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# 從動詞意義和結構的整合分析客語移除類動詞

# Verbs of Removal in Hakka: Integration of Verbal Meanings and Constructions

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# Integration of Verbal Meanings and Constructions

**BY**

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# 國立政治大學研究所論文提要

研究所別：語言學研究所

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論文提要內容：(共一冊，二萬零九百七十八字，分五章)

本文以客語移除類動詞為研究對象探索語意和形式的關係。動詞的語義透過詞彙分解化、概念結構、詞彙化、框架語義和顯像等機制帶出。後以 Goldberg (1995, 2006)的構式理論為基礎，運用 Iwata (2005a, b)建議的修正模式，對動詞和結構之間的整合，提出更精細、更詳盡的解釋。根據前述方法，我們初步將移除類動詞分為六個次分類，並呈現出他們在結構上被顯像的論元。最後帶入 Iwata 提出的模組，分析各次分類動詞和不同句子結構的結合情形和其後的語義表現。

# Abstract

This paper aims to explore verbs of *removal* in Hakka with respect to the relationship between form and meaning. Following the constructional approach in the shape of Goldberg (1995, 2006) and Iwata (2005a, b), we display a finer mechanism for the integration of verbal meanings and constructions. Verbal meanings, L-meanings (Lexical Head Level Meaning), are carried out through the following concepts: decomposition, conceptual structure, conflation, frame, profiling. Constructional meanings or P-meanings (Phrasal Level Meaning), variants of L-meanings, are manifested by different constructions. In our analysis, we display six subclasses of verbs of *removal* in Hakka, depending on their different lexicalized meanings. We also present the different roles they profile in phrasal expressions. Last, we demonstrate the integration of the verbal meaning and several constructions (e.g., *BUN* construction and *LAU* construction).

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# CHAPTER I

# INTRODUCTION

## 1.1 Motivation and purpose

Neutral verbs, like *put* and *remove*, designate a basic pattern of human activities and experiences. Evidence is from two perspectives: first, from language acquisition, Clark (1978, 1996), citing data from Grégorie (1973) for French, Bowerman (1973) for Finnish, Park (1977) for Korean, Sanchés (1978) for Japanese, claims that cross-linguistically, general purpose verbs, like *put*, are among the first and most frequent verbs in children's speech. Clark (1996) furthermore finds that these early-learned verbs play an important role in serving as templates, something causing something to move, for further acquisition of similar verbs on the basis of their semantic characteristics. Goldberg, Casenhiser, and Sethuraman (2004) likewise speculate that the verb *put* with the caused motion construction is one of the most frequent patterns in analyzing the mothers' speech from the Child Language Exchange System (CHILDS) database (MacWhinny 1995). The second piece of evidence comes from linguistic manifestations. Hong et al. (2005), studying VV compounds in Mandarin, show that the most frequent concept classes to occur at the

V1 position are motion, removing, putting, and so on. In brief, these neutral verbs designate a basic pattern of human activities and experiences.

Because of high frequency and early appearance, verbs of putting have long been the focus in lexical semantic studies (e.g., Croft 1991, Dixon 1991, Gruber 1976, Liu 2000, Lien 2004). For example, the subclasses of *spra*y and *load* verbs in various languages are particularly discussed by many researchers (Croft 1986, 1991, Dixon 1989, Dowty 1991, Fillmore 1966, 1968a, 1968b, Jackendoff 1990a, 1990b, Levin and Rappaport Hovav 1991, Pinker 1989, Rappaport Hovav and Levin 1985, 1988, etc.; for languages other than English: Dutch, Dick 1978; French, Boons 1974; German, Becker 1971; Japanese, Fukui, Miyagama, and Tenny 1985, etc.). However, verbs of removal, the opposite concept of putting,[1] are much less discussed in the past. Take the following studies for instance. Levin and Rappaport Hovav (hereafter, L&RH) (1991, 1993) uncover the lexical characteristics of three English verbs of removal, *remove*, *clear*, and *wipe*. They claim that these three verbs belong to three different subclasses, because the *clear* and *wipe* verbs lexicalize the meaning components resultant state and means, respectively. It is these meaning components that determine the semantic class membership and syntactic behaviors of these verbs.

