has uttered a wrong tone on BEI. That is, the use of *beih* with a low-level tone in conjunction with an Agent-phrase sounds unnatural. This behaviour suggests that perhaps the difference in tone acts as a pragmatic signal that there is a non-overt agent present, or tells the listener that the speaker will omit the agent in that particular utterance. I leave this open for now and will concentrate on constructions with the non-specialized form of BEI, *bei*, in the rest of the paper.

In English the passive may be used whenever an agent cannot be specified because it is unknown. In Cantonese, if the agent is unknown or generic, an indefinite NP, *yahn* 'person' for human agents, or *yeh* 'thing' for non-human agents, is inserted after BEI.

C (17a) go chak bei **yahn** da sheung - jo　　**C (17b)** go chak bei **yeh** da sheung - jo
　　　　CL *thief* BEI *person hit　injure*-PFV　　　　　　CL *thief* BEI *thing hit　injure*-PFV
　　　　'The thief was injured by someone.'　　　　　　　　'The thief was injured by something.'

Assuming that the BEI-construction is a passive, the ungrammaticality of (13c) is surprising because it is a general property of passives that the agent phrase can be omitted. (17a) and (17b) are even more surprising in that the insertion of an agent will save the structure. According to a typological classification of passives offered by Keenan (1985), one characteristic of a true passive construction is the optionality of the external theta role. This seems to be the pattern across languages of the world. That is, as a general rule, if a language has passives, it would have what Keenan terms 'basic passives'. These are the type where there is no agent phrase and the main (non-passive form) verb is transitive.

G-2.1 If a language has passives with agent phrases then it has them without agent phrases
(Keenan 1985:249)

Mandarin Chinese presents no deviation from this generalization, but Cantonese Chinese appears to have an obligatory agent phrase associated with its BEI-construction which cannot be omitted. The question is how do we account for this deviance? Three possibilities come to mind: 1) Keenan's generalizations are incorrect; 2) the Cantonese BEI-construction is not a passive; or 3) the BEI-construction is a passive but something else is forcing the retention/appearance of the agent. Another issue which must be considered is the nature of the BEI-phrase itself. That is, where it is generated, what properties does it have and what effect does it have on the predicate. Any previous analyses which only deal with Mandarin data cannot adequately account for the Cantonese BEI-constructions because the Agent cannot be omitted.

2.1 Obligatory Agents and Colloquial Mandarin

Probing further into Mandarin, we find that the characteristic of retaining an agent may not be isolated to Cantonese alone. Referring to colloquial Mandarin, Po-Ching and Rimmington (1997) make the following comment:

"In colloquial speech, **ràng** or **jiào** may be used instead of **bèi**...it is possible for the construction to be used without an agent. In these cases, **bèi**...but not **ràng** or **jiào**, is placed before the verb." (Po-Ching & Rimmington, 1997:124)

In the cases where *ràng* or *jiào* is used, they are associated with a meaning that is close to the get-passives in English. When they are used in other constructions *ràng* has a literal meaning of 'let' and *jiào* has the meaning of 'call'. The correspondant of *ràng* in Cantonese is *yoeŋ* 'let', while *jiào* is *gui* 'call'. Compare the following examples. These are the same sentences of (12) and (13) except that BEI has been substituted with *ràng/yoeŋ* and *jiào/gui*. Observe the grammaticality differences.

M (18)
    Colloquial Mandarin

a) jincha da   shang - le   tufei
  police hit injured-PFV *thief*   **Active**
  'The police injured the thief'

b) tufei **jiao** jincha da shang-le   **Passive**
  thief got police hit injured-PFV (**overt Agent**)
  'The thief was injured by the police.'

c) tufei **rang** jincha da shang-le
  thief got   police hit injured-PFV
  'The thief was injured by the police.'

d)*tufei **jiao / rang** da shang - le
  thief got / got   hit injured- PFV
  'The thief was injured.'

C (19)
    Cantonese

a) ginchak da sheung - jo go chak
  police   hit   injured -PFV   CL *thief*
  'The police injured the thief.'

b) *go chak **giu** ginchak da sheung - jo
  CL *thief call police   hit injured*-PFV
  'The thief was injured by the police.'

c) *go chak **yoeŋ** ginchak da sheung - jo
  CL *thief let police   hit injured*-PFV
  'The thief was injured by the police.'

d) *go chak **gui / yoeŋ** da sheung - jo
  CL *thief call / let   hit injured* - PFV
  'The thief was injured.'

From (19b, c), notice that Cantonese does not appear to correspond with Mandarin in using *gui* and *yeoŋ* for a passive interpretation. They only mean either 'let' or 'call' and do not have the semantics of get-passives like the Colloquial Mandarin examples. However, the ungrammaticality of (18d) shows that Colloquial Mandarin behaves like Cantonese in having

an obligatory agent phrase. Like (17a) above, (18d) can be saved by the insertion of a generic

agent:

Colloq.M (20) tufei jiao / rang **ren** da shang - le
         thief JIAO/RANG *person hit injure*-PFV
         'The thief was injured by someone.'

Perhaps Cantonese BEI has subsumed the passive semantics conveyed separately by

Colloquial Mandarin *jiào/ràng* and *bèi*. Cantonese BEI participates in a structure which

gives rise to a passive meaning, like the Mandarin BEI-constructions, but it does not allow

for the omission of the agent phrase. A further argument for this proposal comes from

observations made by Chappell (1996) regarding the adversity constraint on *jiào* and *ràng*

passives:

> ...The *bèi* passive of translatese broadened in its application to include the expression of
> passive events both neutral and fortunate in nature and as a result lost its adversity
> constraint entirely.
>   NOUN PHRASE BEI (NOUN PHRASE) VERB PHRASE
>   (undergoer)   (agent)
>   (23) Tā   bèi (   )   xuǎnwéi zhǔxí
>   3sg   BEI (   )   elect:as chariperson
>   'She was elected as the chairperson.'
> ...A further piece of evidence showing that agentless passives are not a feature of the
> spoken language in Chinese is provided by the two passives formed by *ràng* and *jiào*. As
> these colloquial passives are exclusively agentful, no sentences analogous to the *bèi* of
> (23) exist.
>   (27) *Ta ràng (jiào) xuǎnwéi zhǔxí.
>   3sg RANG (JIAO) elect:as chairperson
> ...even though the requirement of an overt agent is fulfilled, the adversative constraint is
> violated.
>   Chappell (1996 : 1033-1034)

The Chinese passive is usually considered an Adversity passive because these

constructions are only used in contexts where something bad has happened the Patient or

Experiencer. However, many scholars suggest that due to the translation of Western texts

into Chinese, and vice versa, the BEI-passive construction has lost its strict adversity

constraint because the English passive has no such a requirement. Most passives in English are best translated using a BEI-construction (see discussion in Section 2.0). This has led researchers to suggest that the contact with the prestige literature (English) has caused the Chinese to accept and generate non-adversity passives with the BEI-construction.

To prove this hypothesis, Cowen and Reed (1988) conducted an experiment where they compared the acceptability rate for non-adversity passives of Taiwanese residents, who have not had much exposure to Western literature texts in translation, and educated Mainland Chinese residents who have had more exposure to such texts. Their results indicated that the Mainland residents had a higher rate of acceptability for non-adversative BEI-constructions than the Taiwanese residents did. They concluded that language change could be influenced by contact with another language. They also predicted that once the change was accepted widely (i.e. no further need for an adversity effect on passives) the modified language rule would displace the original one and non-adversity passives might be accepted as the norm in future language development.

Cantonese BEI-construction also seems to display an adversity requirement, in that if the verb has no adversative effect, it usually cannot participate in a passive construction. However, just like Mandarin it has also recently developed a tolerance for non-adversative meanings (see (21a, b)).

C (21) **a)** keuih bei   yun   sooŋwey   joojik   (c.f. Chappell's #23)
        3p BEI *people elect-as chairperson*
        'He was elected as the chairperson by the people.'

    b) ngoh bei   lousi   tsaan ngoh lɛk
      I   BEI *teacher praise me smart*
    'I was praised by the teacher that I was smart.'

c)* Paul bei   Mary   ngoy-do   mhduklieu
    Paul BEI *Mary love-to-the-extent-that extremely*
    'Paul was loved by Mary to the point of desperation.'
<div align="center">c.f.</div>

M   **d)**   Paul bei Mary ai de budeliao
       Paul BEI *Mary love-to-the-extent-that extremely*
       'Paul was loved by Mary to the point of desperation.'

However, a comparison of (21c) to (21d) shows that Cantonese still retains more of an

adversative requirement than Mandarin because the verb 'to love' cannot be passivized due to

its lack of an inherent adversative meaning. Although the modifier *budeliao* (*mhduklieu)*

'desperation' adds an adversative connotation to the sentence, the sentence is still

ungrammatical in Cantonese. This might be due to the notion that the verb itself, 'to love',

cannot be adversative. However, the same sentence translated into Mandarin, (21d) is fine.

Thus it would seem that Cantonese BEI has retained a mixture of properties from *bèi* (non-

adversative passives possible), *ràng* and *jiào* (non-adversative passives not possible) in

Mandarin.

<div align="center"><h2>Chapter 3: Types of Passives in Cantonese</h2></div>

In addition to the regular passive constructions, Cantonese also has other kinds of

passives. According to the discussion found in Matthews and Yip (1994)[11], Cantonese has at

least 4 different types of passives. They include the Regular passive, Indirect passives,

Resultative passives and Adjectival passives. Each is exemplified below for the Cantonese

dialect:

C (22) a)   ga che bei a Paul touh - jo.   **Regular**
          CL *car* BEI CL *Paul steal* PFV   **Passive**
          'The car was stolen by Paul.'

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[11] henceforth M&P (1994)

b) a John bei   a Paul touh - jo ga che.   **Indirect**
    CL *John* BEI CL *Paul steal* PFV CL *car*   **Passive**
    'John had his car stolen on him by Paul.'
          (Literally: *John was affected by Paul's stealing his car.*)

c) ga che bei   a Paul tek   laahn - jo.   **Resultative**
    CL *car* BEI CL *Paul kick broken* PFV   **Passive**
    'The car was broken by Paul, (by his kicking of it).'

d) bei Paul tek   laahn - jo ge che mo yuhn wuh yew.   **Adjectival**
    BEI *Paul kick broken* PFV LP *car none people will want*   **Passive**
    'No one will want the car that was broken (by kicking) by Paul.'

(22c) and (22d) above illustrate the Resultative and Adjectival passives respectively. Notice, that these types of constructions are not easily translated into English. The Resultative passive describes a state resulting from an action and is formed by the addition of either a resultative verbal particle or an adjective of result/completion after the verb of a regular passive. M&Y suggest that the particle or adjective forms a verbal compound with the verb and is obligatory in these constructions[12]. This is comparable to the constructions in English such as "to word carefully", where the modifier of the verb cannot be omitted.

E (23) a) John worded the letter carefully
          b) *John worded the letter.

The adjectival passive consists of a BEI-phrase with a passive verb that is used to modify the head noun. In (22d) the head noun of the phrase is *che* 'car'. These types of passives have the flavour of a relative clause. What is of main interest in the present discussion are the passives given in (22a) and (22b), the Regular and Indirect passives. Notice that in all of the passive constructions BEI must always be followed by its agent NP.

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[12] An alternative to their suggestion is that these passives are exactly like Regular passives, except that they are formed with serial verbs instead of a simplex (single) verb. Notice in (22c) that the perfective marker actually attaches to the so-called "adjective" *laahn* 'broken'. This suggests that perhaps it is verbal in nature, so could plausibly be the second member of a serial verb construction.

Indirect passives present yet another puzzle; there appears to be three arguments in these types of constructions: Experiencer, Agent, and Patient.

> **experiencer**   **agent**   **patient**
> (22b) a John   bei   a Paul touh - jo   ga che.   **Indirect**
>   CL *John*   BEI   CL *Paul steal* PFV CL *car*   **Passive**
>   'John had his car stolen on him by Paul.'

Passive operations do not typically introduce another argument; rather, they are usually analyzed as suppressing an argument (external theta role). Theta grid augmentation is characteristic of causative-type constructions, however. Would Indirect passives be better analyzed as causatives instead? We will consider this possibility in the next section.

3.1 Indirect Passives

The Indirect passives is unlike a Regular passive because it does not have corresponding active form. That is, while the grammatical subject of the Regular passive form is actually the logical object, this is not the case with Indirect passives.

>   *logical object*   *logical subject*
> C (24) a) a   John bo che BEI   a Paul   touh - jo   **Regular Passive**
>   CL *John* CL *car* BEI CL *Paul*   *steal* PFV
>   'John's car was stolen by Paul.'

>   *logical subject*   *logical object*
> b) a Paul   touh - jo   a John bo   che   **Active of (24a)**
>   CL *Paul*   *steal* PFV CL *John* CL *car*
>   'Paul stole John's car.'

>   *affectee(?)*   *logical subject*   *logical object*
> c) a John BEI   a Paul   touh -jo   bo che   **Indirect Passive**
>   CL *John* BEI   CL *Paul*   *steal* PFV CL *car*
>   'John was affected (adversely) by Paul stealing his car on him.'

>   *logical subject*   *logical object*
> d) a Paul   touh - jo   a John bo   che   **Not the Active of (24c)**
>   CL *Paul*   *steal* PFV CL *John* CL *car*
>   'Paul stole John's car.'

A passive sentence describes essentially the same event as an active sentence. For example, "John hit Mary" denotes the same event as "Mary was hit by John", although the syntactic structure is different. Like the English example, (24a) and (24b) both describe the same event, but (24c) and (24d) do not. The difference lies in the fact that (24c) describes an event where *John* was adversely affected by something; (24d) describes an event involving *John's car*.

Another peculiarity of Indirect passives, which may help explain why there is no direct active correspondant form, is that the NP in sentence initial position is always construed as the possessor of the NP in object position. For example, in (22b), for a passive reading, *John* is construed as the owner of *ga che* 'the car.' This possessor relation can be reinforced by placing a pronoun, *keuih*, which acts as an overt possessor before *ga che*. This pronoun can only be bound by *John* and not by *Paul*. However, after much consideration and speaker consultation, it appears that although (25) is acceptable, it is rather awkward. (22b) is the preferred utterance. This point will be elaborated further in section 3.3.

C (25) Passive Interpretation

a John$_i$ bei a Paul$_j$ touh - jo keuih$_{i/*j}$ ga che   c.f. (22b)
CL *John* BEI CL *Paul steal*-PFV   3p   CL *car*
'John's own car was stolen on him by Paul.'

This possessor-relation also holds true in Mandarin as well. This characteristic was noted by Ting (1993), although his analysis is based on a gapped/non-gapped hypothesis for the direct object:

> ...indirect passives are allowed in Chinese with a coreferential possessor, overt or empty...
> (9) a. Gapped direct:
>   Zhangsani bei wo da - le   [e]$_i$ yixia.
>   BEI I   hit-ASP   once
>   'Zhangsan was hit once by me.'

b. Non-gapped direct:

Zhangsani bei wo da - le   ta$_i$ yixia.

     BEI I hit-ASP he once

'Zhangsan was hit once by me.'

c. Indirect (with post-verbal retained object):

Zhangsan$_i$ bei   tufei sha - le (ta$_i$) baba

     BEI bandit kill-ASP he father

'Zhangsan was affected by the bandit's killing his father.'

One thing crucial about (9) is that the matrix subject is in an obligatory coreferential relation with a post-verbal element…

…if the post-verbal pronominal is not coreferential with the matrix subject, it is ill-formed, as shown in (39):

(39) *Zhangsan$_i$ bei wo da - le   ta$_j$.

     BEI I hit-ASP he

'Zhangsan$_i$ was affected by my hitting him$_j$.'

<div align="right">Ting (1993:240-241, 247)</div>

Now consider the following examples:

C (26) a) myu go yun bo che dou BEI a Paul touh-gwo   **Regular Passive**

     every person's car all BEI CL *Paul steal*-PFV

'Every person's car had been stolen by Paul before.'

b) myu-go yun dou BEI a Paul touh-gwo   bo   che   **Indirect Passive**

     every person all BEI CL *Paul steal*-PFV *(possessive) car*

'Every person was affected by Paul's having stolen their cars.'

c) myu-go yun$_i$ dou BEI a Paul$_j$ touh-gwo   tsigei bo$_i$ che   **Indirect Passive**

     every person all BEI CL *Paul steal*-PFV *self 's car*

'Every person was affected by Paul's having stolen their own cars.'

As discussed in Section 1.3.3, *tsigei* is a locally bound, subject-oriented reflexive. Example

(26c) demonstrates three properties of the Indirect Passive:

(i) The quantified subject must be in an Argument-position (i.e. [spec, IP]) in order to bind the anaphor in object position

(ii) The quantified subject must be in the governing domain of the anaphor to be an eligible binder for the anaphor

(iii) *Paul* cannot be an antecedent for the self-anaphor

In fact, (i) can be generalized to the Regular passive as well. The NP in sentence initial

position of a passive is the subject of the clause. It is in an Argument-position and can bind

pronouns and anaphors. (26c) crucially shows that the subject must be in an A-position.

Quantifiers can be dislocated into A'-positions, but in such a position they cannot bind any anaphor[13].

E (27) a)* Every woman$_i$, I hate her$_i$.
     b) Every woman$_i$ says Bill hates her$_i$.

C   **c)*** myu go neuyun$_i$, ngoh tsuŋ keuih$_i$
        every CL *woman*   1p *hate* 3p
        'Every woman, I hate her.'
     d) myu go neuyun$_i$ dou wa a Bill tsuŋ keuih$_i$
        every CL *woman all say* CL *Bill hate* 3p
        'Every woman says Bill hates her.'

However, because the quantified expression in (26c) is able to bind the possessive self-anaphor in object position, it must be in an A-position.

(26c) further shows that the subject and the BEI-phrase must be in the same governing domain since the local subject-oriented self-anaphor *tsigei* can be bound by the subject. (ii) is a reflex of Principle A of the Generalized Binding Theory:

Principle A: An anaphor must be bound in its local domain.

                                           (Aoun, 1985)

However, *Paul* in (26c) is also a subject (subject of *touh* 'steal' in [spec, *v*P]) and is a closer potential binder for the anaphor than *myu-go yun* 'every person' is. However, it is not possible for *Paul* to serve as the binder of *tsigei* in (26c) for the sentence to have a passive interpretation. If *Paul* were to be construed as the antecedent for the anaphor, the meaning of the sentence would change. It would no longer have the semantics of an Indirect passive but rather means something like 'Every person has let Paul steal his own car before.' With *Paul* as the antecedent of *tsigei*, (26c) would carry the flavor of a permissive causative instead (also see (32b) below).

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[13] I am grateful to Hamida Demirdache for this suggestion.

Due to this seemingly unusual restriction, I argue that the possessor relation is crucial for a passive interpretation. If this relation is blocked or disrupted then no passive meaning is possible. Ting's example (39) given above shows that the possessor relation also holds in Mandarin as well. Compare (22b) with (28) below. In (28a) the subject *John* no longer binds the possessor pronoun in object position, so that *John* is no longer construed as the owner of the car. In (28b) an overt nominal possessor is substituted. Again the possessor relation between the subject and the object does not hold.

C (28) a) a John$_i$ BEI a Paul$_j$ touh - jo keuih$_k$ ga che
     CL *John let* CL *Paul steal*-PFV 3p CL *car*
     'John$_i$ let Paul$_j$ steal his$_k$ car.'

   b) a John$_i$ BEI a Paul$_j$ touh - jo Mary$_k$ ga che
     CL *John let* CL *Paul steal*-PFV *Mary* CL *car*
     'John$_i$ let Paul$_j$ steal Mary$_k$'s car.'

(27a) and (28b) also have the ring of a permissive causative rather than a passive sentence. Thus, we observe from (25) and (28) that the possessor-relation is crucial in deriving a 'passive' meaning from the sentence. When there is no possessor-relation between the NP in subject position and the NP in object position, the sentence cannot be interpreted as a passive. In fact, BEI can no longer be translated as meaning "by" in these cases. Instead, it conveys the meaning of "let". This line of argumentation also explains why *Paul* cannot be the binder for the anaphor in object position, although it could qualify as one. The possessor-relation between the subject *myu-go yun* 'every person' would be disrupted if *Paul* was the antecedent of *tsigei*. At this point, the disruption of the possessor-relation serves as one explanation why *Paul* cannot bind *tsigei*, however, we shall see later how the structure can actually rule out this possibility as well. We now come to the question of whether these Indirect passives are better analyzed as causatives instead.