[1] The notion of putting and removal are like two sides of the same coin. First, from the verbal meaning, verbs like *rake*, *shovel*, and *siphon* are listed in both *wipe* verbs and *funnel* verbs; that is, these instrument verbs may be used to describe either putting things on surfaces or in containers or removing things from surfaces or containers. Second, the interaction among Agent, Theme and Goal are ambiguous. For example, in the sentence like *Mary put a book on the desk*, for the Agent *Mary*, the book is removed from her, but for the Goal *desk*, the book is put on it.

Interestingly, Liu (2000a) points out that similar pairing patterns hold in Mandarin. Examining a larger scope of verbs , verbs of surface contact, Liu claims that the verb *cing1* 清 'to clear' may be examined together with the verb *ca1* 擦 'to wipe' in that they both undergo Locative Alternation. Besides, similar to the distinction from *wipe* and *clear*, *ca1* 擦 'to wipe', unlike *cing1* 清 'to clear', cannot incorporate the meaning component of a resultant state. And semantically, only *cing1* 清 'to clear' denotes a change of state in a locational space by removing a certain substance (Liu 2000a: 287f). Echoing L&RH's claim, Liu states that differentiating meanings of verbs will help uncover the syntactically-relevant semantic components and characterize the way they interact with verbal syntax. Lien (2006) also presents the interaction between verb classification and constructions from *Li Jing Ji*. Among the nine verb classes of Taiwanese Southern Min, the *wipe*-types, such as *soe1* 梳 'to comb', *sau2* 掃 'to sweep', *mua5* 磨'to rub', and *cit4* 拭 'to wipe', comprise the semantics roles like Agent, Theme, Location, and Instrument, and because the Instrument role is conflated in the *wipe*-type verbs, it does not have to be represented in the construction.

Like English (L&RH, 1991), Mandarin (Liu 2000), or Taiwanese Southern Min (Lien 2006), Hakka has a variety of verbs that can be used to express the semantic notion of removal, an animate agent contacting with the surface of a location through

a certain motion for the purpose of causing a patient to move away from the source to the goal. As in Table 1.1, verbs of removal in Hakka are lexicalized with different semantic elements (i.e. conflated elements) and manifest differently in syntax (i.e. [V. Patient] constructions, etc.)

Table 1.1 Different syntactic realizations of verbs of removal in Hakka

| lexical items | conflated elements | [V. Patient] constructions | [V. Source] construction | [V. Goal] constructions | [V. Result] constructions |
|---|---|---|---|---|---|
| *ban1*<br>搬<br>'to remove' | n/a | *ban1 zok4 e2*<br>搬桌仔<br>'to remove the table' | *ban1 vuk4*<br>搬屋<br>'to move (out of the house)' | *ban1 vuk4*<br>搬屋<br>'to move (into the house)' | *ban1 ciang5 ciang5*<br>搬淨淨<br>'to empty out' |
| *got2*<br>割<br>'to cut' | Instrument | *got4 vo5*<br>割禾<br>'to cut rice harvest' | *got4 tien5 kam1*<br>割田崁<br>'to cut the grass from the ridge (between rice fields)' | * | *got4 ciang5 ciang5*<br>割淨淨<br>'to completely cut (sth)' |
| *cin1*<br>清<br>'to clear' | Result | *cin1 lep4 sep4*<br>清垃圾<br>'to clear garbage' | *cin1 fong5 gien1*<br>清房間<br>'to clean the room' | * | *cin1 kung1*<br>清空<br>'to clear (sth) off' |
| *sen3*<br>擤<br>'to blow one's nose' | Source | *sen3 pi3*<br>擤濞<br>'to blow one's nose' | * | * | *sen3 ciang5 ciang5*<br>擤淨淨<br>'to blow … clean' |
| *cut8*<br>捽<br>'to wipe' | Manner | *cut8 hon3*<br>捽汗<br>'to wipe off perspiration' | *cut8 zok4 e2*<br>捽桌仔<br>'to wipe the table' | * | *cut8 ciang5 ciang5*<br>捽淨淨<br>'to wipe clean' |
| *ha1*<br>下<br>'to unload' | Direction | *ha1 fo2*<br>下貨<br>'to unload cargo' | * | * | *ha1 kung1 kung1*<br>下空空<br>'to unload completely' |

From the various patterns that verbs of removal in Hakka manifest, we may assume that first, these verbs of removal might belong to distinct subclasses; second, the verb itself might be in a truly central place, as different facets of syntactic configurations,

where the verb and other argument-taking elements are found, are seen to be projections of its lexical properties. The observations accord with Levin and Rapport Hovav's (1991) claim that the participant roles of the verb determine its semantic class membership and syntactic structures.

However, if we observe the syntactic patterns in a larger scope, this predicate-centered claim might meet a potential challenge which violates the argument realization principle (ARP) or the subevent identification condition (SIC)[2] offered by Rappaport Hovav and Levin (1998). Consider the following Hakka example.

(1) a. 佢 搬 桌仔 到 別間 教室。

*Gi5 ban1 zok4-e2 do3 pet8-gien1 gau3-siit4*
He remove desk to another-CL classroom
'He removed the desk to another classroom.'

b. *gi1*佢 ACT <*ban1*搬>
BECOME [*zok4-e2* 桌仔 < *do3 pet8-gien1gau3-siit4* 到別間教室>]

SIC requires that the ACT subevent, *zok4-e2* 桌仔 'the desk', is identified by *ban1*搬 'remove' and the BECOME subevent, *gau3-siit4* 教室 'the classroom', is identified by *do3*到, but there is a third subevent, the CAUSE subevent, which is not identified by any lexical predicate.

[2] Refer to chapter 3 for details.

This case can be easily solved if we treat the whole construction as a form-meaning pattern (Goldberg 1995, 2006); that is, the construction in (1) itself brings out the causal meaning, which is considered as a caused motion construction. Although Goldberg's constructional approach may explain the grammatical constructions, it faces two challenges: the ruling out of the ungrammatical constructions and little emphasis on fine-grained nuances among verbal meanings. Accordingly, Iwata (2005a, b) proposes a two-level-meaning model to display the fusion of verbal meanings and constructions.

Based on the previous studies, this study will explore to what extent the syntactic properties of verbs can be derived from their lexical semantic properties from verbs of removal in Hakka in practice. The foundations are built on modifications of Iwata's model, incorporating both the lexical approach and the constructional approach. To be more specific, this thesis aims to investigate the nature of the lexical knowledge that a speaker of Hakka possesses with respect to semantically related verbs that might be classified as verbs of removal as a first approximation, but that turn out to be diverged when their syntactic properties are further examined. Furthermore, the study will to provide a detailed lexical analysis of these verbs and their proliferous integration with several constructions (e.g., [V X] constructions, BUN constructions, and LAU constructions).

## 1.2 Conventions of the data

The data of verbs of removal in this study are mainly based on Siisian Hakka (四縣客語) in Miaoli (苗栗), and marked with Tongyong Pinyin phonetic symbols (通用拼音). Most of the corresponding Chinese characters are based on those found in *Hakka Dictionary of Taiwan*. Some of the examples are from dictionaries[3], Hakka stories, and Hakka magazines, some of them are from the research project NSC 90-2411-H-004-013, and still some are from my own creations with modifications of my advisor. The tone diacritics are represented as 1 for *yinping* (low-high tone), 2 for *yinshang* (high-low tone), 3 for *yinqu* (high tone), 4 for *yinru* (short-low tone), 5 for *yangping* (low tone), 8 for *yangru* (short-high tone).