3.2 Indirect Passives as Causatives

The relevant examples for this next section are (25) and (28a), repeated below:

C (25) a   John$_i$ bei   a   Paul$_j$ touh - jo   keuih$_{i/*j}$ ga che
        CL *John* BEI CL *Paul steal*-PFV   3p   CL *car*
        'John's own car was stolen on him by Paul.'
C (28a) a   John$_i$ BEI   a   Paul$_j$ touh - jo   keuih$_k$ ga che
        CL *John let* CL *Paul steal*-PFV   3p   CL *car*
        'John$_i$ let Paul$_j$ steal his$_k$ car.'

Let's first consider (25), where *John* is the possessor of *ga che* 'the car.' Semantically, the NP preceding BEI, *John*, does not have the interpretation of being a direct causer of any action. There is no sense in which *John* is an agent who caused the action of *Paul*'s stealing of his own car. Rather, *John* is interpreted as the person who experienced *Paul*'s action of stealing; he is the affectee.

However, turning to (28a), where the subject does not possess the object, there <u>is</u> a sense in which *John* permitted *Paul* to steal someone else's car. This sentence can certainly be interpreted as a permissive causative; it cannot be interpreted as a passive due to the lack of a possessor-relation.

Therefore, the answer to the question whether Indirect passives can be analyzed as causatives is both yes and no. Indirect passives are ambiguous. None of the other Cantonese passives described in (22) have ambiguous interpretations other than the Indirect Passive. They are comparable to English 'get/have' passives which can have both a passive and causative meaning.

E (29)   John got his car stolen by Paul.
      →MEANING 1: John's car was stolen by Paul   *Passive*
                2: John made Paul steal his car   *Causative*

In fact (25), repeated below, can also have a causative meaning, although the subject possesses the object. A possessor-relation does not necessarily block a causative interpretation, but it is <u>crucial</u> in maintaining a passive meaning.

(25) a John$_i$ bei a Paul$_j$ touh - jo keuih$_i$ ga che
   CL *John* BEI CL *Paul steal*-PFV 3p CL *car*
   (i) 'John's own car was stolen on him by Paul.' (ii) 'John$_i$ let Paul steal his$_i$ car.'

The difference in interpretation results from whether the subject is construed as the agent or patient of the sentence. This point can be demonstrated by the insertion of an agent-oriented adverb such as *gouyi* 'intentionally.'[14]

C (30) a) a John$_i$ gouyi   bei a Paul$_j$ touh - jo keuih$_i$ ga che   **causative only**
   CL *John intentionally let* CL *Paul steal*-PFV 3p CL *car*
   'John intentionally had his car stolen by Paul.'

   b) a John$_i$ bei a Paul$_j$ gouyi   touh - jo keuih$_i$ ga che
   CL *John* BEI CL *Paul intentionally steal*-PFV 3p CL *car*
   'John had his car stolen on him intentionally by Paul.'   **passive**
                  OR   **OR**
   'John let Paul intentionally steal his car.'   **causative**

When it is modified by the agent-oriented adverb, *John* in (30a) is definitely interpreted as the initiator, or causer of the stealing action performed by *Paul*. The example in (30b) is slightly more complicated. When the adverb modifies the lower subject *Paul, Paul* is construed as the agent of the verb 'steal'. However, *John* <u>can</u> be construed as either the experiencer or causer of the action, depending on whether *John* is a derived subject or an underived (true) subject. If *John* is a derived subject (i.e. such as that in a passive) then it is construed as an experiencer/patient, having no volitional control over *Paul's* action of 'stealing'. However, if *John* is a true subject (i.e. such as in a causative) it can still be

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[14] I am grateful to Hamida Demirdache who reminded me of the importance of this test.

construed as the indirect causer/agent of the action. The agent-oriented adverb is able to modify *Paul* because it is the internal subject of the lower verb phrase.

The same BEI-construction may have two different interpretations, causative or passive, depending what type of role the NP in [spec, IP] plays. This ambiguity is not confined to Cantonese alone. To further support my earlier suggestion that Cantonese BEI has subsumed the functions of colloquial Mandarin *jiào* and *ràng* Chappell (1986) makes the following comment regarding Mandarin.

> A possible linguistic motivation behind the *ràng* and *jiào* passives retaining their 'traditional' meaning and not developing a translatese form, as did the *bèi* passive, is their use elsewhere as both causative verbs and independent lexical verbs. *Bèi* does not have any other grammatical uses apart from that of passive exponent, nor can it be used as an independently occurring verb...so that the problem of ambiguity does not arise.
> ...Since the *ràng* and *jiào* passives are restricted to an adversative interpretation, this aids in the maintenance of distinct semantic structures for *ràng* and *jiào* passive and causative constructions...The only potential for ambiguity with the passive lies with intentional speech-act causatives...when the latter contain semantically transitive verbs in their predicate but the direct object denoting the undergoer of the action has been ellipsed:
> (38) Tā   ràng wǒ pīping - le   yíxià.
>   3sg RANG I   criticize-COM one:CL
> *Causative:* (i) 'He had me criticize (somebody).'
> *Passive:*   (ii) 'He was criticized by me.'

Chappell (1986:1037-1038)

To better understand Chappell's observation, consider the bracketed structures of (31) which are reproductions of her example #38, with the trace and ellipsed object filled in.

M (31)   b) [$_{IP}$Ta$_i$ rang [$_{vP}$wo [$_{VP}$piping-le [$_{NP}$(ta$_j$) yixia]]]]   **Causative**

   a) [$_{IP}$Ta rang [$_{vP}$wo [$_{VP}$piping-le [$_{NP}$t$_i$ yixia]]]]   **Passive**

Chappell notes that there is an ambiguity with sentences such as her #38 because the sentence can either be interpreted as a causative with an ellipsed object NP, or a passive with a moved object NP. If Cantonese BEI has all the properties of Mandarin *bèi*, *ràng* and *jiào*, then this ambiguity of causative/passive alternation in Indirect passives is expected.

The binding properties of sentences involving BEI which have a causative meaning are also different from those with a passive meaning.

C (32) a) myu-go yun$_i$ dou BEI a Paul touh-gwo tsigei$_i$ bo che   **Passive Meaning**
   every person all BEI CL *Paul steal*-PFV *self* 's car
   'Every person was affected by Paul's having stolen their own cars.'

b) myu-go yun$_i$ dou BEI a Paul$_j$ touh tsigei$_{*i/j}$ bo che   **Causative Meaning**
   every person all BEI CL *Paul steal self* 's car
   'Every person has let Paul steal his own car.'

c) myu-go yun$_i$ dou BEI a Paul$_j$ touh keuih$_{i/*j/k}$ bo che   **Causative Meaning**
   every person all BEI CL *Paul steal* 3p 's car
   'Every person has let Paul steal their cars.'

(32b) shows that once the sentence acquires a causative interpretation the NP in subject position can no longer bind a reflexive appearing before the object. Unlike (26) from above, the subject *myu-go yun* 'every person' is not longer able to bind *tsgei* 'self' in (32b). This serves to show that somehow, in these constructions, the structural subject NP is no longer in the binding domain of the reflexive and thus cannot serve as a potential antecedent for it. (32c) reinforces the inference that the [spec, IP] position is no longer contained within the minimal domain of the reflexive. In this example, the subject is able to serve as an antecedent for the third person pronoun, *keuih*. If the subject *myu-go yun* is within the minimal domain, Principle B would be violated if the subject was co-indexed with the pronoun in Object position. However, no such violation arises. Principle B also rules out the co-indexation of *Paul* with the object *keuih bo che* 'his/her car' because *Paul* is contained within the minimal domain of the pronoun. Notice that it is possible for the pronoun to be bound by some other antecedent NP (index *k*) that is not mentioned in (32c), but it cannot be bound by *Paul*.

From these observations, I propose that the expressions of passive meaning have only one governing domain (i.e. is mono-clausal) while those of causative meaning have two (i.e. bi-clausal). A explication of the structures of the BEI-construction will clarify matters. This will be pursued in Chapter 6.

3.3 Indirect Passives as Possessor-Raising

The question remains as to how to deal with the apparent 'third' argument in Indirect passives structures. For instances where this construction is a causative the problem is trivial. Causative structures typically introduce another argument into the predicate and assign it the Causer theta role. However, passives cannot. Recall the obligatory possessor-relation between the subject and object of passive-type sentences. These constructions can be analyzed as instances of possessor-raising.[15] Thus, there is not actually an extra argument in these types of structures, but rather the possessor is raised out of the base object position. Compare (33a) and (33b):

C (33) a) [a John$_i$] bei a Paul touh - jo [t_i ga che]
      CL *John* BEI CL *Paul steal*-PFV CL *car*
      'John had his car stolen on him by Paul.'

    b) [a John ga che] bei a Paul touh - jo
       CL *John* CL *car* BEI CL *Paul steal*-PFV
       'John's car was stolen by Paul.'

(33b) has virtually the same structure as (33a), except that the entire NP has been fronted rather than the possessor alone. Under this analysis, the apparent 'third' NP in Indirect passives is no longer a problem. The NP in subject position is not an independent argument in itself, requiring an independent theta role, but is actually the possessor raised out of the lower object NP. In accordance with possessor-raising structures we may argue that the

possessor receives its theta role directly from the object. I will be adopting this view for the rest of the paper.

However, the contrast between speaker preference for (22b) over (25), repeated below, still remains to be explained even if we assume that possessor-raising is manifested in Indirect passives.

(22b) a John   bei a Paul touh - jo ga che.
    CL *John*   BEI CL *Paul steal* PFV CL *car*
    'John had his car stolen on him by Paul.'

(25) a John$_i$ bei a Paul$_j$ touh - jo keuih$_{i/*j}$ ga che   c.f. (33a)
    CL *John* BEI CL *Paul steal*-PFV 3p   CL *car*
    'John's own car was stolen on him by Paul.'

Under the possessor-raising hypothesis, the overt possessive pronoun of (25) occupies the exact position where the trace of the raised possessor should be. It should not be possible for a pronoun to occupy this position if the trace is there already. At this point I do not have a full explanation for this phenomenon but one possible avenue of pursuit might be along the lines of 'clitic doubling' or 'clitic-reference' such as in the cases of Macedonia presented by Spencer (1991):

As clitic pronouns develop a stronger attachment for a particular grammatical category, they begin to look more like (agreement) affixes than free standing syntactic constituents...In Macedonian this impression is strengthened by the fact that a definite direct object, or any indirect object, must be referenced ('reduplicated' in the descriptive literature's terminology) by a clitic pronoun agreeing for person , number and, in the case of 3sg, NPs, gender...Examples are given in 9.29 - 9.32:

    9.29   Mi   ja   dadoa <u>smetka-ta</u>
           1sg.-DAT 3sg.F-ACC *gave*   *bill*-ART-F
           'He gave me the bill.'

    9.30   Dajte mu   ja   košula-ta
           give 3sg. M-DAT 3sg.F-ACC *shirt*-ART-F
           'Give him the shirt.'

    9.31   <u>Nemu mu</u>   go   dadov.
           To-him 3sg.M-DAT 3sg.M/N-ACC *I-gave*
           'It was to him that I gave it.'

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[15] I am indebted to Michael Rochemont who suggested this to me.

9.32   <u>Mu</u>   go   dadov pismence -to   <u>nemu</u> a   ne nejze
        3sg.M-DAT 3sg.M/N *I-gave note*   -ART-N *to-him and not to-her*
        'I gave the note to him, not to her.'

<div align="right">Spencer (1991:359-360)</div>

Spencer's examples all show that a clitic is reduplicated for a definite direct object and any indirect object. In his 9.29 and 9.30 the clitic *ja* is a reduplicant for the feminine direct object (definite reference) nouns 'bill' and 'note'; in 9.31 and 9.32 the clitic *mu* is the reduplicant for the indirect object 'to him'.

Although the exact mechanisms of this strategy have to be worked out, we can pursue an analysis of the Cantonese examples along these lines. Since I have argued that the Indirect Passive involves possessor-raising, the trace of the raised possessor naturally shares the exact same φ-features as the possessor itself. Therefore, whatever pronoun clitic is generated in that position will have the same φ-features as the raised possessor as well. The possessor was originally part of the DP of the direct object of the verb, and after it was raised it is possible that a clitic pronoun might be generated to reference the possessor NP.

Passives of this sort are also associated with a definiteness effect as exemplified by the insertion of a demonstrative *ni* 'this' before an indefinite NP *go yun* 'a person':

C (34) a) ni   go yun bei a John touh - jo ga che
           this CL *person* BEI CL *John steal*-PFV CL *car*
           'This person had his car stolen on him by John.'

        b)*go yun bei a John touh - jo ga che
           CL *person* BEI CL *John steal*-PFV CL *car*
           'Some person had his car stolen on him by John.'

(34) shows that an indefinite NP is ungrammatical in these structures. However, the insertion of a demonstrative, giving definite reference, saves the sentence. These facts all point to the possibility of analyzing the overt possessor in (25) as a kind of 'referential clitic' in the spirit of Spencer.

To dissolve the ambiguous meanings associated with the Indirect passive, I will term the constructions with a passive interpretation as 'BEI-passive' and the ones with a causative meaning as 'BEI-causative.' In the following section we will further explore the properties of these two types of BEI.

Chapter 4: BEI: Passive versus Causative

Having teased apart the two distinct meanings associated with BEI we may now ask how are the passive and causative related in Cantonese? Are they derived from the same structures? From the above examples, we have already witnessed that BEI-causative and BEI-passive constructions are different in both their binding properties and theta grids. What causes this difference?

4.1 What is the Cantonese 'passive'?

Let's refer back to Example (22), repeated below for convenience.

C (22) a) a Paul touh - jo   a John ga che   **Active**
        CL *Paul steal*-PFV CL *John 's car*
        'Paul stole John's car.'

        b) a John ga che bei a Paul touh - jo.   **Regular**
        CL *John's car* BEI CL *Paul steal* PFV   **Passive**
        'John's car was stolen by Paul.'

        c) a John bei   a Paul touh - jo ga che.   **Indirect**
        CL *John* BEI CL *Paul steal* PFV CL *car*   **Passive**
        'John had his car stolen on him by Paul.'

In the regular passive of (22b) the whole object NP has moved up, out of its base position, to an A-position (presumably [spec, IP]). We speculate that the NP has moved up to an A-position because it can serve as an antecedent for a local anaphor, as shown in (26c). For (22b) I have suggested that these might be instances of possessor-raising. In these cases, only the possessor of the object NP has raised out of the object base position, up to an argument-

position (presumably [spec, IP] again). Not only can it serve as an antecedent to an anaphor in object position, as shown by (26c), but in the following cases as well:

C (35) a) John_i bei tsgei_i go tsey touh-jo bo che
     John BEI *self* CL *son steal*-PFV CL *car*
     'John_i had his_i car stolen on him by self's_i son.'

   b) myu go yun_i bei tsgei_i go tsey touh-jo bo che
     every person BEI *self* CL *son steal*-PFV CL *car*
     'Every person_i had his_i car stolen on him by self's_i son.'

In comparison with the active sentence of (22a), we observe that something must move out of the canonical object position of the verb phrase in a BEI-passive construction. This 'something' can either be the whole object NP or its possessor alone. A BEI-passive construction where neither the object NP nor its possessor is fronted is ungrammatical. Compare (36c) with (36b).

C (36) a) a Paul tek laahn - jo ga che
     CL *Paul kick damage*-PFV CL *car*
     'Paul damaged the car.' (by kicking)

   b) ga che bei a Paul tek laahn - jo
     CL *car* BEI CL *Paul kick damage*-PFV
     'The car was damaged by Paul's kicking of it.'

   c)* bei a Paul tek laahn - jo ga che[16]
     BEI CL *Paul kick damage*-PFV CL *car*
     'The car was damaged by Paul's kicking of it.'

What could be forcing this kind of movement? I suggest that, similar to some previous analyses of English (Jaeggli, 1986; Baker, Johnson & Roberts, 1989), the passive function in Cantonese suppresses the verb's ability to assign Accusative case (ACC). In a passive, if the object cannot receive abstract Case in its base position from the verb, then it must move to a

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[16] See the Appendix 1 for a discussion of exceptional circumstances where the following is acceptable:
    "bei a Paul tek laahn - jo ga che"
    BEI CL *Paul kick damage*-PFV CL *car*
    'The car was damaged by Paul's kicking of it.'

Case position in order to obtain Case. Assuming we have a standard functional projection of IP[17] above VP then, the closest landing site where the NP can get structural Case would be [spec, IP].

However, recall in Section 3.0 where Adjectival passives were briefly mentioned. One might argue that these types of passives would pose a counterexample to our claim since the object still remains in-situ in these cases. Compare the Adjectival passive of (22e) and (36c) above, repeated as (37a) and (37b) respectively:

C (37) a) bei Paul tek laahn - jo ge che mo yuhn wuh yew.　　　　(22e) Adjectival
　　　　　BEI *Paul kick damage-* PFV LP *car none people will want*　　　　Passive
　　　　　'No one will want the car that was damaged by Paul's kicking of it.'

　　　　b)*bei a Paul tek laahn - jo ga che　　　　　　　　　　(36c)
　　　　　BEI CL *Paul kick damage-*PFV CL *car*
　　　　　'The car was damaged by Paul's kicking of it.'

　　　　c)* bei Paul tek laahn - jo ga che mo yuhn wuh yew.　　　　(36c) as an
　　　　　BEI *Paul kick damage-* PFV CL *car none people will want*　　　　Adjectival
　　　　　*'No one will want the car was damaged by Paul's kicking of it.'　　　Passive

Upon closer inspection, the Adjectival passive of (37a) does not pose a counterexample to our claim, but rather supports it. Notice that the linking particle *ge* in (37a) is different from the noun classifier *ga* in (37b, c). Although phonologically similar, the substitution of one particle for the other changes the grammaticality of the sentence. Compare (37a) and (37c). The linking particle of (37a) serves the function of a relativizer, linking the head noun *che* 'car' with the phrase that modifies it. It is possible that this particle has inherent abstract Case and is able to directly Case mark the following NP. However, the noun classifier in (37b, c) lacks such an ability, so substitution of this classifier in (37c) yields an ungrammatical sentence because the object NP cannot get Case.

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[17] I use IP in a neutral way and not to specifically denote an Infl. phrase, a Tense phrase or an AGR phrase.

Examples involving apparent double objects in passives also support my proposal that the Object NP moves for Case reasons. Ditransitive verbs participating in passive structures were very hard to find because none of them seem to satisfy the adversity requirement, that was mentioned earlier, on Cantonese passives. However, there are some examples involving *pai* 'to send (a person)' and *gæi* 'to mail'. The former has already been exemplified in (15b), repeated below as (38a); *gæi* 'to mail' will be presented in (38c):

C (38) a) howtseuŋ   bei   howgouk   pai - jo heui toywan
    school-principle BEI *school-administration send*-PFV *to Taiwan*
    'The principle was sent to Taiwan by the administration.'

  *b) heui toywan bei   howgouk   pai   howtseuŋ
    to Taiwan BEI *school-administration send school-principle*
    'To Taiwan was sent the principle by the administration.'

  *c)   howtseuŋ   bei   howgouk   pai - jo   toywan
    school-principle BEI *school-administration send*-PFV *Taiwan*
    'The principle sent to Taiwan by the administration.'

  d) bougwo bei a John mh-gokyi gæi-jo heui toywan
    parcel BEI CL *John not-notice mail* -PFV *to Taiwan*
    'The parcel was mailed to Taiwan accidentally by John.'

  *e) heui toywan bei a John mh-gokyi gæi-jo bougwo
    to Taiwan BEI CL *John not-notice mail* -PFV *parcel*
    'To Taiwan the parcel was mailed accidentally by John.'

  f) bougwo bei a John mh-gokyi gæi-jo   bey Mary
    parcel BEI CL *John not-notice mail* -PFV *for Mary*
    'The parcel was mailed to Mary accidentally by John.'

  *g) bey Mary bei a John mh-gokyi gæi-jo bougwo
    for Mary BEI CL *John not-notice mail* -PFV *parcel*
    'Mary was mailed the parcel accidentally by John.'

  *h) bougwo bei a John mh-gokyi gæi-jo   Mary
    parcel BEI CL *John not-notice mail* -PFV *Mary*
    'The parcel was mailed to Mary accidentally by John.'