## 1.3 Organization of the thesis

The thesis is organized in the following way. Chapter II reviews Levin and Rappaport Hovav's study in English, Liu's study in Mandarin, and Lien's study in Taiwan Southern Min as a foundation of the present study. In Chapter III, related theoretical frameworks will be introduced, such as the lexical approach as reviewed in section 3.1, and the constructional approach, as reviewed in section 3.2. Chapter IV then first analyzes the inherent meaning of six selected removal verbs in section 4.1,

[3] They are *A Chinese-English Dictionary: Hakka Dialect* 客英大字典, *Ke Yu Zi Yin Ci Dian* 客語字音辭典, *Hakka Dictionary* 客話字典, *Hakka Dictionary of Taiwan* 臺灣客家話辭典.

and embarks on our main topic from three integration domains: [V X] constructions, BUN constructions, and LAU constructions, as presented in section 4.2, section 4.3, and section 4.4, respectively. Last, chapter V concludes the thesis by summarizing the study and providing research issues for future studies.

# CHAPTER II

# LITERATURE REVIEW

The association between word meaning and syntactic behavior has long been the focus of lexical semantic studies. It is generally assumed that certain aspects of word meaning can figure in linguistic generalization. In section 2.1, Levin and Rapport Hovav (1991) present a case study for a set of verbs that might as a first approximation be classified as verbs of removal, but reveal their divergence after a closer examination of their inherent meanings and syntactic properties. The meaning components of a lexical item are in determining the semantic class membership and syntactic structures of the verb. Next, the investigation of Liu (2000) in section 2.2 uncovers the syntactically-relevant semantic components and characterizes the way they interact with verbal syntax in Mandarin by means of verbs of surface contact through motion. Finally, in section 2.3 we will give some remarks on the previous studies.

## 2.1 Levin and Rappaport Hovav (1991)

Levin and Rappaport Hovav (1991) uncover the lexical characteristics and the syntactic relevant components of verbs of removal in English by three semantically related subclasses, *remove*, *clear*, and *wipe*. They begin with displaying the similarities among these three subclasses, relating to the removal of a substance from a location and sharing the same types of argument structure: the locatum-as-object variant ("V NP *from* NP") (L&RH 1991: 126f):

(1) Monica removed groceries from the bag.

(2) Doug cleared dishes from the table.

(3) Kay wiped the fingerprints from the counter.

However, only the case of *remove* does not allow the source as direct object, that is, location-as-object variant ("V NP") (L&RH 1991: 128).

(4) *Monica removed the bag.

(5) Doug cleared the table.

(6) Kay wiped the counter.

(4) is semantically different and cannot mean that Monica took something from the bag. Another pattern distinguishing *clear* and *wipe* is that *wipe* does not retain the theme when the location is expressed as the object (L&RH 1991: 128).

(7) *Monica removed the bag of groceries.

(8) Doug cleared the table of dishes.

(9) *Kay wiped the counter of fingerprints.

According to theses distinct syntactic behaviors, Levin and Rapport Hovav thus conclude that the verb *remove*, *clear*, and *wipe* belong to three different subclasses. In addition, there are a few other verbs that behave like these subclasses, as listed in (10-12) (L&RH 1991: 129).

(10) *Clear* verbs: *clear, clean, empty*

(11) *Wipe* verbs: *buff, brush, erase, file, mop, pluck, prune, rake, rinse, rub, scour, scrape, scratch, scrub, shear, shovel, sponge, sweep, trim, vacuum, wipe*, etc.

(12) *Remove* verbs: *dislodge, draw, evict, extract, pry, remove, steal, uproot, withdraw, wrench*, etc.

To explain their distinct syntactic behaviors, we should fall back on their inherent lexical meanings. A closer examination at these three verb classes reveals a systematic difference in the meaning of their members. The *clear* verbs specify the state of the location as a result of the action denoted by the verb, but none of them makes explicit how this resultant state is achieved. In contrast, the *wipe* verbs make explicit how the removal of the substance from a location is effected, and may fall into two subclasses according to whether their meaning specifies a manner, as in (13a)

or an instrument, as in (13b) (L&RH 1991: 131):

(13) a. Manner subclass: *erase*, *pluck*, *rub*, *scratch*, *shave*, *trim*, *wipe*, etc.

b. Instrument subclass: *brush*, *mop*, *rake*, *shovel*, *sponge*, *vacuum*, etc.

Moreover, consistent with their verb meanings, the *clear* verbs are deadjectival; they are derived from the adjectives with the same name, as in (14), rather than adjectives derived from the verbs, as in (15).

(14) *clean* the blackboard; a *clean* blackboard (L&RH 1991: 130)

(15) *wipe* the table; a *wiped* table

Unlike the *clear* and *wipe* verbs, the *remove* verbs specify neither a resultant state nor a means. They are the prototypical verbs of removal, which mean roughly 'to cause an entity not to be at a location', and nothing more. Levin and Rappaport Hovav further argue that it is these lexicalized meaning components that determine their basic meanings and, hence, their syntactic behavior. Take the use of *clear* and *wipe* verbs in the location-as-object for example. The *clear* and *wipe* verbs are not verbs of removal, but rather belong to change-of-state verbs and activity or surface contact verbs, respectively. When mapping to the sentence level, similar to other change-of-state verbs, as in (16-17), the *clear* verbs can undergo the causative/inchoative alternation, as in (18-19) (L&R 1991: 133f):

(16) a. Francesca cooled the coffee.

b. The coffee cooled.

(17) a. Jane thickened the sauce.

b. The sauce thickened.

(18) a. Martha emptied the tub.

b. The tub emptied.

(19) a. The strong winds cleared the skies.

b. The skies cleared.

Furthermore, many change-of-state verbs, like the *clear* verbs, are deadjectival, either zero-derived from adjectives or formed from adjectives by the suffixation of *–en*, as the two subclasses in (20) (L&RH 1991: 134):

(20) a. zero-derived: *cool*, *dry*, *narrow*, *open*, *slow*, *warm*, etc.

b. suffix *-en*: *broaden*, *darken*, *deepen*, *redden*, *soften*, etc.

The distinction between (a) and (b) in (16-19) may account for the different senses incorporated in the change-of-state verbs: one could be paraphrased as 'to come to be in state', involving a single argument, as in (b), and the other as 'to cause to come to be in state', involving two arguments, as in (a), considered as 'causative change-of-state verbs'. The *clear* verbs differ from other change-of-state verbs in that they denote a change of state in an entity typically brought by removing

something from that entity, while other changes of state are brought by changes in chemical composition, structure, etc.

Unlike the *clear* verbs, many of the *wipe* verbs are found in the conative construction, which is attested with verbs whose meaning includes notion of movement and contact (Guerssel et al. 1985, Laughren 1988), as illustrated in (21). Also, the *wipe* verbs do not participate in causative/inchoative alternation, as in (22), while the *clear* verbs do, as in (16-19).

(21) a. Kay rubbed the counter.

b. Kay rubbed at the counter.

(22) * Francesca cooled at the coffee.

Moreover, the *wipe* verbs can be subdivided into two semantically coherent subclasses: the *manner* subclass denotes a surface contact with particular type of motion, and the *instrument* subclass denotes a surface contact with the instrument from which the verb takes its name. Both of these surface contact verbs are not necessarily verbs of removal, because they can be used as verbs of putting, depending on the nature of the motion or instrument involved, as shown in (23-24) (L&RH 1991: 136).

(23) a. Kay wiped the polish onto the table.

b. Lynn scraped the leftovers into a bowl.

(24) a. Sylvia shoveled the snow onto the lawn.

b. Kelly raked the leaves into the gutter.

Therefore, Levin and Rappaport Hovav further claim that the putting and removing senses of these verbs are both 'extended' meanings of these verbs, and it is these extended meanings that account for their appearance in the syntactic structure with verbs like *remove*, or with verbs like *put*. When a *wipe* verb is found in the syntactic structure of the *remove* verbs ('NP V NP *from* NP'), it is manifesting an extended use as a verb of removal. This removal *wipe* would mean 'to remove by means of surface contact through wiping motion', and it would be expected to express its arguments like other verbs of removal. On the other hand, when it is found in the syntactic structure of the *put* verbs ('MP V NP *onto/into* NP'), it is an extended use as a verb of putting, which means 'to put by means of surface contact through wiping motion'.