These constructions all involve three NPs. In (38a) they are: *howtseuŋ* 'principal', *howgouk* 'school administration and *toywan* 'Taiwan.'; in (38d) they are: *John*, *bougwo* 'parcel' and *toywan* 'Taiwan'; in (38f) they are: *John*, *bougwo* 'parcel' and *Mary*. Notice that only the direct object can be moved but not the indirect object. These so-called ditransitive verbs are also composed of more than just the bare verb itself. There is a 'coverb'[18] before each indirect object: *heui* 'to' and *bey* 'for'. When these 'coverbs' are omitted the sentence becomes ungrammatical, (38c, h). I argue that these coverbs serve to Case mark the indirect object. If they are absent, then the indirect object NP cannot receive Case. If the indirect object moves to [spec, IP] to get Case then the direct object will be stranded without Case. I propose that the reason for movement of the direct object is to obtain Case, but since the indirect objects already have a way of satisfying case in their base positions, they are never moved in passives. Under this analysis, there are no true double object constructions in Cantonese, where the verb can directly assign Case to two NPs. In constructions involving 3 NPs I argue that a coverb must be present as a Case assignor because the verb can directly assign Case to only 1 NP. Therefore, although these so-called ditransitive verbs involve 3 NPs, and 3 theta roles, the verb must subcategorize for a coverb phrase in order for Case to be satisfied on the indirect object.

Returning to the Cantonese passive, one notices that the verb's ability to discharge the external theta role is not suppressed (i.e. it does not reduce the number of arguments in the verb's theta grid). There is always an overt agent phrase following BEI.

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[18] For now I treat these coverbs as prepositions. Their categorial status is unclear but more discussion will follow in Section 4.1.5.

I have also argued that the Cantonese passive does not introduce another theta role. Even for Indirect passives I have argued that the NP in [spec, IP] position is not an extra argument, but rather a raised possessor[19].

4.1.1 The Function of BEI

We have already seen an example which shows that the BEI-phrase cannot be an adjunct. Example (35) reveals that a local reflexive NP following BEI can be bound by the matrix subject. This means that both the anaphor and its antecedent must be in the same governing domain and the subject is in an A-position which c-commands the anaphor. It is not possible for an anaphor in an adjunct such as the prepositional "by+Agent" phrase in English passives to be bound.

E (39) * [$_{IP}$Mary$_i$ was [$_{VP}$hit [$_{PP}$by herself$_i$.]]]

Example (40) shows that the NP following BEI can also serve as an antecedent for binding.

C (40) a John$_i$ bei a Paul$_j$ touh - jo tsgei$_{*i/j}$ ga che	**Causative only**
CL *John let* CL *Paul steal*-PFV *self* CL *car*	(no passive possible)
'John let Paul$_j$ steal his$_j$ own car.'	

In (40) it is not possible for *John* to bind the anaphor. Principle A would predict this if *John* is not contained within the governing domain of the anaphor. *Paul* is the closer governor. Again, because the subject and object do not hold a possessor-relation no passive interpretation is possible.

Now, consider again (22b), the Regular passive.

(22b) a John ga che bei a Paul touh - jo.	**Regular**
CL *John's car* BEI CL *Paul steal* PFV	**Passive**
'John's car was stolen by Paul.'	

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[19] These cases are somewhat problematic in that it is not clear how the object in base position receives Case once the possessor is raised. Perhaps the raised possessor is in a chain relation with its object. However, this is a general problem for all analyses of possessor-raising which is beyond the scope of this paper.

Assuming the previous hypothesis regarding the function of the Cantonese passive, the NP *John* is fine because it has both Case and a theta role. How does the NP *Paul* get Case then? It can no longer move to [spec, IP] for structural Case because this position is occupied by the object already. According to Chomsky (1995) the verb is not able to assign Case directly to its external argument because sisterhood is a necessity of direct Case assignment. In consideration of these factors, the logical subject *Paul* should be illicit since it cannot satisfy the Case Filter. However, I suggest that this NP is saved by the presence of BEI. BEI acts as an exceptional Case assignor to this NP, performing the same function as certain functional prepositions in English.

E (41) a) For John to leave would be a mistake. b)* John to leave would be a mistake.
   c) He is envious of Susan.   d)* He is envious Susan

For in (41a) and *of* in (41c) contributes no identifiable semantics to the sentences above except that they serve to Case mark the NPs *John* and *Susan* respectively. The omission of these prepositions as Case assignors in (41 b, d) yields ungrammatical sentences because the NPs cannot get Case from their respective infinitival and adjectival predicates. Another similarity shared between the functional uses of these prepositions and BEI-passive is that they do not introduce an extra argument into the predicate. Along similar lines, would it be possible for us to suggest that BEI was a preposition?

4.1.2 BEI-passive as a Preposition

Several previous analyses based on Mandarin (Cheng 1988; LaPolla 1988; Li 1990; Ting 1993; Li 1994) have argued against treating BEI as a preposition. There are two main arguments against this proposal. First, phrases introduced by prepositions are usually adjuncts

and so are optional. However, (41) readily shows that not all phrases introduced by prepositions are adjuncts. The prepositions in (41) are certainly obligatory for Case reasons.

The second objection to analyzing BEI as a preposition involves the fact that Chinese disallows preposition stranding. Consider the following:

(42) *English*   a)   John, I like to talk to.

Cantonese   b)   ngoh jung-yi **tuhng** a John king-gey.
                       I   like   with CL John have-conversation

                     c) *a $John_i$, ngoh jung-yi **tuhng** t_i king-gey
                       CL John I   like   with have-conversation

                     d) a $John_i$, ngoh jung-yi **tuhng** $keuih_i$ king-gey
                       CL John   I   like   with   3p   have-conversation
                     'As for John, I like to talk to him.'

Mandarin   e) John bei pian le
                      John BEI cheat PFV
                     'John was cheated.'

(42a) shows a stranded preposition in an object topicalized structure. The same configuration given in (41c) for Cantonese is ungrammatical. If we want to maintain the topicalized object in (41c), we must re-inserting a pronoun NP after the preposition so that it will not be stranded. Based on these facts, it has previously been argued that a structure such as (41e) in Mandarin, where the agent NP has been omitted, should be ungrammatical if BEI were a preposition. In (41e), the 'prepositional' BEI would be stranded without an overt agent NP. However, this property will never be problematic in Cantonese because we have seen that, for independent reasons, the agent phrase can never be omitted. Therefore, there is still a possibility we can maintain that BEI is a preposition in Cantonese.

4.1.3 BEI-passive as a Verb

A. Li (1990) considers the possibility of Mandarin BEI as a verb. She concludes that this proposal is not tenable for five different reasons. Firstly, unlike most verbs, BEI in BEI-

constructions cannot take any aspectual marker, such as the perfective. Secondly, it cannot participate in the common A-not-A question forms. It also cannot stand alone in a predicate or be a simple answer to a question as a simple verb can. Finally, it does not seem to introduce any argument, unless it is possible to have canonical (underived) avalent verbs (i.e. verbs which have no arguments). The NPs both preceding and following BEI are independently introduced by the verb in the VP, and not by BEI. (43) exemplifies these properties using the verb *chi* 'eat' in Mandarin and its correspondant, *sik* 'eat', in Cantonese. The example will show that lexical entries which are verbal, like *chi*, can participate in the tests mentioned by A. Li.

(43) a) <u>taking of an aspect marker</u>

    M ta chi - le   fan   **C** keuih sik - jo   faan
       3p *eat*-PFV *rice*   3p *eat*-PFV *rice*
       'He has eaten rice.'   'He has eaten rice.'

   b) <u>participate in the in A-not-A question form</u>

    M ta chi-bu-chi fan?   **C** keuih sik-mh-sik faan?
       3p *eat-not-eat rice*   3p *eat-not-eat rice*
       'Will he eat rice?'   'Will he eat rice?'

   c) <u>stand alone in a predicate as a simple verb</u>

    M ta chi fan   **C** keuih sik faan
       3p *eat rice*   3p *eat rice*
       'He eats rice.'   'He eats rice.'

   d) <u>can be a simple answer to a question</u>

    M <u>A:</u> ta chi-bu-chi fan?   <u>B</u>: chi! **C** <u>A</u>: keuih sik-mh-sik faan?   <u>B</u>: sik!
         3p *eat-not-eat rice*   *eat*   3p *eat-not-eat rice*   *eat*
         'Will he eat rice?'   'Sure, eat!'   'Will he eat rice?'   'Sure, eat!'

   e) <u>introduce an argument</u>

    M ta chi fan   *chi*   **C** keuih sik faan   *sik*
       3p *eat rice*   ⟋＼   3p *eat rice*   ⟋＼
       'He eats rice.'   *ta*   *fan*   'He eats rice.'   *keuih* *faan*
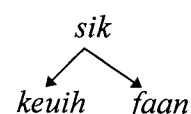
   A. Li's arguments against treating Mandarin BEI as a verb carry over into Cantonese.

(44) summarizes these 5 objections as applied to Cantonese BEI:

C (44) a) it cannot take an aspect marker like most verbs

    (i)* ga che bei - jo   a Paul touh - jo

        CL *car* BEI-PFV CL *Paul steal*-PFV

            →intended meaning: 'The car had been stolen by Paul.'

b) even verbs which cannot take an aspect marker (like the copula) can participate in the in A-not-A question form; BEI cannot

    (ii)* ga che bei - mh - bei a Paul touh?

        CL *car* BEI- *not* -BEI CL *Paul steal*

            →no meaning can be assigned.

c) it cannot stand alone in a predicate as a simple verb

    (iii)* keuih bei ngoh

        3p BEI 1p

            →no meaning can be assigned

d) it cannot be a simple answer to a question

    (iv) **A:** heuy-mh-heuy ga che bei a Paul touh - jo?   **B:** *bei

          is -not- is CL *car* BEI CL *Paul steal*-PFV   BEI

          'Was it by Paul that the car was stolen?'   'Was.'

e) it does not introduce any argument; unless it is possible to have avalent verbs

    (v) ga che bei a Paul touh - jo

        CL *car* BEI CL *Paul steal*-PFV

        'The car was stolen by Paul.'

            →in (v) both NPs *ga che* 'car' and *Paul* are introduced by the *touh* 'steal' and not BEI

Regarding (44e) it might be possible to argue that BEI is a verb which introduces a Theme argument into Indirect passive constructions[20]. That is, for an example such as (45a), below, *John* may be analyzable as a second theme which is introduced by BEI:

C (45) a) a John bei a Paul da do tsek gou <u>si - jo   weyzi</u>

      CL *John* BEI CL *Paul hit till* CL *dog die*-PFV *to-the-extent-that*

      'John had his dog hit to death by Paul.'

    *b) a John do <u>si - jo   weyzi</u>   bei a Paul da tsek gou

      CL *John till die*-PFV *to-the-extent-that* BEI CL *Paul hit* CL *dog*

      'John till his death had his dog hit by Paul.'

The resultative complement *sei-jo weyzi* 'until dead' is theme-oriented only. Although it can modify the theme *gou* 'dog' as in (45a), it cannot modify *John* in (45b), irregardless of whether the sentence has a passive or causative interpretation. This test can be used to show that *John* can be either an Agent or an Experiencer, but not a Theme.

<u>4.1.4 BEI-Causative as a Verb</u>

From (44) we cannot definitively conclude that all occurrences of BEI are non-verbal. Consider the instances of BEI used to derive a causative meaning. BEI-causative can perform functions (a-e) mentioned in (44). This is illustrated in (46) below.

C (46) a) <u>take an aspect marker</u>
    John bei- jo keuih cheuk gaai.
    John let -PFV him go-out street
    'John has let him go outside.'

  b) <u>participate in a A-not-A question form</u>
    John bei-mh-bei keuih cheuk gaai?
    John let-not-let him go-out street
    'Is John letting him go outside?'

  c) <u>to stand alone in a predicate</u>
    keuih bei ngoh
     3p *let* 1p
    'He/she lets me.'

  d) <u>answer to a simple question</u>
    A: bei keuih heui - mah? **B:** bei!
     let 3p *go* V-PRT   *let!*
    'Letting him/her go out?' 'Of course!'

  e) <u>introduces the Causer theta role</u>
    John bei a Paul touh - jo Mary ga che
    John let CL Paul steal-PFV Mary's car
    'John let Paul steal Mary's car.'

In light of these facts, it might be plausible to analyze BEI-causative as a verb. Actually the categorical status of BEI has been hotly debated precisely due to its dual characteristics of

having prepositional and verbal properties, depending on the environment it is used in and what its semantics are. However, this categorial ambivalence is not isolated to BEI alone.

4.1.5 The Ambiguity of Categories

Matthews & Yip (1994) present an insightful comment regarding the ambiguity between prepositions and verbs in Cantonese. As result of this ambiguity they term these items 'coverbs' instead for neutrality and so that they can analyze this group under the main category of verbs, with prepositions as a subclass.

> "Whether prepositions exist in Chinese is also an open question. Functionally, the role of prepositions in expressing relationships between noun phrases is played by two different types of word: 'coverbs' and 'localizers'…The question thus arises whether the coverbs are functioning as prepositions or merely as verbs…Even in those contexts where they correspond to prepositions in English, these words behave like verbs in many respects…in so far as prepositions exist in Cantonese, they are a subclass of verbs which may be used as prepositions. Alternatively, the coverbs may be regarded as verbs in all their manifestations, in which case their characteristic use as 'coverbs' invariably involves a serial verb construction."
>
> Matthews & Yip (Y&P 1994:60)

Most of these items termed as 'coverbs' behave in a similar fashion to BEI. They show both prepositional and verbal properties and adopt a different semantics depending on how they are used. Take for example, *hai* 'at'.

C (47) a) keuih yihga hai guownsi   b)* guownsi$_i$ keuih yihga hai t$_i$
       3p *now at company*   *company* 3p *now at*
       'He is at the company now.'   'The company, he is there now.'

      c) keuih yihga hai- gan guownsi   d) keuih yihga hai-mh-hai guownsi, ah?
       3p *now be at*-PROG *company*   3p *now at - not- at company,* PRT
       'He is at the company right now.'   'Is he at the company now?'

The 'coverb' *hai* 'at' cannot be stranded as (47b) shows, but it can also take a verbal aspect marker, as in (47c), and participate in an A-not-A configuration, as in (47d). A 'coverb' like *ging* has both the meanings of 'via' (preposition) and 'to pass by' (verb) depending on its context. On the other hand there are items like *lihng* 'make' which are considered verbs but

do not participate in any of the tests. *Lihng* is analyzed (M&Y) as participating in a causative

structure similar to BEI-causative where it introduces the causer argument.

C (48) a) a John lihng a Paul tsi dou
     CL *John make* CL *Paul late arrive*
     'John caused Paul to arrive late.'

    b) a John lihng tsi dou ge heuy a Paul
     CL *John make late arrive* LP *is* CL *Paul*
     'It was Paul who John made arrive late.'

    c)* a John lihng - jo / gan / gwo / hoi a Paul tsi dou
     CL *John make* -PFV/PROG/EXP/HABCL *Paul late arrive*
     'John caused/ is causing/ has caused/ usually cause Paul to arrive late.'

    d)* a John lihng -mh- lihng a Paul tsi dou, ah?
     CL *John make-not-make* CL *Paul late arrive*, PRT
     'Did or did not John make Paul late?'

In (48) *tsi dou* 'arrive late' is a one-place predicate, but there are two arguments in (48a): a

causer and a patient. The verb *lihng* serves to introduce the causer *John*. Notice that it can

be stranded without an NP complement as in (48b)[21], but it cannot take any aspectual marker,

(48c), or can it participate in A-not-A structures, (48d).

The ambiguous qualities of these types of items makes it very difficult to determine their

categorical status. The question of whether prepositions exist in Cantonese still remains

open. So is the possibility of whether we can claim BEI-passive is a pure preposition.

Alternatively, we could posit the existence of an entirely new category which I will term

"neutrals". All the problematic 'coverbs' considered in this section would belong to this

category, as would BEI. These neutrals are have both verbal and prepositional properties but

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[21] The verb *lihng* in (48b) subcategorizes for a CP and not an NP.

  (48b) [IPa John [VPlihng tsi dou [CP ge[VP heuy a Paul]]]]
    CL *John* *make late arrive* LP *is* CL *Paul*
   'It was Paul who John made arrive late.'

are not entirely one or the other. However, their behaviour remains constant within a certain structure. That is, in one given structure it will act either as a preposition or a verb, but not both. The ability of neutrals to have dual functions could derive from the fact that they possess a feature matrix that contains both verbal and prepositional properties. An alternative explanation is that they are not specified with any features at all but acquire their different interpretations in virtue of the structure that they generate or participate in. I will explore this latter option further in the discussion with BEI in Chapter 6.

4.2 What is the Cantonese 'causative'?

In exploring the BEI-passive we have already partly answered the above question. While the BEI-Causative constructions behave differently than BEI-passive in regards to binding (see examples 25-28, 30, 32, 35), agent-oriented pronoun distribution (30, 45) and properties of BEI (section 4.1), they do share several characteristics. First, the subject NP can serve as an antecedent to an anaphor in a BEI-construction with either a causative or a passive interpretation.

C (49) a) John$_i$ bei a   Paul hoy dou tsgei$_i$ porchan   **passive only**
         John BEI CL *Paul ruin until self   bankrupt*   **interpretation**
         'John$_i$ was ruined by Paul to the extent that he went bankrupt.'

        b) a   John$_i$ bei a Paul$_j$ hoy dou tsgei$_j$ porchan   **causative only**
         CL *John* BEI CL *Paul ruin until self bankrupt*   **interpretation**
         'John let Paul ruin himself into bankruptcy.'

        c) a   John$_i$ bei a Paul$_j$ hoy dou keuih$_i$ porchan   **causative only**
         CL *John* BEI CL *Paul ruin until 3p bankrupt*   **interpretation**
         'John let Paul ruin him till he was bankrupt.'

As shown by (27), elements in A'-positions cannot bind an anaphor. The binding in (49a, c) suggest that the subject of the BEI-phrase in both passives and causatives the occupies an A-position. The causative in (49b) also shows that the NP following the BEI-phrase can serve

as an antecedent to an anaphor in object position. Thus, this position must also be an A-position.

We have already observed that the NP following BEI cannot be omitted in any Cantonese BEI-passive construction. This generalization holds true even for the causative interpretation of the Indirect passive:

C (50) *a John$_i$ bei a ~~Paul~~$_k$ touh - jo ga che$_j$
       CL *John let*   *steal* - PFV *car*
       'John$_i$ let *e* steal the car$_j$.'

(50) shows that the causee NP after BEI cannot be omitted. Since *John* is not the possessor of the object, it must be an independent argument rather than a raised possessor. Where (50) is interpreted with causative semantics, there are three separate arguments and theta roles: Causer, Causee and Theme. The Causee and the Theme roles are related to the lower verb *touh* 'steal', while the Causer role is introduced by BEI. We can surmise that because the object can remain in-situ, Case is properly satisfied on the object NP. Thus it seems that the lower verb has not lost its ability to assign Accusative case, allowing the object to remain in-situ. The subject *John* preceding BEI may be argued to receive structural case in [spec, IP]. Thus again, it is BEI which seems to be case-marking the NP which follows it. However, unlike BEI-passive, it is possible for an aspectual marker to intervene between BEI and the Causee NP. BEI-causative can be modified by an aspectual affix. This has already been shown in (46a), repeated below:

C (46) a) John bei- jo keuih cheuk gaai.
          John let -PFV *him go-out street*
          'John has let him go outside.'

The intervention by other modifiers, like a time adverbial, is still not possible, as exhibited by (10b) and (51). I will return to this in a later section.

C (51) * John bei kumyak keuih cheuk gaai.
　　　　John let yesterday him go-out street
　　　　'John let him go outside yesterday.'

Causation augments the theta grid of the verb by the introduction of a Causer. Example

(30) above has already demonstrated that the subject NP *John* does have volition in these

types of sentences, and is in fact the Causer of the event rather than a Patient. The

introduction of theta roles are usually accomplished by lexical categories such as verbs.

Verbs are also capable of assigning Case to NPs. From the examples, BEI-causative is seen

to be consistent with other causative constructions in being able to introduce an extra theta

role. For all the examples we have considered so far, BEI-causative behaves like a lexical

causative verb in its semantic interpretation and ability to participate in tests for verbs.

The chart below summarizes the properties of BEI-passive and BEI-causative.