In sum, this study examines the meaning of the members of the three related verb subclasses and shows that each pattern of argument expression is restricted to a semantically coherent class of verb and is closely related to verb meaning. The neutral *remove*-group verbs are with a general meaning 'X causes Y to go away from Z'. The *clear*-group verbs and the *wipe*-group verbs share the same structure with

the *remove*-group but each conflates with a change of state (i.e. a resultant state) and the specification of means or manner. Consequently, these three semantic subclasses have different patterns of syntactic argument structure as illustrated in examples (1-9) above, now analyzed in (25-27):

(25) *Remove* verbs: Theme - direct object; Source - *from*-prepositional phrase

(26) *Wipe* verbs:

A. Theme – direct object; Source – *from*-prepositional phrase

B. Source – direct object; no overt Theme

(27) *Clear* verbs:

A. Theme – direct object; Source – *from*-prepositional phrase

B. Source – direct object; Theme – *of*-propositional phrase

**2.2 Liu (2000)**

Liu (2000) examines a related class of verbs, verbs of surface contact through motion in Mandarin (e.g., *ca1* 擦 'to wipe', *mo3* 抹 'to scub', *shua1* 刷 'to brush', *gua1* 刮 'to shave', *fu1* 敷 'to cover', etc.), which are similar to the *wipe*-group verbs discussed in Levin and Rappaport Hovav (1991).[1] The verbs of surface contact through motion generally describe 'to contact through repeated motion with the

[1] Lien (2006) also gives us a brief introduction of verbs of removal in Taiwanese Southern Min. He examines the relationship among verb classification, aktionsart, and constructions based on the linguistic manifestations in *Li Jing Ji* 荔鏡記. Refer to Lien (2006) for details.

surface of a location for the purpose of removing or putting on some substances or physical objects'. The verbs of surface contact through motion in Mandarin display similar syntactic behavior in several aspects: first, they are transitive verbs taking overt objects, as in (28a); second, they may take resultative complement, as in (28b); third, they may occur with a frequency phrase, as in (28c); fourth, they may take a preverbal manner adverbial, as in (28d):

(28) a. 他 在 拖 地板。

*Ta1 zai4 tuo1 di4-ban3*
He ZAI mop floor
'He is mopping the floor.'

b. 地 拖 得 很 乾淨。

*Di4 tuo1 de5 hen3 gan1-jing4*
Floor mop DE very clean
'The floor has been wiped/mopped very clean.'

c. 一天 拖 兩次

*yi4-tian1 tuo1 liang3-ci4*
one day mop two time
'mopping two times a day'

d. 猛拖

*meng3-tuo1*
mightily mop
'mopping mightily'

Moreover, it is interesting to notice that there are similar patterns between English and Mandarin. When the verb *wipe* is examined with the verb *clean*, the

verb *ca1* 擦 ‘to wipe’ can be paired up with the verb *cin1* 清 ‘to clear’. All of them describe the removal of a substance or physical objects from a location and share the same type of locus-locatum alternation, as in (29).

(29) a. Locus as object (location-as-object variant):

他 在 清 廚房 / 擦 桌子。

*Ta1 zai4 cing1 chu2-fang2 / ca1 zhuo1-zi5*

He ZAI clean kitchen / wipe table

‘He is cleaning the kitchen/wiping the table.’

b. Locatum as object (locatum-as-object variant):

他 在 清 垃圾 / 擦 灰塵。

*Ta1 zai4 cing1 le4-se4 / ca1 huei1-chen2*

He ZAI clean garbage/wipe dust

‘He is cleaning the garbage/wiping the dust.’