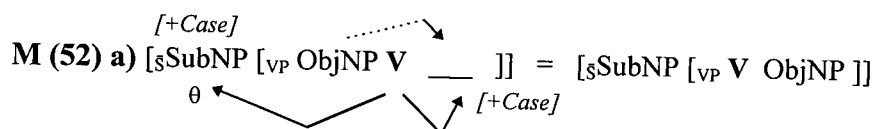| Table 1	Passive BEI	Causative BEI	Example
Subject NP can bind a possessive pronoun in Object position	✓	✓	25
Subject NP can bind a local self-anaphor in Object position	✓	✗	26c
Subject NP *must* be co-referential with Object NP	✓	✗	22b
NP after BEI can bind a possessive pronoun in Object position	✗	✗	32c
NP after BEI can bind a local self-anaphor in Object position	✗	✓	32b, 40
Subject NP can be analyzed as raised possessor	✓	✗	33a
NP after BEI can be modified by agent-oriented adverb	✓	✓	30b
Subject NP can be modified by agent-oriented adverb	✗	✓	30a
Object NP (all or possessor only) must move out of base-position	✓	✗	33, 36
Phrase has 3 identifiable theta roles	✗	✓	22b
BEI-phrase is an optional adjunct	✗	✗	35
Participates in tests for verbs (i.e. aspect, A-not-A...etc.)	✗	✓	44, 46
Cannot be stranded without a following NP	✓	✗	13c
BEI + NP can be separated by an Aspect marker	✗	✓	44a, 46a

In light of these facts, it might be plausible to analyze BEI-causative as a verb since it can

behave like one, unlike BEI-passive. However, even if we conclude that BEI-causative is

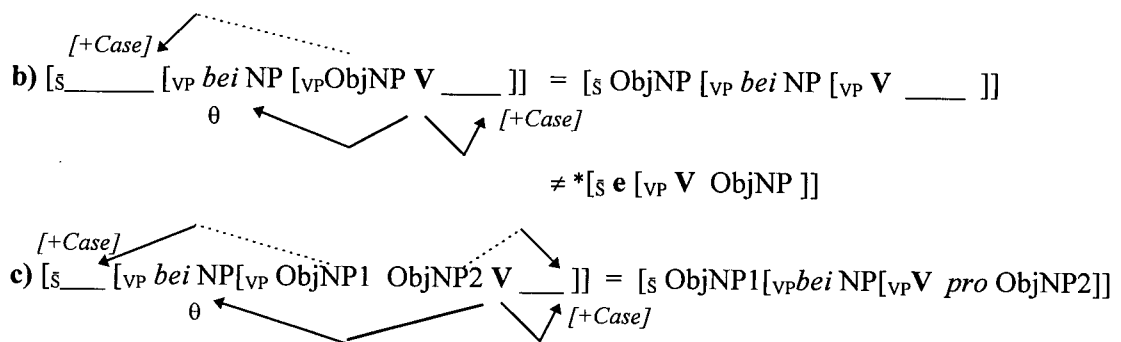verbal we cannot propose the same for BEI-passive. As exemplified by (44) it clearly does

not behave like a verb. We also mentioned earlier that there is no objection to analyzing BEI-passive as prepositional in Cantonese due to the fact that the Agent is never omitted (except with the use of *beih*). But on the other hand, we cannot argue that BEI-causative is a functional preposition either because is <u>needs</u> to be able to retain the functions of a verb, as seen in (46). The categorical status of BEI has been hotly debated precisely due to its dual characteristics of having prepositional and verbal properties, depending on the environment it is used in and what its semantics are. One possible solution to this dilemma might be to argue that there are two different BEIs; one is verbal (corresponding to BEI-causative), the other is prepositional (corresponding to BEI-passive). I will consider these possibilities as I examine the tree structures of the BEI-construction in the following sections.

Chapter 5: Previous Analyses of the BEI-construction

Although there is currently no published analyses of Cantonese BEI-constructions, it would be helpful to compare how the BEI-construction is dealt with in Mandarin. In this chapter I will briefly review two analyses of BEI in Mandarin.
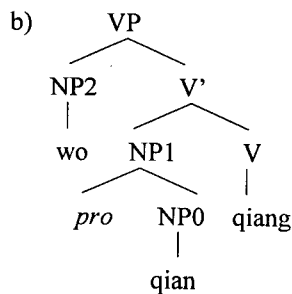
A.Y.H. Li (1990) proposes the Mandarin BEI-construction is a passive and that it involves NP-movement. Her analysis was based on two assumptions about Chinese: 1) Chinese is head-final in D-structure; and 2) Case assignment is to the right of the verb, while theta role assignment is to the left. Using her tests mentioned in Example 44, above, she concludes that BEI is neither a preposition or a verb. Rather, it is a kind of identifier which signals a passive. She treats the BEI+NP phrase as an argument. The following illustrates how her system works.

M (52) a) [$_S$SubNP [$_{VP}$ ObjNP V ___]] = [$_S$SubNP [$_{VP}$ V ObjNP]]

[+Case]

θ

[+Case]

b) [s___ [vp *bei* NP [vpObjNP V ___]] = [s ObjNP [vp *bei* NP [vp V ___]]

[+Case]

θ   [+Case]

≠ *[s e [vp V ObjNP]]

c) [s___ [vp *bei* NP[vp ObjNP1 ObjNP2 V ___]] = [s ObjNP1[vp*bei* NP[vpV *pro* ObjNP2]]

[+Case]

θ   [+Case]

(52a) is an example of an active sentence, while (52b, c) are passive *bei*-sentences. A. Li

argues that all the NP arguments must be generated to the left of the verb for proper theta role

assignment. In example (52a), the Agent θ-role is being assigned to what she terms the

"subject" position. The subject NP is also base-generated in this position. I assume the

"subject" position means [spec, IP] in GB theory. In this position the NP can receive

structural Case. However, the object NP must move to the right of the verb in order to get

Case. In (52b), a regular passive sentence, A. Li argues that the Agent θ-role is being

assigned directly to the *bei*+NP phrase. Because the θ-role is not being assigned to [spec, IP],

it becomes a non-theta position. Therefore, the object has an option to move into this

position. According to A. Li's analysis, the object is forced move into the position because

there are no expletives in Mandarin. If the object does not move into sentence initial position

the Extended Projection Principle would be violated. A. Li proposes the (52c) represents a

"source double object structure." These cases look very much like the Indirect passives

observed in Cantonese. NP1 is the possessor while NP2 is the object possessed. Because 2

Case positions are available both NPs can move to satisfy its Case requirement. To ensure

that it is NP1 which raises and not NP2, A. Li appeals to the following structure (her

examples #46 and #47), where *pro* is in the specifier of NP2:

#46) a) Ta qiang wo qian
        he rob me money
        'He robbed me of my money.'

b)

```
          VP
         /  \
       NP2   V'
        |   /  \
       wo  NP1   V
          /  \   |
        pro  NP0 qiang
              |
             qian
```

#47) Zhangsan bei wo qiang le   [*pro* qian]
      Zhangsan by me rob ASP   *money*
      'Zhangsan was affected by the fact that I robbed him of his money.'

A. Li (1990: 179-180)

Under the structures proposed by A. Li, NP2 cannot move to sentence initial position because then *pro* could not be identified. The sentence would thus be ungrammatical. If, however, NP1 moves, then *pro* would be identified with NP1, whereby deriving a possessor-relation.

A. Li's analysis faces several problems. First, the dichotomy of Case and θ-role assignment is surprising. Why must θ-roles be assigned in one direction while Case assignment is done in the opposite direction? In current theories, such as GB theory, direct Case assignment correlates with theta role assignment. In order for object NPs in her system to satisfy Case, downward movement is forced. Not only is downward movement problematic, but it is unclear what and where the postverbal position is. Perhaps we can assume that while the tree structure is being built up, an empty position is specifically generated after the verb in order to allow for movement of the object later. However, (52b) shows that the object does not necessarily need to move into this position. Generating a position that may or may not be used later in the derivation runs counter to economy principles, which create positions only if they are required by the structure. If the postverbal position is not generated as the structure is being built up, but only comes into existence later

when the object moves there, the 'extension principle' (Chomsky 1995:327) would be violated. This principle guarantees cyclicity in a derivation because it prohibits the returning back to an earlier stage of a derivation and building more structure.

Second, it is unclear how the generation of *pro* in the specifier position of NP2 is justified. How come there is no *pro* in the specifier of NP1?

A final less serious note, although she concludes that Mandarin BEI is not a verb, she nonetheless labels the [*bei*+NP] phrase as a VP (example 52).

Additionally, A. Li's analysis says nothing about the causative type structures that can be generated with Cantonese BEI. In light of this, her proposal cannot adequately deal with the BEI-patterns we observe in Cantonese.

Next, let's consider an analysis by Ting (1993). He agrees with A. Li that the Mandarin BEI-construction is passive but proposes that BEI is a verb. It assigns a theta role to the matrix subject which is based generated and not NP-moved. He argues that the BEI-construction is bi-clausal because of the following example (his example #6):

> #6) Zhangsan$_i$ bei wo da - le ta$_i$ yixia
> *Zhangsan* BEI *I   hit* -ASP *he once*
> 'Zhangsan was hit once by me.'

Ting (1993:243)

Ting argues that binding of the pronoun would be impossible because of Principle B of the Binding Theory if the BEI-construction was mono-clausal. However, his claim regarding the grammaticality of #6 is questionable. A. Li gives a similar sentence to argue that the BEI-construction is mono-clausal (A. Li's #50):

> #50) *Ta$_i$ bei wo qiang le   ta$_i$.
> *he by me rob* ASP *he*
> 'He was affected by the fact that I robbed him.'

A. Li (1990:180)

From the Cantonese example (32a) above, it was shown that the subject NP can bind an anaphor in object position. This type of behavior also sheds doubt into Ting's claim that the BEI-passive construction is bi-clausal.

Putting the aside the question of grammaticality judgments, Ting's analysis also hinges on the proposal that the BEI-phrase selects for a CP complement. A null operator sits in the head of the CP and A'-binds any arguments (overt or covert) in the object position.

The structures I posit for the *bei*-construction in Chinese are given in (27).

(27) a. Non-gapped direct:

Zhangsan$_i$ bei [$_{CP}$ O$_i$ [wo da - le   ta$_i$]]]
     BEI   *I hit*-ASP *he*
'Zhangsan was hit by me.'

b. Gapped direct:

Zhangsan$_i$ bei [$_{CP}$ O$_i$ [wo da - le   *pro*$_i$]]]
     BEI   *I hit*-ASP
'Zhangsan was hit by me.'

c. Indirect (with retained objects):

Zhangsan$_i$ bei [$_{CP}$ O$_i$ [wo da - le   ta$_i$ haizi]]]
     BEI   *I hit*-ASP *he child*
'Zhangsan was affected by my hitting his child.'

...I propose that the null operator, which forms a SPEC-head agreement chain with C in the predicate, agrees with the subject and that the predication relation between the matrix subject and the CP complement of *bei* is therefore licensed...The hypothesis that the null operator ensures the predication relation between the matrix subject and the CP complement of *bei* is supported by the obligatory coindexation relation that holds between the matrix subject and the element in the embedded clause taken by *bei*.

Ting (1993: 245, 247)

Ting's analysis is attractive for a couple of reasons. Firstly, it correctly predicts the possessor-relation in Indirect passives. Secondly, his structures can be easily modified to generate a causative BEI-sentence. All that needs to be done is to say that the verb *bei* in sentences with causative semantics specifically assigns a Causer θ-role and no null operator exists. The BEI-construction is still bi-clausal, but whether it selects for a CP or an IP is not crucial. However, this type of analysis faces one serious problem if it is carried over into

Cantonese. As pointed out earlier, example (32a) shows that the subject NP can serve as an antecedent to an anaphor in object position. If we adopt Ting's structure, the subject NP and the null operator would both be co-indexed with the anaphor. However, operators in A'-positions cannot bind anaphors. This was exhibited in my earlier example (27). Therefore, Ting's analysis cannot be carried over into Cantonese either because it is dependent on an A'-binding approach.

In the next chapter I will discuss possible tree structures for the BEI-construction in order to arrive at an analysis which will handle the range of phenomenon we have observed in Cantonese. First, we need to consider the range of positions where BEI could be base-generated.

Chapter 6: The Structure of the BEI-construction

6.1 The Interaction of Time adverbials, Instrumentals and Patient: Review of Li (1990)

Li (1990) attempts to manipulate the positions of time adverbs, instrumentals and patients with respect to each other to argue that BEI resides outside of the VP. The following are her examples for Mandarin (I have corrected some typos) taken from her book Order and Constituency in Mandarin Chinese (pp.169-170). She uses the BA-construction which preposes the object NP before the verb and allows it to have greater freedom of movement in the phrase as compared to a normal V+NP structure:

(32) a. Tufei zai natian yong dao henhende ba tade erzi sha le
bandit at that day with knife cruelly BA *his son kill* ASP
'The bandit killed his son with a knife cruelly on that day.'
b. Tufei zai natian henhende yong dao ba tade erzi sha le
at that day cruelly with knife BA *his son*
c. Tufei zai natian ba tade erzi henhende yong dao sha le
at that day BA *his son cruelly with knife*
d. Tufei zai natian yong dao ba tade erzi henhende sha le
at that day with knife BA *his son cruelly*

e. Tufei zai natian henhende ba tade erzi yong dao sha le
　　at that day　cruelly BA *his　son with knife*

f. Tufei zai natian　yong dao henhende ba tade erzi sha le
　　at that day with knife cruelly BA *his　son*

g. *Tufei yong dao zai natian henhende ba tade erzi sha le
　　with knife at that day cruelly BA *his son*

h. *Tufei henhende zai natian　yong dao ba tade erzi sha le
　　cruelly　at that day with knife BA *his son* .

The examples in (32) show that the manner adverbial 'cruelly', the instrument 'with a knife', and the patient 'son' do not have fixed word order with respect to each other. However, the time expression 'that day' does not have the same freedom of word order. It must precede the manner adverbial, instrument, and patient. This difference is position can be straightforwardly captured by the generalization that time adverbials occur outside the VP but the others occur within the VP...Similarly, a *bei* phrase has a fixed order with respect to a

patient, an instrument, and a manner adverbial:

(33) a. Ta bei　tufei　yong dao henhende ba tade erzi sha　le
　　he by bandit　with knife cruelly BA *his　son　kill* ASP
　　'He was affected by the fact that his son was killed by a bandit cruelly with a knife.'

b. Ta bei tufei ba　erzi henhende yong dao sha　le
　　by　　　BA *son　cruelly　with knife*

c. Ta bei tufei henhende ba erzi yong dao sha　le
　　by　　　*cruelly* BA *son with　knife*

d. *Ta yong dao bei tufei　　ba erzi sha le
　　with knife by bandit BA *son*

e *Ta　ba　erzi bei　tufei　　yong dao sha le
　　BA *son　by bandit　with knife*

f. *Ta henhende bei　tufei ba　erzi sha le
　　cruelly　by bandit BA *son*

The sentences in (33) show that [*bei* NP] occurs outside the VP. It does not occur after the patient NP (*ba* NP), instrument, or manner adverbial. If [*bei* NP] occurs outside the VP, we expect it to have free word ordering with respect to time adverbials, which is the case:

(33) g. Ta zai natian　　bei ren sha　le
　　he at that day by man kill ASP
　　'He was killed on that day.'

h. Ta bei ren zai　natian sha　le
　　he by man at that day kill ASP
　　'He was killed on that day.'

(A. Li 1990: 169-170)

If we adopt A. Li's approach into Cantonese, we expect to derive the same set of results.

Compare (48a-h) with her (32a-h) example. (I have omitted a corresponding (48f) because Li has repeated her (32a) as (32f) again).

C (53) kumyuk keuih gouyi youŋ hup ba ji tseuŋ soumai
    yesterday 3p *intentionally use box* BA CL *gun hide*
    'Yesterday, he intentionally used a box to hide the gun.
    'Yesterday, he used a box intentionally to hide the gun.
    'Yesterday, he intentionally hid the gun (by) using a box.
    'Yesterday, he hid the gun intentionally (by) using a box

a) keuih kumyuk youŋ hup gouyi ba ji tseuŋ sou - mai
  SUBJ. TIME INSTR. MANN.   OBJ.   V

b) keuih kumyuk gouyi youŋ hup ba ji tseuŋ sou - mai
  SUBJ. TIME MANN. INSTR.   OBJ. V

??c) keuih kumyuk ba ji tseuŋ gouyi youŋ hup sou - mai
  SUBJ. TIME OBJ.   MANN. INSTR. V

d) keuih kumyuk youŋ hup ba ji tseuŋ gouyi sou - mai
  SUBJ. TIME   INSTR.   OBJ. MANN. V

e) keuih kumyuk gouyi ba ji tseuŋ youŋ hup sou - mai
  SUBJ. TIME MANN. OBJ.   INSTR.   V

✓g) keuih youŋ hup kumyuk gouyi ba ji tseuŋ sou - mai
  SUBJ. INSTR. TIME MANN.   OBJ. V

✓h) keuih gouyi kumyuk youŋ hup ba ji tseuŋ sou - mai
  SUBJ. MANN. TIME INSTR.   OBJ.   V

i) keuih gouyi youŋ hup kumyuk ba ji tseuŋ sou - mai
  SUBJ. MANN. INSTR. TIME   OBJ. V

j) keuih gouyi youŋ hup ba ji tseuŋ kumyuk sou - mai
  SUBJ. MANN. INSTR. OBJ.   TIME V

*k) keuih gouyi youŋ hup ba ji tseuŋ sou - mai kumyuk
  SUBJ. MANN. INSTR.   OBJ.   V   TIME

*l) kumyuk keuih youŋ hup ba ji tseuŋ sou - mai gouyi
  TIME SUBJ. INSTR.   OBJ.   V   MANN.

*m) kumyuk keuih gouyi ba ji tseuŋ sou - mai youŋ hup
  TIME SUBJ. MANN. OBJ. V   INSTR.

*n) gouyi keuih ba ji tseuŋ youŋ hup sou - mai
  MANN. SUBJ. OBJ.   INSTR. V

*o) ba ji tseuŋ keuih gouyi youŋ hup sou - mai
  OBJ.   MANN. INSTR. V

TIME = time adverbial
INSTR. = instrumental

MANN. = manner adverb
OBJ. = object

THM = theme
SUBJ. = subject

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As expected, (53a-e), like Li's (32a-f) are fine, with the time adverbial, manner adverb and instrument having free word order related to each other. The only exception is (53c) which sounded very unnatural to my consultants, perhaps because the object has been displaced too far from the verb. However, (53g) and (53h) are also acceptable, contrary to Li's claim. In fact, as (53i, j) shows, the time adverbial can be placed directly before the verb. (53k, l, m) illustrate that the only restriction seems to be that these modifiers must precede the verb. Because of the use of the BA-construction, the object must obligatorily precede the verb. In normal sentence patterns where the object follows the verb, tests to show whether the modifiers can precede the object would be irrelevant because the sentence will always be ungrammatical with these modifiers coming after the verb. However, speakers have noted that it is more 'natural' to have the time adverbial out in the front of the sentence, before the subject, rather than after it. In fact, this position seems reserved for the time adverbial only. (53n, o) show that the instrument, manner adverb, and the preposed object cannot precede the subject. From (53) we can speculate that time adverbials can occur freely anywhere in the sentence as long as it precedes the verb. Manner and instrument are restricted to the domain between IP and V. However, we do not know at this point whether they occur outside or inside the verb phrase. Tests involving a modal *wuh* 'will' may help to clarify this situation. I will be treating the modal as a kind of inflection which occupies the head of IP.[22]

C (54)   a) tingyuk keuih wuh   gouyi   youŋ sɛk da- laahn   ga che
             tomorrow 3p *will intentionally use stone hit-damage* CL *car*
             'Tomorrow, he will intentionally use a stone to damage the car.'

          b) keuih tingyuk wuh   gouyi youŋ sɛk da- laahn   ga che
             SUBJ. TIME   MOD MANN. INSTR.   V

---

[22] Alternatively, it can head its own Modal Phrase (ModP) inside IP.

c) keuih   wuh tingyuk gouyi   youŋ sɛk da- laahn   ga che
    SUBJ. MOD TIME MANN. INSTR.   V

d) keuih tingyuk wuh youŋ sɛk gouyi   da - laahn   ga che
    SUBJ. TIME MOD INSTR. MANN. V

e)* keuih youŋ sɛk wuh   gouyi   da-laahn ga che
     SUBJ. INSTR. MOD MANN. V

f)? keuih gouyi   wuh youŋ sɛk da-laahn ga che
     SUBJ. MANN. MOD INSTR. V

(54a, b, c) demonstrate that the time adverbial can occur freely before and after the modal as predicted. Comparison of (54c) with (54d) shows that manner and instrument have no fixed word order with respect to each other when they occur after the modal. However, when the instrument precedes the modal the sentence becomes ungrammatical, as in (54e). Speakers are uncertain of their judgments for (54f), where the manner adverb precedes the modal. Some of the time it sounds acceptable, while at other times it is not. A possible intended meaning would be something like, "He is intentionally _planning_ to use a stone to damage the car" where the emphasis would be on the 'intention' of the event. However, there is no question that the sentences where the manner and instrument are located after the modal are acceptable. From this, we may speculate that manner and instrument occur somewhere below the IP but before V. A. Li's suggestion that they are confined within VP (or _v_P) may be correct. This is logical since manner and instrument are predicative modifiers. Because time adverbials, being sentential modifiers, seem to have a relatively free distribution they are not good tests for structural location of items within a phrase.

    As a side note, negation always precedes the modal:

C (55) a) tingyuk keuih _mh_-wuh   gouyi   youŋ sɛk da- laahn   ga che
        tomorrow 3p _not-will intentionally use stone hit-damage_ CL _car_
        'Tomorrow, he will not intentionally use a stone to damage the car.'

b) keuih tingyuk <u>mh</u> - wuh gouyi youŋ sɛk da- laahn ga che
    SUBJ. TIME   NEG MOD MANN. INSTR. V

c) keuih <u>mh</u> - wuh tingyuk gouyi youŋ sɛk da- laahn ga che
    SUBJ. NEG MOD TIME   MANN. INSTR.   V

d) keuih tingyuk <u>mh</u> - wuh youŋ sɛk gouyi da - laahn ga che
    SUBJ. TIME NEG MOD INSTR. MANN.   V

We shall see in the ensuing discussion that manner adverbs may venture out of the verb

phrase depending on certain circumstances.

In sum, the previous discussion has identified the fact that the adverbials of instrument

and manner generally occur in a position which is below the IP projection but above the V-

head. Time adverbials appear to have a relative freedom in word order. Where they precisely

are base-generated are indeterminate at this point.

<u>6.1.1 BEI and the Interaction with Modifiers</u>

Assuming that manner and instrument cannot occur higher than IP, we can use their

interaction with the BEI phrase to determine where BEI might be generated.

C (56) a) keuih wuh   gouyi   sik-sei di toen   *Active*
            3p *will intentionally eat-all* CL *candy*
            'He/she will intentionally eat up all the candy.'

b) di toen wuh BEI keuih gouyi   sik-sei   *Passive*
    THM MOD   AGT MANN. V
    'The candy was all eaten up by him.'

c)* di toen BEI keuih wuh   gouyi   sik-sei
       THM   AGT MOD MANN. V

d)* di toen BEI wuh keuih gouyi   sik-sei
       THM   MOD AGT MANN. V

e)* di toen wuh   gouyi BEI keuih sik-sei
       THM MOD MANN.   AGT V

f)* di toen gouyi   wuh BEI keuih sik-sei
       THM MANN. MOD   AGT V

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The passive of (56a) is rendered by (56b). The sentence is fine when the modal precedes the BEI-phrase. However, if the modal intervenes between BEI and the agent NP, or if it follows the BEI-phrase, the sentence is uninterpretable, (56c, d). Sentences (56e, f) are also ungrammatical, as should be expected. We have already seen from (30) that an agent-oriented adverb such as *gouyi* 'intentionally' cannot precede the BEI phrase in a passive interpretation. The reason behind this is perhaps because the Agent NP always follows BEI. This adverb might require a local c-commanded relation with its controller (the Agent) in order to be licensed. If we substitute the examples with an instrumental modifier we would achieve the same results in grammaticality. An instrument cannot precede the BEI-phrase presumably because it is too far from the verb to be locally controlled by it, and thus cannot modify the verb.

C (57) a) keuih wuh yoeŋ geuk tek-laahn ga che   *Active*
           3p *will use foot kick damage* CL *car*
           'He/she will use his/her foot to kick the car until it is damaged.'

       b) ga che wuh BEI keuih yoeŋ geuk tek-laahn   *Passive*
         THM MOD   AGT MANN. V
         'The car will be damaged by him through kicking.'

       c)* ga che BEI keuih wuh yoeŋ geuk tek-laahn
           THM   AGT MOD MANN. V

       d)* ga che BEI wuh keuih yoeŋ geuk tek-laahn
           THM   MOD AGT MANN. V

       e)* ga che wuh yoeŋ geuk BEI keuih tek-laahn
           THM MOD MANN.   AGT V

       f)* ga che yoeŋ geuk wuh BEI keuih tek-laahn
           THM   MANN. MOD   AGT V

From (56) and (57) we can tentatively conclude that BEI-passive must be generated below IP but before the sites for the manner and instrument modifiers. Assuming that these modifiers

are confined within VP (or *v*P), BEI would occupy a position just above the verb phrase, but below the IP.

Turning to BEI-causative, it seems to interact with predicative modifiers and the modal in the same way as BEI-passive does. However, in these structures it is possible to have the manner adverb precede the BEI phrase because there is a volitional agent NP that can c-command and locally control it. However, the semantics of the sentence would be altered (compare (58a) and (58c). If the manner adverb can precede BEI, and BEI precedes the verb phrase, then this seems to run counter to Li's claim that manner adverbs are restricted to the verb phrase. This is not necessarily the case if we postulate that BEI-causative **is** a verb and the manner adverb is generated within the BEI-phrase. This property supports the suggestion that BEI-causative is actually a verb.

C (58)[23] a) ngoh wuh bei keuih$_i$ gouyi   tseetmor keuih tsgei$_i$ *Causative*
          1p *will let* 3p *intentionally*   *depress* *him* *self*
          AGT$_1$ MOD AGT$_2$ MANN.   V   THM
          'I will let him feel sorry for himself intentionally.'
          (i.e. he is making himself depressed by his own free will)

        b)* ngoh bei keuih$_i$ wuh   gouyi   tseetmor keuih tsgei$_i$
           AGT$_1$ AGT$_2$ MOD MANN.   V   THM

        c) ngoh wuh   gouyi bei keuih$_i$ tseetmor keuih tsgei$_i$
          AGT$_1$ MOD MANN. AGT$_2$ V   THM
         'I will intentionally let him feel sorry for himself.'
         (i.e. I want him to continue to be depressed)

        d) ngoh gouyi   wuh bei keuih$_i$ tseetmor keuih tsgei$_i$
          AGT$_1$ MANN. MOD AGT$_2$ V   THM

---

[23] There are no corresponding examples in Mandarin because the Mandarin BEI-construction has no causative interpretations associated with it.

From (58b) we maintain that BEI-causative, like BEI-passive cannot precede the modal. This would suggest that both BEIs may be generated in similar structures. We turn to a formulation of the trees for BEI in the next section.

6.2 The BEI tree

We have so far determined that the BEI-passive involves a verb and its object[24]. Thus we minimally need a structure such as Figure (1.1). At this point, I am making an assumption that has yet to be confirmed that only transitive verbs can participate in a passive construction. If so then I adopt Chomsky (1995) and posit a structure such as (Fig.1.2) where there is a light verb v projection. Chomsky notes that this projection houses a verbal affixal feature. To make this more concrete suppose that it is a 'transitivizing' feature which allows the verb to assign ACC case[25]. Therefore, if only transitive verbs can participate in the passive construction then the basic structure must minimally contain the light v projection.

If the structure of (Fig.1.2) is standardly adopted in my analysis, it makes a very strong prediction that only transitive[26] verbs can participate in a BEI-construction. Unaccusatives have no underived subject; intransitives have no underived object; ditransitives[27] (if they exist) have too many arguments. (see the end of Section 4.1for a discussion of double object constructions). So far I have found no examples which disproves my claim.

C (59) a) $[_{IP}keuih_i [_{VP}sei$ -jo $t_i]]$ **b)**$*[_{IP}keuih_i$ BEI $[_{VP}sei$ - jo $t_i]]$ *Unaccusative*
        3p   *die*-PFV   3p   BEI   *die*-PFV
       'He/she died.'   *'He/she was died.'

---

[24] i.e. the transitive class of verbs.

[25] Due to the interaction with passive one might argue that this 'transitivizing' feature is deactivated, or the whole vP node is eliminated (for economy reasons) because passive suppresses the verb's ability to assign Accusative case anyways. I leave this objection as an open question for the time being.

[26] I am using this term to denote verbs which can directly assign Case to maximum one NP.

[27] I am using this term to denote verbs which can directly assign Case to 2 NPs without the necessity of a functional preposition or a coverb.

c) [IPkeuih [VPhaam]]   **b)***[IP ___ BEI [VPkeuih haam]]   *Intransitive*
   3p   *cry*   3p   *cry*
   'He/she is crying.'   *'He/she was cried.'

d) ? [IP a   Paul [VPsooŋ buun su   a John]]
         CL *Paul*   give CL   book CL *John*
      'Paul gave John a book.'

e) [IP a   Paul [VPsooŋ buun su   bey a John]]
         CL *Paul*   give CL   book to CL *John*
      'Paul gave a book to John.'

f)* [IP buun su BEI [VP a Paul sooŋ a John]]   *Ditransitive*
         CL *book* BEI   CL *Paul give* CL *John*
      'The book was given to John by Paul.'

Adopting a Hale & Keyser (1993) system in which lexical relations are associated with

the generation of argument structure, Chomsky argues that the *v*-VP configuration can be

interpretted as the structure whereby the external theta role is licensed[28].

> "The external role is a property of the *v*-VP configuration, and a specifier bearing this role
> is therefore a necessary part of the configuration; a transitive verb assigns an external θ-
> role by definition."
>
>   Chomsky (1995: 316)

---

[28] A similar proposal was explored in Kratzer (1993). She argues that the external theta role is not directly
assigned by the lexical verb head but rather by an inflectional Voice projection generated above VP.
> The first move was to sever the external argument from its verb. The second move was to let the inflectional
> head that is responsible for accusative case introduce the external argument…The fact that the external argument
> must be realized outside of the VP follows from the Realization Principle and the fact that external arguments
> are introduced by inflectional heads.
>
> (55) *The Realization Principle*
>   Arguments of a lexical item must be realized within the projection of that item.
>
> (56) VoiceP

external   Voice'
argument
      Voice VP
           NP   V'
          V   …
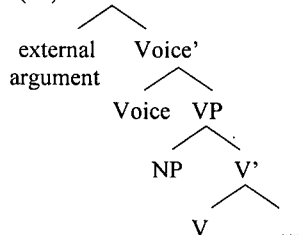
                                                           Kratzer (1994:124)

Her idea of a Voice projection parallels Chomsky's light verb projection, which is an inflectional
(functional) projection. Combined with the suggestion that *v* contains a 'transitivizing' feature which
allows the verb to assign Accusative case once adjoined to *v* we are able to realize Kratzer's suggestion in
a Minimalist framework.

Extending the v-node to include the specifier position we derive (Fig. 1.3), where the subject

is generated. We can argue that such a structure is automatically generated when Selects

chooses transitive verbs from the Numeration and C_{HL} maps them into a derivation. If

passive in Cantonese is syntactic then even in passive structures the v-node is still present,

and the v-VP configuration necessarily licenses the appearance of the external theta role.

Suppression of the external theta role is accomplished at the lexical level. If passive were

syntactic then the [spec, vP] position would already be present and cannot be suppressed in

the syntax. The problem specific to Cantonese then, would not be how to get rid of the agent

in a passive, but rather, how to keep it. As a reflex of the v-VP configuration, which is

naturally part of the lexical structure of all transitive verbs (if Chomsky is correct in his

generalization) we have a means of ensuring that the position of the external theta role is

preserved. This requirement is necessary due to the obligatory-Agent constraint on the BEI-

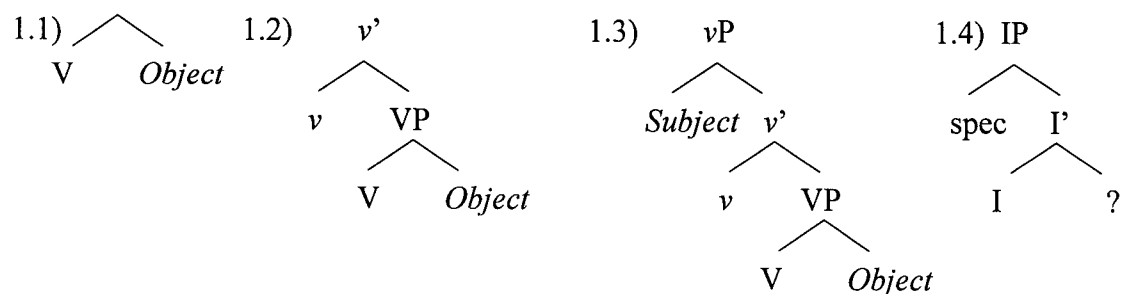construction.

Figure 1: Preliminary Trees

Figure (1.4), with IP used neutrally, would denote the top of the tree structure. However, the

question is what is the complement of I? Is it vP? Continuing from (Fig.1.3) we have several

choices. I will first consider two: (i) BEI, either causative/verb or passive/preposition,

adjoins to vP; vP is the complement of I; (ii) there is another projection above vP containing

BEI, which is responsible for either a causative or passive interpretation; this projection is the complement of I.

6.2.1 Proposal 1

Several previous proposals have aimed at analyzing Mandarin BEI-passive as participating in a serial verb configuration (Chu 1973; Cheng 1988; Matthews &Yip 1994). BEI is the first member of a the serial construction (called the 'coverb'). BEI and its complement NP are adjoined to the verbal projection. For passive interpretations, BEI+NP would be a prepositional projection; for causative, BEI+NP is a verbal projection. These structures are exemplified below.
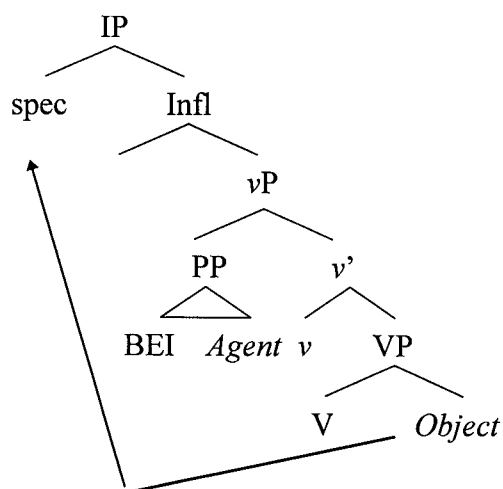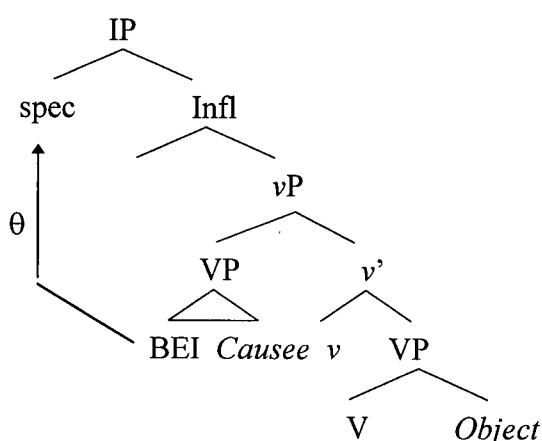
Figure 2: Proposal 1: *Passive BEI*   **Figure 3:** Proposal 1: *Causative BEI*

Although the BEI-phrase is situated within *v*P, these structures do not necessarily pose a difficulty regarding the interaction of BEI with manner and instrumental adverb phrases. We can bypass this hazard by stipulating that these modifiers are generated no higher than *v*'. However, I argue that Figures 2 and 3 could not be the correct structures for BEI because of two real problems.

Firstly, it is undesirable to stipulate two BEIs which differ in category but not in structural positions or functions. These two BEIs seem to serve the same function of Case marking the NP that follows it. Although it is tempting to segregate BEI-passive and BEI-causative because of their differences in interpretation and the properties listed in Table 1, it is apparent from the discussion in Section 4.1.5 that there is no concrete evidence that prepositions and verbs are separate categories. There are other items which behave much like BEI does. We would be led to stipulate two homophonous expressions, corresponding to the appropriate category, for these items as well.

Secondly, and more seriously, (60) below demonstrates that several binding facts do not obtain if we adopt the structures in Figures 2 and 3.

C (60) a) a John$_i$ bei a Paul$_j$ touh - jo ga che   **Passive**
                 CL *John* BEI CL *Paul steal*-PFV CL *car*
                 'John's own car was stolen on him by Paul.'

        b) a John$_i$ bei a Paul$_j$ touh - jo tsgei$_{*i/j}$ ga che   **Causative only**
                 CL *John let* CL *Paul steal*-PFV *self* CL *car*   (no passive possible)
                 'John let Paul$_j$ steal his$_j$ own car.'

        c) a John$_i$ bei a Paul$_j$ touh - jo keuih$_{i/*j}$ ga che   **Causative only**
                 CL *John let* CL *Paul steal*-PFV 3p   CL *car*   (no passive possible)
                 'John$_i$ let Paul$_j$ steal his$_i$ car.'

As previously mentioned, pronouns and anaphors are governed by different principles of the Binding Theory and must be c-commanded by its antecedent.

Binding Theory
     (A) An anaphor is bound in its governing category.
     (B) A pronoun is free in its governing category.
     (C) An R-expression is free everywhere.

                                             Chomsky (1981:188)

Paul in (60b) should be able to serve as an antecedent for the reflexive in object position because it is within the governing category of the reflexive, and it is the closest available

subject NP. However, Figure 3 does not predict this because *Paul* does not c-command the reflexive and thus cannot serve as a potential antecedent. The NP in [spec, IP] cannot serve as a potential antecedent to the reflexive because it is not contained within its minimal domain. (60c) shows that the causative interpretation must be bi-clausal in order to allow for the co-indexing of the pronoun with the subject in [spec, IP], else a Principle B violation would arise. If causatives are bi-clausal then (60b) is predicted to be ungrammatical because of a Principle A violation: the anaphor is not bound within its minimal domain, the lower IP. However, this is not the case as witnessed by the grammaticality of (60b). For BEI-causative, at least, the structure presented in Figure 3 cannot be correct.

Since the *v*P adjunction analysis for BEI as separate PP and VP categories cannot bypass this complication, let us consider other alternatives.

6.2.2 Proposal 2

Recall from the earlier discussion that there were two possibilities for the expansion of Figure (1.3). The second option is by postulating another projection over *v*P which is responsible for the difference in interpretations for the arguments of *v*P. This maximal projection would be the sister of I. The problems encountered in Proposal 1 can be overcome if we postulate trees of the following configuration:
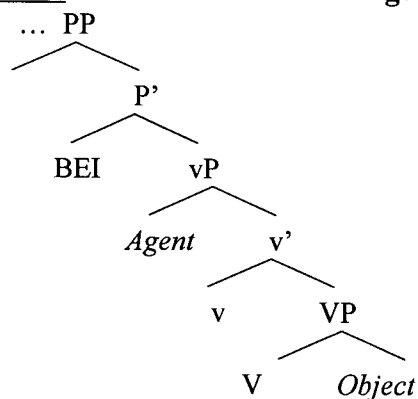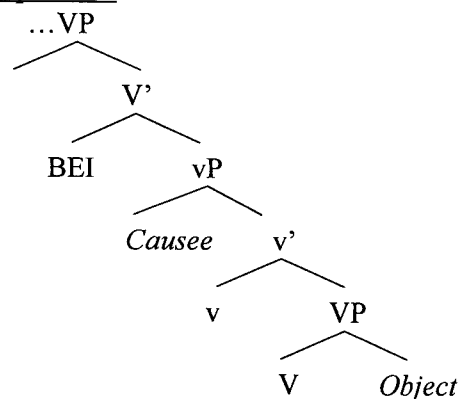
Figure 4: Proposal 2: *Passive BEI*

```
        ... PP
        /    \
             P'
            /  \
         BEI    vP
               /  \
           Agent   v'
                  /  \
                 v    VP
                     /  \
                    V    Object
```

Figure 5: Proposal 2: *Causative BEI*

```
        ...VP
        /    \
             V'
            /  \
         BEI    vP
               /  \
          Causee   v'
                  /  \
                 v    VP
                     /  \
                    V    Object
```

If BEI participated in the structures given above, the binding relations discussed earlier would

obtain. It would no longer be problematic for *Paul* in (60b) to bind the self-anaphor because

the position of the Causee now c-commands the object position. However, we are still left

with the undesirable effect of having to postulate two different BEIs, which occupy similar

syntactic structures. We would also have to argue that the prepositional BEI is somehow

able to produce the effect of a passive by suppression of the Case assigning ability of the

verb. Prepositions in general assign Case, but are not known to suppress it. In an effort to

unify the two BEIs, let's consider another option.