However, they contrast with each other as the *clear*-type verbs are deadjectival; that is, they can be used as adjective modifiers, as in (30).

(30) 清流 / 清溪

*cing1 liu2/cing1 xi1*

‘clear stream/clear creek’

Also, like in English, some verbs of surface contact through motion in Mandarin can be used as both verbs of removal, compounding with the resultative element *shang4* 上 ‘on’ and verbs of putting, compounding with the resultative *diao4* 掉 ‘off’, while some are used as only one of them, as illustrated in (31).

(31) a. With senses of removing and putting:

擦　上 / 掉　口紅

*ca1 shang4/diao4 kou3-hong2*

wipe　on/off　lipstick

'put on/wipe away lipstick'

b. With sense of putting:

敷　上 / *掉　藥膏

*fu1　shang4/*diao4　yao4-gao1*

cover　on/*off　ointment

'cover with/*take off oitment'

c. With sense of removing:

剃　*上 / 掉　腿毛

*ti4　*shang4/diao4　tuei3-mao2*

shave　*on/off　leg hair

'*shave on/shave off leg hair'

Liu explains that for verbs like *ca1* 擦 'to wipe', the locational change of the locatum is lexically under-specified. This explanation is slightly different from that of Levin and Rappaport (1991), which accounts for this phenomenon as the extended meanings of *wipe*.

### 2.3 Remarks

These studies both give us a lucid instruction to analyze verbs of removal and provide solid evidence to show that lexical meanings do affect syntactic properties to a certain degree cross-linguistically. However, Levin and Rapport Hovav and Liu provide different explanations for the ambiguous meaning, putting and removing, of

the *wipe*-type verbs (e.g., *wipe* in English and *ca1* 擦 'to wipe' in Mandarin). Levin and Rappaport Hovav claim that verbs often have basic and extended meanings. The basic meaning of the *wipe* verb belongs to the concept of verbs of surface contact through motion, manifested in the syntactic structure [NP V NP] ('Agent V Location'); e.g., *Tony wiped the table*. Moreover, it can be extended to the sense of removing or putting, when it is found in the syntactic structure associated with verbs of removal ('Agent V Locatum *from/off* Location'; e.g., *Tony wiped the dust from the table*) and verbs of putting ('Agent V Locatum *onto/into* Location'; e.g., *Tony wiped the polish onto the table*), respectively. Levin and Rappaport Hovav hold that *wipe* verbs may have both removing and putting senses, mainly based on their extended meanings which can incorporate with different syntactic structures. However, they do not give the reason why only the *wipe* verb, rather than the other two types, may have this extending and integrating process. And the derivational process between basic and extended meanings might be somehow arbitrary.

Liu, on the other hand, does not account for extended meanings. She claims that unlike *fu1* 敷 'to cover', which specifies the putting sense in its lexicalized meaning, and *ti4* 剃 'to shave', which specifies the removing sense in its lexicalized meaning, verbs like *ca1* 擦 'to wipe' lexically underspecify the locational change of the locatum. Therefore, verbs like *ca1* 擦 'to wipe' may allow both kinds of

resultative, the locatum either removed from or put onto a location. Although Liu points out the inherent differences lexicalized in each type of verbs, she does not illustrate the integration process, mapping lexical meanings to syntactic meanings.

Accordingly, some issues need to be dealt with: first, from Levin and Rappaport's claim, what is the motivation for only *wipe* verbs to integrate with different syntactic structures, and thus obtain its so-called 'extending meanings'? Second, from Liu's argument, how do people proceed the combination of lexical meanings and syntactic meanings? To answer these questions, we need to rely on several theories presented in the following section.

# CHAPTER III

# THEORETICAL FRAMEWORKS

To lay out the groundwork for our analysis, we are going to review some related theories in this section. The lexical approaches are first discussed in section 3.1, including event conceptual structure, lexicalization, and frame and perspective. Then, complementing the lexical approach, the constructional approach will be reviewed in section 3.2, followed by some remarks in section 3.3.