6.2.3 Ritter & Rosen (1993) on 'have'

Another possible solution may be to treat BEI much in the same way that Ritter and

Rosen (1993) treat English 'have', which also has dual characteristics. Consider (61):

E (61) John had Paul steal his car.
        →2 meanings (i) 'John' is the causer.
                      (ii) 'John is the affectee

Ritter and Rosen (1993) attribute this variability in meaning due to *have*'s lack of any

semantic content.

> "...the interpretation of *have*'s argument as causer or experiencer comes from the
> role it plays in the event...The action of a causer marks the beginning point of an
> event...An argument that is interpreted as an experiencer can extend the event
> beyond the termination of action denoted by the predicate...*Have* adds an extra
> participant to the event or state denoted by its complement...Due to its lack of
> semantic specification, *have* cannot project into the syntax as an independent verb
> because it lacks the capacity to assign a thematic interpretation to its argument(s).
> Projection of an unspecified verb would result in a violation of the Principle of Full
> Interpretation (Chomsky 1986) because its arguments could not be interpreted at LF.
> The argument structure operation which combines the argument array of *have* with
> that of an independent predicate salvages the structure by providing a mechanism for
> interpreting the argument(s) of *have*...either the causer or
> experiencer...interpretations arise because adding *have* (and its argument) has the
> consequence of extending the duration of the event denoted by the predicate. There
> are two ways in which an event can be extended to include a new participant outside

the core event - the beginning point can be pushed back, or the endpoint can be opened up by including a non-delimited state."

<div align="right">Ritter and Rosen[29] (1993: 523-524)</div>

Essentially, how their system works, is whenever *have* is selected, it must be combined with another predicate to form a 'complex predicate.' Otherwise, the argument introduced by *have* cannot be fully interpreted. Whether an Experiencer or Causer interpretation is formed depends partly on the nature of the predicate that *have* combines with (i.e. whether it has causative/affected semantics) and partly on the way the event is extended (i.e. backwards or forwards). Ritter and Rosen's proposal is also attractive in that they mention an interesting correlation between *have* and Experiencer interpretations:

> "the experiencer interpretation imposes additional constraints...there must be a coreferential ethical dative or a relation of possession between the subject and some argument of the complement"

<div align="right">(R&R: 526)</div>

This correlation has already been observed in Cantonese Indirect passives. If R&R's arguments for *have* can be carried over into an analysis for Cantonese BEI we would be able to account for its dual characteristics and also predict the possessor-relationship. However, this solution is not tenable for three different reasons.

Firstly, BEI-passive does not introduce any extra argument that can be combined with a following predicate. This is most apparent in the cases involving Regular passives, even if one does want to contend that the possessor in Indirect passives is a separate argument on its own.

Secondly, *have* in English is categorically a verb. It is still indeterminate at this point whether BEI is a verb or a preposition. (44) and (46) above show that it has properties of both.

Lastly, R&R point out that complex predicates can only denote one single event. Because of its impoverished semantic content, *have* does not have any event specification of its own to contribute to the proposition when it is combined with another predicate. Therefore, it should not be possible to negate the event denoted by *have* while confirming the event denoted by the predicate combined with *have* because they are essentially the same event. This contrasts with a true causative verb, such as *make* which has its own event specification, and can be negated. This is shown in (62). Contrast (62a) with *have* and (62b) with *make*.

E (62) a) ✘ Paul didn't have John go outside but he sneakily went outside anyways.
　　　　 b) ✓Paul didn't make John go outside but he sneakily went outside anyways.

If BEI was like *have* in needing to be combined with another predicate in order for its argument to be fully interpretable, we would expect that to get the same results as (62). That is, the event of BEI cannot be negated while the event of the lower predicate is confirmed.

C (63) ✓a Paul mo bei　a　John tseuk gaai butgwo keuih touhtouh-dey tseuk-jo　heui
　　　　　　CL *Paul not* BEI CL *John go-out street　but　　he　　sneakily　go-out*-PFV *go*
　　　　　　'Paul didn't let John go outside but he sneakily went outside anyways.'

(63) shows that this prediction is not borne out. Thus, we cannot provide a parallel treatment for BEI as for English *have*.

Cheng (1988) provides an analysis of BEI-constructions in Mandarin along similar lines as Ritter and Rosen. She treats Mandarin BEI as the first member of a serial verb construction. BEI combines with another predicate and their argument structures are combined.

> I propose to treat the bei-construction as a case of serial verb constructions in Mandarin...the characteristics shared by both the lexical and the syntactic serialization was that the argument structure of serialized verbs are "combined". Following Li, Y.-F. (1988),

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[29] Henceforth R&R

I assume an identification mechanism which pairs up arguments. That is, if V1 has <1, 2> and V2 has <1>, then if <2> of V1 is identified with <1> of V2, then V1 <2> and V2 <1> are assigned the same NP...I propose to treat *bei* as a verb. It takes two arguments, one external (patient) and one internal (agent). When it occurs in the serial verb constructions, its theta-roles are identified with the other verb in a sentence. The identification essentially internalizes the agent theta-role of the other verb while externalized its internal theta-role.

Cheng (1988:18-19)

The central idea behind the use of Cheng's identification mechanism is to combine the arguments of BEI with the arguments of a following predicate in such a way that the arguments switch roles. Example (64) illustrates this procedure.

	patient		*agent*		1	2		1	2
M (64)	John	BEI	Paul	da - le	BEI <John, Paul>		da	<Paul, John>
	John	BEI	*Paul*	*hit*-PFV					
	'John was hit by Paul.'								

In a serial verb structure the arguments of both predicates are combined and only 2 theta roles are assigned to 2 available NPs which are identified with each other. However, what happens in the Mandarin cases where the Agent phrase can be dropped? Cheng suggests that in cases with no overt agent, the BEI+VP sequence is reanalyzed as a single verb instead of a serial verb.

...when the NP following *bei* is null, reanalysis takes place and [bei+V] is reanalyzed as a verb...If [bei+V] is derived straight from the lexicon, there is no reason why the agent role disappears. On the other hand, with reanalysis, it is possible that since the NP following *bei* is null, reanalysis forces identification to discharge both theta-roles.
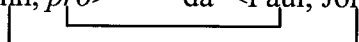
Cheng (1988: 20)

	patient		*agent*		
M (65)	John	BEI	____	da-le	BEI + da → BEI da <John, *pro*>
	John	BEI		*hit*-PFV	
	'John was hit (by someone).'				

Since Cheng argues that no movement actually takes place in BEI-constructions, the null NP after BEI cannot be an NP trace or a wh-trace. The null NP also cannot be PRO because the position after BEI is governed. Therefore, it must be *pro* which takes a discourse antecedent.

Her analysis faces several problems. First, in order for her identification mechanism to work, there must be two different thematic hierarchies: one for BEI and one for the second predicate. While BEI has an external θ-role of Patient, and an internal θ-role of Agent, the exact opposite is true for a predicate such as *da* 'hit', in order for the arguments to be mapped properly with each other. However, in accordance with Theta Theory, a θ-role such as Patient is usually assigned to an internal argument, while the role of Agent is assigned to an external argument, not the other way around.

Second, her reanalysis approach is an ad hoc method of getting rid of the external role of the second predicate when the NP following BEI is null. Consider (66):

M (66)
patient		*agent*			1	2		1	2
John	BEI	____	da - le		BEI	<John, *pro*>	da	<Paul, John>
John	BEI		*hit*-PFV					
'John was hit.'					BEI + da → BEI da <John, *pro*>			

Let's suppose that in the lexicon the serialization of BEI and *da* has already occurred and its arguments are combined as in (64). Reanalysis of this serialized structure must take place once the null argument of BEI is identified with the external role of the second predicate. It is unclear whether the external role of the second predicate must be null as well or if BEI with a null argument can combine with any other predicate. However, why must reanalysis take place in cases with no overt Agent, and how does reanalysis force the discharge of the Agent theta role? If [bei+V] were reanalyzed as a single verb, its structure would preclude any argument, null or overt from intervening between BEI and the second verb. Where then is the Agent θ-role discharged?

Third, what mechanism constrains the serialization of BEI? Can it be combined with any predicate or are there licensing conditions? That is, there is no discussion about which types of predicates are eligible to be combined with BEI.

Lastly, this type of analysis faces the same problem that Ritter and Rosen's analysis has. That is, if the arguments of BEI and another predicate are combined we would expect that there is only one event. We have already seen that this is not the case with the BEI-construction. The negate-event-1/confirm-event-2 test in (63) shows that the events in a BEI-construction seem to be independent of each other.

In addition to these problems, Cheng's analysis has nothing to contribute to the dilemma regarding BEI-constructions which have a causative type meaning. Nonetheless, it would still be desirable to find a unified account for the two seemingly disparate BEIs. We could resort to the earlier suggestion that it is a "neutral", having dual-functions, or we can explore the possibility that something else is affecting the behaviour of BEI. I will start with the latter possibility first in the next Section.

6.2.4 Proposal 3: *Functional* versus *Lexical* Differences

It is clearly desirable, in light of the binding facts, to preserve a configuration similar to Figures 4 and 5, rather than 2 and 3. Before developing another approach, let's reconsider what it is in general that we want the passive and causative BEI structures to accomplish.

Figure 6: <u>Proposal 3:</u> *General BEI-passive*   **Figure 7:** <u>Proposal 3:</u> *General BEI-causative*
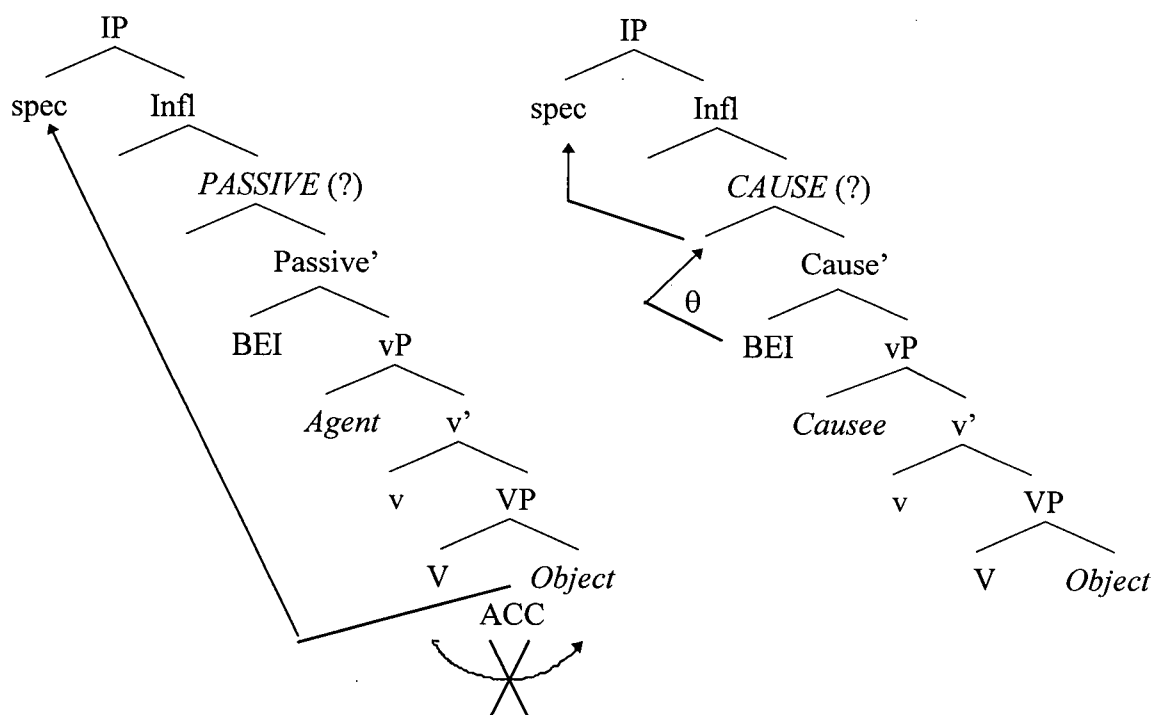
In a passive, I propose that the verb is altered so that it is no longer able to assign Accusative case, forcing movement of the object (or possessor-raising) to satisfy Case. This is exemplified by Figure 6 where the object of the lower V is raised to [spec, IP]. Because no new theta roles or arguments are introduced into the predicate and because the Accusative case assignment property of the verb itself has been altered, I propose that the formation of the passive is a functional process and so a functional projection is projected. The verb does not suddenly lose its ability to assign Accusative case. Case is being suppressed by a higher functional projection which alters the lower verb's Case assigning abilities.

In a causative, the main verb is not altered. The verb retains the ability to assign Case to its object complement, so no movement is necessary. An extra Causer theta role is introduced into the predicate, either by BEI or some other lexical head. The subject of this higher projection (Causer) later raises to [spec, IP]. It is typical of lexical projections, such as

VP[30], to be able to introduce another argument[31], but not of functional heads, such as IP. I argue that this construction, being causative, and being able to augment the theta grid, is lexical.

We may be able to use this Functional / Lexical distinction to obtain the desired effects for the BEI-construction. Consider Figures 8 and 9:

Figure 8: <u>Proposal 3</u>: ∅-*passive*   **Figure 9:** <u>Proposal 3:</u> ∅-*causative*
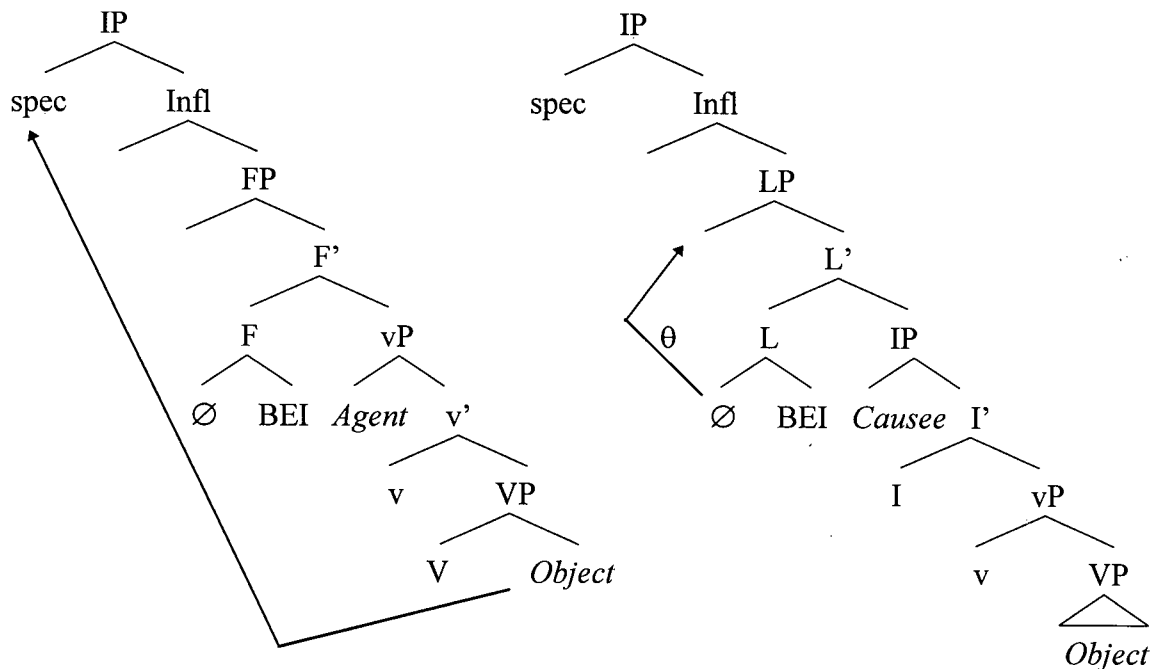
In Figures (8) and (9) the projections which dominate *v*P for passive and causative interpretations are functional and lexical projections, respectively.

To form a passive construction, a functional phrase (FP), containing a null functional head, ∅, is generated above *v*P. The passive function licenses the appearance of this FP. The phonologically null head of FP houses the semantic features of [passive]. It is this functional projection which suppresses the Accusative case assigning ability of the main

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[30] It is the head of lexical projections which introduces the theta role.
[31] See Bresnan (1972), Emonds (1985), and Larson (1988)

verb. This line of argumentation is desirable because we no longer have to stipulate that BEI was a preposition which can suppress Case. The head of FP strictly selects for a transitive verbal projection. This selectional restriction obtains the generalization that an NP always follows BEI. As discussed earlier, the NP would be the external argument of the *v*-VP configuration, which is always the case in transitive verbs.

Along the same lines, a lexical projection, containing a null lexical head, is generated over *v*P to form a causative construction. The extra θ-role is introduced by the phonologically null head ∅ of this lexical projection. The lexical head also selects for a sentential complement (IP) resulting in the bi-clausal structure effect that we observe with the binding of anaphors.

The selectional restrictions of the respective functional and lexical heads make certain predictions regarding the rest of the structure. I will return to this point later.

Where does BEI fit in on all this? Déchaine (1993, and p.c.) suggests that in terms of the categorial features [αNominal, αReferential, αFunctional], which have a unique specification for verbs, nouns, adjectives, etc., prepositions are syntactically transparent. That is, they are not specified for any of these features, if we adopt a privative system. This lack of specification may explain the ability of prepositions to alternate between being able to assign a theta role or not. While lexical prepositions exist there could be another class of 'grammatical prepositions' which have all the syntactic properties of the Lexical head P, but no thematic content (Williams, 1989a), (Déchaine, 1993:65). A Lexical head, such as V or N, can introduce additional argument structure while Functional heads, such as Comp or Tense, cannot. Because prepositions are not positively specified for any category they may

have the ability to be selected for either for a Lexical or Functional projection depending on the type of construction they are in. Rochemont (p.c.) also suggests that perhaps such 'grammatical prepositions' may also lack any semantic content but derive their meaning in virtue of the configuration they are found in. Abney (1987) also notes "Words with no independent semantic content belong to the set of functional categories."

Following along the lines of these suggestions, I propose that BEI is a category-neutral element (negatively specified for category features [-Nominal, -Referential]) and lacks semantic content. Therefore, BEI is a unmarked, functional element able to assign case like a functional preposition such as *for* or *of*. BEI acquires its meaning in virtue of the structure it participates it. Therefore, when it adjoins to a functional projection that has passive semantics, it assumes a passive interpretation; when adjoined to a lexical projection with causative semantics, it assumes a causative 'let' meaning. It is not BEI which affects the predicates of these constructions, but rather the FP and LP themselves. The same functional element BEI is selected for both causative and passive constructions because it is not positively specified for the Lexical/Functional distinction. A question for consideration is why must BEI selected for these two constructions versus something else? It could be the case that there are not other competing functional elements which are negatively specified the way BEI is.

Another question we are faced with would be why do we need BEI if the work is being done by FP and LP? There are two motivations. Firstly, following Chomsky (1995) it is plausible that BEI is a kind of "identifier". For satisfaction of the PF component, BEI is selected for full interpretation of the null causative and passives morphemes. This is the overt phonological 'signal' of a passive or causative construction. Secondly, it has been

assumed that for independently motivated reasons, there is always an external θ-role in the lower VP. As discussed earlier, the NP in [spec, vP] would have no way of getting case through movement since in both structures [spec, IP] is occupied. BEI is required in order for the subject NP to receive Case. BEI is adjoined in a position which can assign Case to the subject NP of the lower verb.

An alternative route that can be pursued is that there is a single BEI, specified as [-Nominal, -Referential]. BEI itself is capable of generating either a functional or lexical projection as the structure requires. We can dispense with the null F and L heads and replace them with BEI instead, thereby simplifying the system. The type of projection generated by BEI would depend on the syntactic structure. If a passive structure is called for then BEI would be selected to extend a functional projection; if a causative structure was needed then BEI would be selected to form a causative projection. This analysis is not equivalent to the one proposed earlier in which there were two different BEIs, a preposition and a verb. There is still only one element BEI, but because it is unspecified for either a functional or lexical distinction it can take on the properties and functions of both without any conflict. Because BEI must necessarily participate in a lexical projection, we can no longer specify that it is only a functional preposition. Instead, under this alternative, BEI is a neutral, underspecified for either distinction. The respective structures would look like Figures 10 and 11:
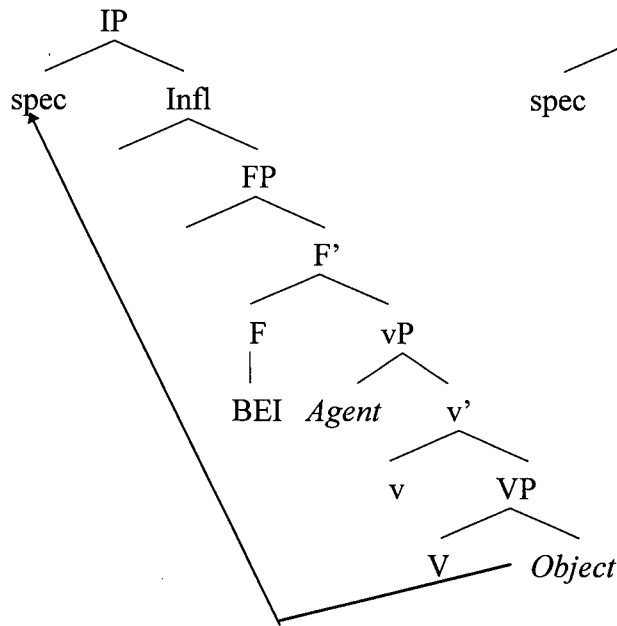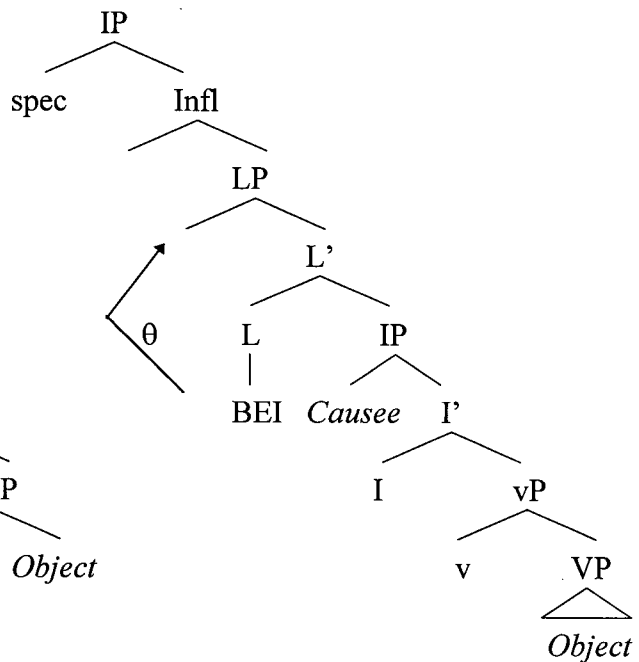
Figure 10: Proposal 3: *BEI-passive*   **Figure 11:** Proposal 3: *BEI-causative*

The advantage with this proposal is that there is no further need to postulate a separate F or L head that is invisible on the surface. BEI is the head of either the functional or lexical phrase, depending on which structure is generated. However, a more detailed investigation into how the mechanisms of this approach can be implemented is required before the proposal can be adopted. At present, both approaches are equally attractive. We no longer need to postulate that the BEI which participates in a passive construction is different from the BEI which participates in a causative construction. For the rest of the paper I will continue to use the null functional and lexical heads for ease of exposition. Also, in Chapter 6, I will discuss whether my analysis can be applied to the Mandarin BEI-constructions as well. By maintaining that a separate Functional or Lexical projection is responsible for the passive and causative interpretations we can maintain that these functions are the equivalent in both dialects except for the form of the element which the respective projections select for. This item is BEI in Cantonese but can be BEI, RANG or JIAO on Mandarin.

6.2.5 Consequences of Proposal 3

We can now address some of the idiosyncrasies of the BEI-construction. Firstly, recall from (46a) that an aspectual marker can intervene between BEI and the following NP in a causative, but not in a passive. This consequence follows in virtue of the structures proposed. Because the causative is a lexical projection it is not impossible for it to also project a functional extension of itself. This functional projection might be similar to the light verb projection. Suppose that LP is able to project a functional Aspect phrase which houses the aspectual markers. This explains why it is possible for BEI-causative to be modified by an aspectual marker, but not BEI-passive. The aspect marker is not actually affixed to BEI but to the head of LP. The speaker gets a sense that the marker is attached to BEI because the head is phonologically null. Normally the lexical head alone would raise to adjoin to the affix and check off its features. However, being adjoined to the L-head, the whole complex L-BEI may be raised and adjoined to the aspectual phrase, much like v-V to T movement in Chomsky (1995). This type of adjunction may yield a structure such as Figure (12)[32].

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[32] If the Aspect selects only for a lexical projection (such as VP) then it could not be projected above another functional projection. The following type of structure could be prevented:
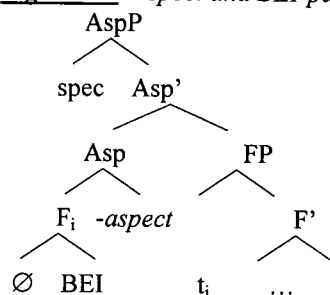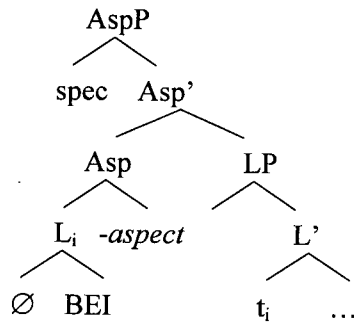
Figure 13: *Aspect and BEI-passive*

```
          AspP
         /    \
      spec    Asp'
             /    \
          Asp      FP
         /  \     /  \
       Fᵢ -aspect    F'
      /  \          /  \
     Ø   BEI    tᵢ    ...
```

Figure 12: *Aspect and BEI-causative*

```
            AspP
           /    \
        spec    Asp'
               /    \
            Asp       LP
           /  \      /  \
         Lᵢ  -aspect   L'
        /  \          /  \
       Ø   BEI      tᵢ   ...
```

This configuration mirrors the *v*-VP configuration. Abstractly speaking, it might be possible to propose that the Aspect projection above LP is equivalent to the light verb projection above VP. That is the Asp-LP configuration is like the *v*-VP configuration. This step is desirable because it would make the lexical projection on par with the verbal projection and we could explain the availability of the extra external theta role position in the same way. On the other hand, the passive FP could never participate in such a structure because it dominates another functional projection (FP-*v*P configuration). Therefore, it is never predicted to be able to assign an external argument θ-role.

Although the structures presented in Figures 8 and 9 adequately account for the range of data so far, they do not predict any constituency between BEI+NP in a passive construction. However, the BEI-phrase does seem to behave like a unit. Although it is difficult to find tests to isolate the constituent, if it exists, there is some evidence in question-answer forms.

C (67) a) <u>A:</u> neih bei   been yuk go da   ga?   <u>B:</u> bei   a Paul!
             2p BEI *which one* CL *hit* Q-PRT   BEI CL *Paul*
             'Who were you beat up by?'   'By Paul!'

    b) <u>A:</u> juebo hey-mey bei   yun   touh - jo?   <u>B:</u> hey! bei a Paul   touh ge!
             jewels is - not BEI *person steal*-PFV   *yes!* BEI CL *Paul steal* PRT
             'Were the jewels stolen by someone?'   'Yes! By Paul.'

(67a) shows that in answer to a question it is possible to respond only with BEI + Agent NP, but not BEI alone or the Agent alone. This constituency is not predicted by the current tree structures.

6.3 A Revision: Proposal 4

Although Proposal 3 can adequately handle the problems encountered in the other proposals, there is another possible structure. These are given in Figures (14) and (15):

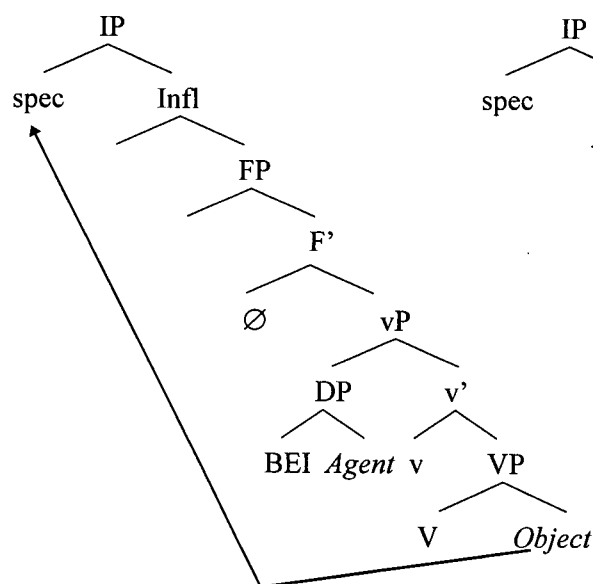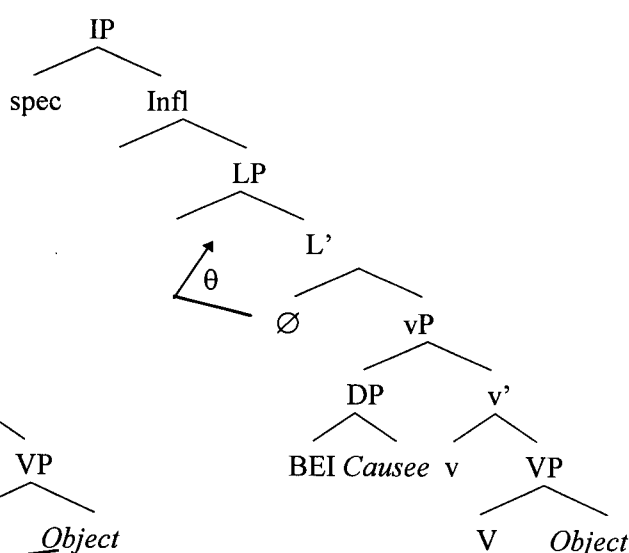**Figure 14:** Proposal 4: $\varnothing$-passive   **Figure 15:** Proposal 4: $\varnothing$-causative

```
        IP                              IP
      /    \                          /    \
   spec    Infl                    spec    Infl
           /   \                           /   \
              FP                              LP
             /  \                            /  \
             F'                            θ    L'
            /  \                          /    /  \
           ∅    vP                       ∅         vP
               /  \                               /  \
              DP   v'                            DP    v'
             / \  / \                           / \   / \
          BEI Agent v  VP                    BEI Causee v  VP
                      /  \                                /  \
                     V   Object                          V   Object
```

The main difference between Figures (8), (9) and Figures (14), (15) is the adjunction site of BEI. In (Fig.14) and (Fig.15) BEI is directly attached to the lower subject NP where it can assign Case directly. Because the mechanism of attachment is adjunction, BEI does not change the category of the maximal projection it is adjoined to. This is crucial because we want to maintain the c-command relation between [spec, vP] and the complement position so that we do not run into binding problems like (61b).

The structures of (Fig.14) and (Fig.15) make a prediction regarding constituency which (Fig.8) and (Fig.9) cannot. Namely, in the revised structure, BEI and the NP are predicted to function together as a constituent. So far, this prediction has been very difficult to test. We cannot use questions as diagnostics because Chinese is an in-situ language, and BEI+NP cannot be topicalized. The question-answer forms given in (67) serve as some evidence. However, for the causative type construction it is more desirable to maintain Figure (9) as the structure because the BEI and Causee NP are separate from each other. This makes it possible for an Aspect marker to intervene, as discussed. (46a) above demonstrates that the perfective aspectual marker -jo can intervene between BEI-causative and the Causee NP.

C (46a) John bei- jo   keuih cheuk gaai.
John let -PFV him go-out street
'John has let him go outside.'

The difficulty with a structure like (Fig.15) is that there is no place for the aspectual marker to be inserted and/or generated between BEI and the NP. This is only problematic for BEI-causatives if we adopt (Fig.15).

In addition, the question-answer form tests used above derive different results when used in an expression with causative meaning:

C (68) <u>A:</u> neih bei-mh-bei a Paul leih-a?   <u>B:</u> bei!   *bei Paul!
   2p let not let CL Paul come PRT   *let   let Paul*
   'Will you let Paul come?'   'Sure!'   'Sure let Paul.'

From (68) there does not seem to be any constituency involved in BEI-causative constructions.

(Fig.14) seems more desirable for BEI-passive because we want to capture the sense that BEI+Agent NP is a constituent. Although BEI, as previously argued, serves the same function in both Cantonese passive and causative constructions, it is possible that it is

generated in different positions for passive and causative. Suppose (Fig.14) is the correct structure for passive interpretations of the BEI-construction, while (Fig.9) is the correct structure for causative interpretations. Although more data and research is required in this area to clarify the issue, the possibility seems plausible. After all, these structures result in different semantic interpretations. It is logical to assume that a difference in structure will reflect a difference in meaning. Maintaining the same structure for both BEI-causative and BEI-passive will not capture the fact that they are indeed different projections, having different properties and interpretations.

Chapter 7: Final Comments

This paper has attempted to show that the Cantonese BEI-construction can have causative and passive meanings. Although it behaves both like a passive (preposition) marker and a causative (verb) marker, there is actually no need to stipulate that it are two different homophonous items that have properties which do not fit neatly into any one category. Previous analyses have not been able to satisfactorily conclude the identity of BEI because they have mainly focused on trying to pinpoint its categorial status. The ambiguity arises precisely because BEI is not positively specified for any category and lacks semantic content. I have proposed that it is due to this unique status that BEI is able to participate in both causative and passive constructions. The discussion would benefit if we can draw parallels between BEI and other 'coverbs' in Cantonese which show similar idiosyncrasies of being both verbal and prepositional. Would it be possible to expand the lexical/function projection hypothesis to account for the difference in behaviour for these items as well?   In

Chapter 8 I will explore this possibility with the Mandarin items *rang* and *jiao* also used for passive and causatives.

One of the main aims of this paper was to explain the reason why the agent could not be omitted in a Cantonese passive. The proposal advanced so far make this a reflex of the syntactic structure. That is, if passive in Cantonese is syntactic, and if only transitive verbs can participate in BEI-constructions, then the *v*-VP configuration that is available would always guarantee that an external argument could be generated. BEI is required to case mark this external argument.

Another alternative way to force the appearance of the external argument might be to use the *manner component* argument as suggested by Hale & Keyser (1993). Chu (1973) and Xiaobo (1991) have argued that a post-verbal element is always required in order to license a passive structure. The post-verbal element can be either an aspect marker or a modifier phrase, or both. For example, (69a) below is ungrammatical, but the same sentence with a verbal modifier is fine, (69b).

C (69) a)* ngoh BEI keuih gik   b) ngoh BEI keuih   gik   dou sei   weyzi
       1p BEI 3p *anger*   1p   BEI   3p *anger until die in-state-of*
      'I was angered by him '   'I was so angered by him till I felt like dying.'

We have already seen that many of the verbs used as examples in this paper are followed by a post-verbal element.

Mandarin		*Cantonese*	
pian - le	(8)	sak sei-jo	(11)
cheat-PFV		*kill die* PFV	
sha si - le	(10)	da sheung	(16), (17), (19)
kill die-PFV		*hit injure*	
da shang	(18)	touh - jo	(22)
hit injure		*steal*-PFV	
chi- le	(9a), (43a)	hoy dou porchan	(49)

eat-PFV

chuban-lė (9d)
publish-PFV

ruin until bankrupt

tek laahn (36)
kick damage

sik sey (56)
eat all

All these modifiers indicate the result brought on by some action from an agent: *sak sei* 'to kill something/someone until dead'; *da sheung* 'to hit something until damaged'; *sik sei* 'to eat something till all finished'. Even the perfective aspect can be viewed in this manner. Some action was undertaken by an agent to arrive at such a state. We can argue, following Hale and Keyser, that these post-verbal elements are externally oriented manner modifiers identified with the manner component of the verb. Therefore, the manner component relates to an external argument. The appearance of the external argument is forced for proper licensing of the manner component of the verb. Further discussion is needed to develop this possibility.

Chapter 8: A Final Comparison with Mandarin

Since this paper started with a discussion of passive in Mandarin, it is only appropriate that it end with one as well. To summarize, I have tried to accomplish the following in regards to the BEI-construction in Cantonese:

i) The prediction that the external theta role will always be present in Cantonese "passives" because the Cantonese passive is a syntactic operation but suppression of the external theta role happens at the lexical level.

ii) The prediction that only transitive verbs can participate in BEI-constructions and the constant presence of the *v*-VP configuration which licenses the external theta role.

iii) The BEI-construction yields not only Passive interpretations but Causative interpretations as well, depending on the type of syntactic structure generated.

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iv) BEI is a category-neutral element devoid of semantic content and underspecified for the Lexical/Functional distinction, so is freely selected for Case reasons in the appropriate structure.

v) The Passive or Causative interpretations in BEI-constructions are generated by the respective null Functional (passive) or Lexical (causative) heads. (Alternatively, it is BEI = L-head or BEI = F-head, depending on the structure it participates it.)

The next section is devoted to the question of whether these findings can be carried over into an analysis for the Mandarin passive. Because the goal of this paper was not to study the BEI-construction in Mandarin I cannot guarantee an absolute answer until further research is done. However, on a preliminary examination the analysis presented is definitely plausible. The most problematic difference to be overcome would be the obligatory presence of an overt Agent after BEI in Cantonese whereas Mandarin appears to have no such constraint. However, an observation made by E.W.Li (1994) may shed light into this issue. She suggests that although the agent may not always be overtly expressed in Mandarin, there is evidence to suggest that it can be present covertly. The following example #57 is taken from page 45 of her thesis:

> Fangzi bei **pro**$_i$ fen gen taziji$_i$ le
> *house* BEI   *allot to himself* PRT
> *'The house was allotted to himself by *pro*.'

> "In the above case, NP *taziji* 'himself' is an anaphor, which requires a binder in an A-position according to Binding Theory. This requirement is not satisfied by any lexical category here. The wellformedness of such a sentence in Chinese entails that there is an empty category present to act as a binder. As no NP or wh-trace is involved and PRO has to be ungoverned, this empty category is a *pro*. However, the above does not hold for English"
>
> (E.W.Li 1994, p.45)

Although this is only one example, it opens up the possibility that the agent is always obligatory in Mandarin as well, whether overtly or covertly. We could also apply her suggestion of a covert agent to cases involving the different toned BEI (*beih*) in Cantonese as

well. That is, the appearance of a non-overt agent *pro* may be licensed by this special form of BEI because it carries a different tone as a phonological signal; *pro* requires BEIH to license it. Rizzi (1986) imposes two conditions on *pro*: 1) it must be licensed; 2) it must be identified. Cheng (1989) proposes that "[Mandarin] *pro* must be licensed by a distinguished functional head". She argues that the Aspect phrase serves to license *pro* in Mandarin, and the discourse context identifies *pro*. The analysis I have presented in this paper argues that BEI-passive is functional in nature. It is possible that BEIH, is "the distinguished functional head" which can license *pro* as a null Agent argument in these constructions. Following Cheng, the discourse context serves to identify *pro*. This initiative creates a generalization that Agents are obligatory in all BEI-constructions in both Mandarin and Cantonese.

As previously noted by Chappell (1996), Mandarin BEI-constructions are never associated with causative meanings although the items *rang* 'let' and *jiao* 'call' can be used in colloquial speech for both the passive voice and the causative. Therefore, these items also seem to behave much in the way that Cantonese BEI does. To show their correlation we can use the same tests as listed in Section 4.1.3 above to see whether *rang* and *jiao* are verbal when they are in sentences where it is possible to have a passive meaning. The following sentence is adapted from Chappell's #38 (1996:1038).

M (70) a) can it take an aspect marker like most verbs?   NO
        (i)* ta *rang / jiao* - le   wo piping - le   yixia
            3p RANG/JIAO -PFV *me criticize*-PFV *once*
            'He had been criticized by me.'

      b) even verbs which cannot take an aspect marker (like the copula) can
         participate in the in A-not-A question form; *rang / jiao* (passive) cannot
           (ii)* ta *rang* bu *rang / jiao* bu *jiao* wo piping - le   yixia?
              3p RANG *not* RANG / JIAO *not* JIAO *me criticize*-PFV *once*
              'He was-not-was criticized by me?'

c) it cannot stand alone in a predicate as a simple verb

(iii)* ta   *rang / jaio*   wo
3p RANG / JIAO 1p
*'He was by me.'

d) it cannot be a simple answer to a question

(iv) **A:** xi-bu-xi ni   *rang / jiao*   ta   piping - le yixia   a?   **B:** *rang!* (*jiao!*)
is-not-is 2p RANG / JIAO 3p *criticize*-PFV *once* Q-PRT
'Was it that you were criticized by him?'   'Was!'

e) it does not introduce any argument; unless it is possible to have avalent verbs
→in the above sentence the only two arguments are *ta* 'he' and *wo* 'me',
both introduced by the verb *piping* 'to criticize', and not by either
rang or *jiao*

As the above tests show, these two items do not behave verbally in this type of environment.

However, they will successfully pass the same tests when the sentences are associated with a

causative interpretation.

M (71) a) <u>take an aspect marker</u>

(i) ta   *rang / jiao* - le   wo piping   yixia[33]
3p RANG/JIAO -PFV *me criticize once*
'He had me criticize (someone).'

b) <u>participate in a A-not-A question form</u>

(ii) ta   *rang*   bu   *rang / jiao*   bu   *jiao*   wo   piping yixia?
3p RANG *not* RANG / JIAO *not* JIAO *me criticize once*
'Did he have me criticize (someone)?'

c) <u>to stand alone in a predicate</u>

(iii) wo *rang* ta   wo *jiao* ta
1p *let* 3p   1p *call* 3p
'I let him.'   'I call him.'

d) <u>answer to a simple question</u>

A: *rang / jiao* ta laih   ma?   **B:** *rang!* *jiao!*
let / call 3p *come* Q-PRT   *let!*   *call!*
'Are we letting /calling him (to) come?   'Of course!'

---

[33] The Mandarin consultants indicate that this example where there is an Aspect marker attached to either *rang* or *jiao* is rather awkward. However, the utterance is acceptable and not entirely ungrammatical. This point is very interesting in light of the fact that all the other tests and examples are perfectly fine. I leave this topic open for further research.

e) <u>introduces the Causer theta role</u>
(iv) Paul rang John dashang - le   Mary.
  Paul had *John hit-till-hurt*-PFV *Mary*
  'Paul had John hit Mary till she was hurt.'

A point of note is that in (71d) *rang* and *jiao* mean something other than "have". They mean 'let' and 'call' respectively. This behaviour shows that these two items may be independent lexical verbs as well, having a different semantic matrix.

Otherwise, for the cases we are considering here, we could apply the analysis suggested for Cantonese to *rang* 'let' and *jiao* 'call' as well. Let's suppose that they are also unspecified for the Lexical/Functional distinction and also lack semantic content. In passive structures they acquire a meaning similar to the get-passives in English; in causatives they acquire the meaning of "have", in the sense of "to cause". A Lexical projection licenses a causative construction; a Functional projection licenses a passive construction; these items acquire their respective interpretations in virtue of the structure they reside in.
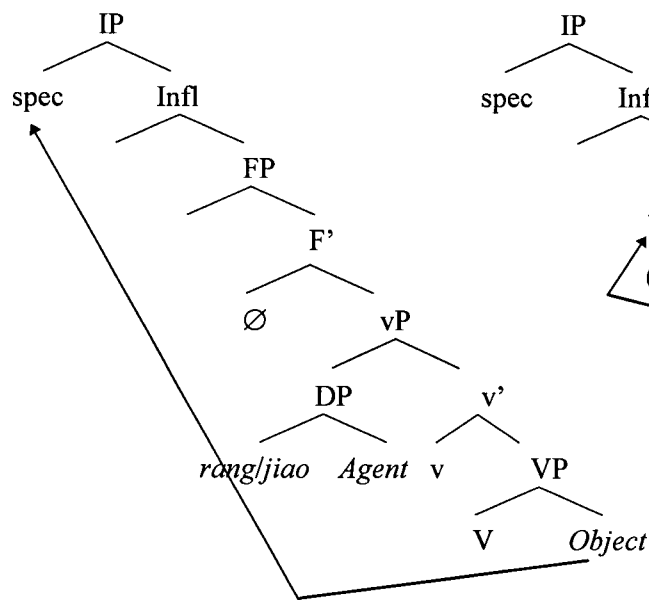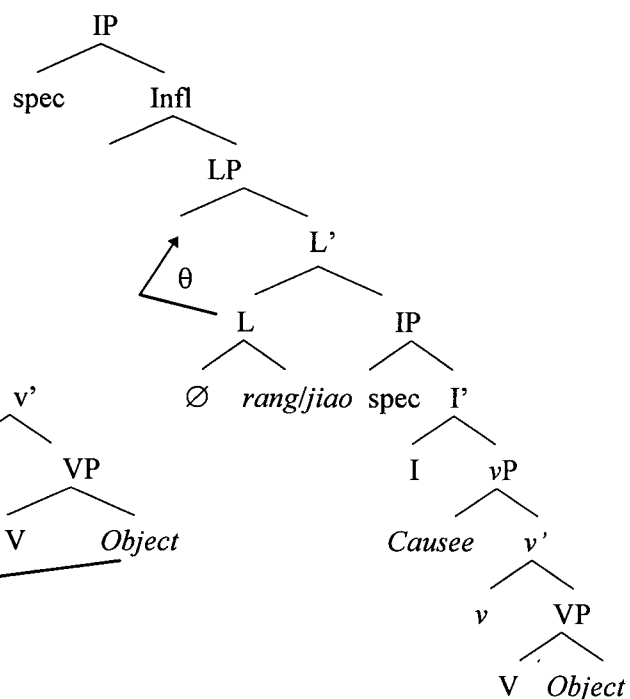
Figure 16: ∅-*rang / jiao Passive*   **Figure 17:** ∅-*rang / jiao Causative*

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The use of the null Functional or Lexical head to generate either a passive or a causative construction in both Mandarin and Cantonese provides for a consistent way in which these constructions are licensed and identified. We dispense with needing to stipulate that BEI or *rang* and *jiao* themselves each carry this dual property. However, as discussed earlier with BEI, it is possible to specify that the item itself is in a neutral category and inherently is able operate both as a functional element and a lexical element.

Turning back to Mandarin BEI, I propose that since it can only have a passive interpretation it can participate only in the Functional projection. That is, it is already pre-specified as a functional element and thus can only occur in passive structures. It also Case marks the XP following it, whether it is an overt NP or a *pro*.

Figure 18: *Mandarin BEI*
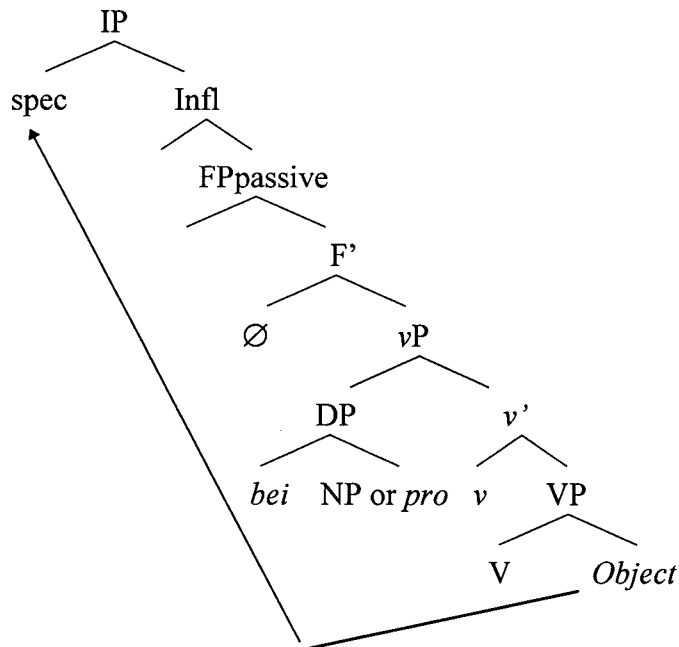
From the above pattern, we could postulate a generalization that the Passive in Chinese is generated by a Functional projection, while the Causative is generated by a Lexical projection. The appropriate elements required to fill the projections are selected according to

their feature specifications and feature compatibility. This paper makes the prediction that only BEI, *bei, beih, rang* and *jiao* will be selected for these constructions because they have certain inherent properties that satisfy the selection requirement for a particular structure. The present discussion would benefit from further research into the use of functional and lexical distinctions in other categories in the language.

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APPENDIX 1: Exceptional "no-movement" Cases

There are exceptional circumstances where the following is considered acceptable:

> I) bei a Paul tek laahn - jo ga che
> BEI CL *Paul kick damage*-PFV CL *car*
> 'The car was damaged by Paul's kicking of it.'

One such scenario where this would be possible would be something like the following:

suppose one was telling a story about Paul trying to damage someone's car. The conclusion

of the story is, "In the end, Paul still managed to damage the car." In this case we would be

able to use (I) if the modifiers *jungyue dou* 'finally still' were inserted before the phrase:

C (Ia) jungyue dou bei a Paul tek laahn - jo ga che
      finally still BEI CL *Paul kick damage*-PFV CL *car*
      'In the end, the car was still damaged by Paul.'

In these situations, it is possible to omit *dou* 'still', but omission of *jungyue* 'finally' would

yield an ungrammatical sentence.

C (Ic) jungyue bei a Paul tek laahn - jo ga che
      finally BEI CL *Paul kick damage*-PFV CL *car*
      'In the end, the car was still damaged by Paul.'
(Id)* bei a Paul tek laahn - jo ga che
      BEI CL *Paul kick damage*-PFV CL *car*
      'The car was still damaged by Paul.'

Notice that because the object remains in its base position this type of example poses a

problem for my passive analysis if I were to claim that something from the object position

must move out (e.g. the verb cannot assign ACC for instance). However, if these are cases of

the permissive causative-type then no problem arises (see section 4.2). Because judgment

from speakers conflict regarding the interpretation of these constructions, I have not formally

included them as part of the analysis till further research and data can provide more useful

comment. The consultants are not sure whether these sentences are definitely passive or

definitely causative. However, they commented that these types of sentences have more of a "causative-feel" to them. Other examples of phrases, other than subject NPs, which can be inserted before the BEI-phrase are given below.

C II) a) kumyuk   bei ginchak tsouk - jo   go chak
          yesterday BEI *police   catch* PFV CL *thief*

       b) go chak kumyuk   bei ginchak tsouk - jo   ← *preferred*
          CL *thief yesterday* BEI *police   catch* PFV
          'The thief was caught yesterday by the police.'

    III) jungyue bei ginchak tsouk - jo go chak
       finally BEI *police   catch* PFV CL *thief*
       'In the end, the thief was caught by the police.'

    IV)?? a) heiy guy-sheuŋ bei ginchak tsouk - jo   go chak
          on street up   BEI *police   catch* PFV CL *thief*

       b) go chak heiy guy -sheuŋ bei ginchak tsouk - jo   ← *preferred*
          CL *thief on   street   up* BEI *police   catch* PFV
          'The thief was caught by the police in the streets.'

    V) * youŋ tseuŋ bei chak dasheuŋ - jo ginchak
       use gun BEI *thief hit-hurt* PFV *police*
       'The police was hurt by the thief using a gun.'

    VI) * yuŋwei keuih maahn bei ginchak tsouk - jo   go chak
       because he   slow BEI *police   catch* PFV CL *thief*
       'Because he was slow, the thief was caught by the police.'

Notice that (II) and (III) are grammatical (although (IIb) is preferred over (IIa)) but the rest are not. The marginal case is (IV) where I obtained mixed results from my consultants. They informed me that the phrase is very awkward and that no one would say anything resembling (IVa). (IVb) is definitely the preferred expression. However, they also agreed that the sentence is not as bad as (V) or (VI). Therefore, I have place double question-marks before (IVa), but I will still consider it as being ungrammatical. One could argue that (IV), (V) and (VI) are ungrammatical because the adverbial has been fronted. The examples below show that this objection is not correct:

C (VII) a John sak- jo a Mary.
     CL *John kill* -PFV CL *Mary*
     'John killed Mary.'

(VIII) <u>kumyak</u> a John sak -. jo a Mary
     yesterday CL *John kill* -PFV CL *Mary*
     'John killed Mary yesterday.'

(IX) <u>jungyue</u> a John sak - jo a Mary
     finally CL *John kill* -PFV CL *Mary*
     'In the end, John killed Mary.'

(X) <u>heiy guy-sheuŋ</u> a John sak - jo a Mary
     on street- up CL *John kill* -PFV CL *Mary*
     'John killed Mary in the streets.'

(XI) <u>youŋ tseuŋ</u> a John sak - jo a Mary
     use gun CL *John kill* -PFV CL *Mary*
     'John killed Mary by using a gun.'

(XII) <u>yuŋwei keuih huŋ-sum</u> a John sak - jo a Mary
     because 3p *cruel-hearted* CL *John kill* -PFV CL *Mary*
     'John killed Mary because he was cruel-hearted.'

As the examples above show, all the adverbs can be fronted before a regular active sentence.

Although it has been pointed out that the above expressions are not the preferred utterances

of native speakers, they are nonetheless acceptable and not as awkward as (IV), (V) or (VI)

above. What, then could be causing the effects in grammaticality in the BEI-constructions?

Before I attempt an answer to this question, consider the following examples. These

sentences can only be used in a restricted context where both speaker and hearer are aware of

the proceedings of the discourse and the details of the discussion. These sentences cannot be

utter out of the blue and carry an existential meaning, similar to English, "There was a…" or

"It so happened that…" type sentences.

C (XIII) kumyak bei a Paul$_i$ touh - jo **keuih**$_{*i/j}$ ga che   **Ambiguous**
     yesterday BEI CL *Paul steal*-PFV *his*   CL *car*   **Interpretation**
     'Yesterday, it happened that Paul$_i$ to stole his$_{*i/j}$ car.'

(XIV) kumyak bei a Paul_i touh - jo **tsgei**_{i/*j} ga che   **Clear Causative**
       yesterday BEI CL *Paul steal*-PFV *his*   CL *car*   **Interpretation**
       'Yesterday, it happened that Paul_i stole his_i own car.

(XV) jungyue bei a Paul_i touh - jo **keuih**_{*i/j} ga che   **Ambiguous**
       finally BEI CL *Paul steal*-PFV *his*   CL *car*   **Interpretation**
       'In the end, it happened that Paul_i stole his_{*i/j} car.'

(XVI) jungyue bei a Paul_i touh - <u>fan</u> **tsgei**_{i/*j} ga che   **Clear Causative**
       finally BEI CL *Paul steal-back his*   CL *car*   **Interpretation**
       'In the end, it happened that Paul_i stole his_{*i/j} own car back.'

The above examples may help to clarify whether these types of expressions where no apparent movement has taken place are really passive or causative in nature. Recall from earlier discussion in Section 3.3, it was noted that Indirect passives with an overt possessor reduplicated before the unraised portion of the direct object were considered awkward by native speakers. However, such utterances were possible as long as the overt possessor is co-referential with the raised possessor NP. Although all the sentences presented in (XIII) to (XVI) above have overt possessors appearing before the direct object they are not awkward sounding expressions. They do not seem to display the kind of awkwardness associated with (25). If this complication is the result of the reduplication of a overt possessor clitic in the place of the trace, then the effect does not show up in the above sentences. This definitely confirms that the examples above are not like the Indirect passive examples presented earlier. I present two possible explanations: (i) these sentences are passives which do not involve object raising (again this would be problematic in my analysis where movement is driven by the need to get Case); (ii) these sentences are only ever causative.

Sentences (XIV) and (XVI) contain a bare reflexive which must be bound in its governing domain. As the examples show *Paul* is the only available binder. Since this is so, the sentence only has a causative interpretation. In (XVI) I have substituted a different aspect

on the verb for semantic reasons. As only a causative interpretation is possible the sentence does not seem to make much sense if it meant something like "Finally Paul accomplished the task of stealing his own car" because the car was Paul's in the first place. For a passive interpretation to be available, the object must share a possessor-relation with an NP in the matrix [spec, IP] position. However, in these examples, there is no visible NP in such a position. One could conclude that this is because nothing has raised out of the object position so there is nothing else available to bind the reflexive. However, even for a causative interpretation, one is led to ask, where is the third theta role assigned to? *Paul* is assigned the Causee role; *ga che* 'car' is assigned the Direct Object role; where is Causer being assigned? I propose that this role is assigned to an empty pronominal, that is, *pro*, sitting in [spec, IP]. Therefore, (XIV) and (XVI) have the following structures:

(XIVa) kumyak *pro*$_j$ bei a Paul$_i$ touh - jo tsgei$_{i/*j}$ ga che   **Clear Causative**
       yesterday pro BEI CL *Paul steal*-PFV *his*   CL *car*   **Interpretation**
       'Yesterday, it happened that Paul$_i$ stole his$_i$ own car.'

(XVIa) jungyue *pro*$_j$ bei a Paul$_i$ touh - <u>fan</u> tsgei$_{i/*j}$ ga che   **Clear Causative**
       finally pro BEI CL *Paul steal-back his*   CL *car*   **Interpretation**
       'In the end, it happened that Paul$_i$ stole his$_{*i/j}$ own car back.'

The *pro* in the above examples cannot bind the reflexive for the same reason that the overt NP in (32b) could not bind the reflexive: it is not in the governing domain of the anaphor.

We can apply the *pro*-analysis to (XIII) and (XV), deriving:

C   (XIIIa) kumyak *pro*$_j$ bei a Paul$_i$ touh - jo keuih$_{*i/j}$ ga che
         yesterday pro BEI CL *Paul steal*-PFV *his*   CL *car*
         'Yesterday, it happened that Paul$_i$ managed to steal his$_{*i/j}$ car.'

   (XVa) jungyue *pro*$_j$ bei a Paul$_i$ touh - jo keuih$_{*i/j}$ ga che
         finally pro BEI CL *Paul steal*-PFV *his*   CL *car*
         'In the end, Paul$_i$ managed to steal his$_{*i/j}$ car.'

In (XIIIa) and (XVa) the *pro* can bind the pronoun in the lower clause, but *Paul* cannot because it is in the minimal domain of the pronoun (Principle B violation). It must be pointed out that these sentences can only be used if the context is known to both speaker and hearer. For example, (XIIIa) and (XVa) can be used in a situation where the discussion was about *Paul* and *his car*, and the speaker was pointing out that due to some course of events, it came about that *Paul* had an opportunity to steal back his own car. That is, the situation must be such that *pro* is able to get a discourse antecedent.

This leads to the question of why can't we posit that there is an invisible *pro* possessor which is raised in these structures? This would allow us to maintain the hypothesis that there is always movement from the object position. A very obvious answer is that such a structure is never verified by the interpretations. Take for example (XIVa):

(XIVa) kumyak *pro*_j bei a Paul_i touh - jo tsgei_{i/*j} ga che
       yesterday pro BEI CL *Paul steal*-PFV *his* CL *car*
       'Yesterday, it happened that Paul_i stole his_i own car.

It was impossible for my speakers to get the reading where the reflexive is bound by a non-overt possessor. This sentence can only ever be causative. I propose, in fact, that all sentences of this type are causative. None of these are passive expressions where the object has not moved, because there would be no way for the Object NP to get Case. The uncertainty in interpretation for (XIII) and (XV) result from the fact that the sentences contain BEI. Speakers naturally connect the appearance of BEI with the generation of a passive sentence, unless it is clear that such an expression is a causative (i.e three distinct arguments are involved). My hypothesis is reinforced by examples where there is no question of possessor-raising involved.

(XVII) kumyak *pro* bei   a Paul da - sei - jo   a John
       yesterday pro BEI CL *Paul beat-kill*-PFV CL *John*
       'Yesterday, circumstances brought it about that Paul killed John."

(XVIII) jungyue *pro* bei   a Paul da - sei - jo   a John
       finally pro BEI CL *Paul beat-kill*-PFV CL *John*
      'Circumstances brought it about that Paul finally killed John."

The NP *John* is not an inanimate object that can be owned so the complication with possessor-raising is removed. Speakers corroborated that that (XVII) and (XVIII) both have a permissive-causative interpretation. A set of circumstances allowed *Paul* to carry out the grisly action of killing *John*.

These findings help explain the grammaticality differences observed in (II) to (VI) above. I argue that verbal modifiers like *jungyue* 'finally' and time adverbials like *kumyak* 'yesterday' occupy an A'-position, perhaps [spec, CP], when fronted. The other adverbials of instrument, location and reason, on the other hand, must occupy an A-position, when fronted[34]. However, the only available A-position is [spec, IP] but it must be reserved for the *pro* if these expressions are all causative. Therefore, if these adverbials are fronted to such a position then there would be no place for *pro* and the sentence becomes ungrammatical because the third theta role cannot be assigned. My argument so far, is only tentative. I have been unsuccessful in finding tests which would show whether these adverbials truly occupy A-positions. More studies into this areas is a necessity in order to arrive at a definitive answer.

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[34] Much thanks to Michael Rochemont for this suggestion.