## 3.1 The lexical approach

### 3.1.1 Event conceptual structure

Ray Jackendoff (1972, 1983, 1987, 1990, 1992) has developed a decompositional theory of meaning which he calls conceptual semantics. The central principle of this approach is to describe meaning in terms of mental representations. Jackendoff's work identifies an inventory of universal semantic concepts, including Event, State, Material Thing (or Object), Path, Place and Property. At the level of conceptual structure a sentence is built upon of these semantic concepts, as illustrated in (1) (Jackendoff 1992: 13):

(1) Bill went into the house.

[**Event** GO ([**Thing** Bill], [**Path** TO] ([**Place** IN ([**Thing** HOUSE])])])]

The structure in (1) concentrates on the semantic of motion and thus the entity (or Thing) *the house* is given as an unanalyzed atom of meaning. More complicated examples of an Event are given in sentences (2-3) below, where we see the semantic function CHANGE OF STATE, or INCHOATIVE, which maps a state into an event, and the semantic function CAUSE, which maps an event into another event, respectively.

(2) The pool emptied.

[**Event** INCH ([**State** BE**Ident** ([**Thing** POOL], [**Place** AT ([**Property** EMPTY])])])]

(3) John emptied the pool.

[**Event** CAUSE ([**Thing** JOHN], [**Event** INCH ([**State** BE**Ident** ([**Thing** POOL], [**Place** AT ([**Property** EMPTY])])])]

Jackendoff believes that sentence meaning is constructed from word meaning, and the semantic decomposition can be used to investigate the mapping between lexical items and grammatical processes.

### 3.1.2 Lexicalization

From the other side of the same coin, semantic components can be integrated together to characterize the syntax-semantics interface as claimed by Leonard Talmy

(1985), who has studied how semantic elements are combined both in single words and across phrases. For example, he has identified several semantic components associated with verbs of motion, including the following (Talmy 1985: 60f):

(4) a. internal components of a motion event:

i. the Figure: an object moving or located with respect to another object (the Ground);

ii. the Motion: the presence per se of motion.

iii. the Location: the location of the movement involves the Source, the Path, and the Goal;

iv. the Path: the course followed or the site occupied by the Figure object with respect to the Ground object.

b. external components of a motion event:

i. the Manner/Cause: the type of motion.

Talmy has pointed out differences in languages in terms of how these semantic components are typically combined or conflated in verbs and verb phrases. Three patterns are discussed in particular for what components are expressed by the main verb root and what by additional elements:

(5) a. the Motion + Manner/Cause pattern

- the verb expresses the fact of motion and its manner or cause, while the direction is expressed separatly; i.e. encoded in an external prepositional phrase, as languages from English

e.g., He **ran** up the stairs.

b. the Motion + Path pattern

- the motion and the path are incorporated in the verbs, and the manner of motion is expressed independently by adverbials or gerundive type, as languages like Spanish:

e.g., **Subio** las ecaleras corriendo

went-up the stairs running
'He ran up the stairs.'

c. the Motion + Figure pattern

- a less common pattern combines the fact of motion with information about the moved object, with other semantic elements expressed separately, as languages like Atsugewi:

e.g., **-lup-** 'for a small shiny spherical object to move/be-located'
**-caq-** 'for a slimy lumpish object to move/be-located'
**-qput-** 'for loose dry dirt to move/be-located'

Talmy's work has led to a number of cross-linguistic studies of how semantic components are conflated into lexical items and grammatical structures (6).

(6) a. Taiwanese Southern Min (Lien 2004: 394f)

- verbs of wearing:

[Motion + Figure]

e.g., 戴 *ti3* 'for a hat or wig to be worn'
結 *kat4* 'for a necktie to be worn'
穿 *ching7* 'for a shirt, trousers, shoes to be worn'
掛 *kua3* 'for glasses, earrings gloves to be worn'

b. Hakka (Lai 2000: 2003)

- verbs of hitting:

[Motion + Manner + Instrument (i, ii) + (Path) + (Figure) + (Result)]

e.g., i. with hands

① with the palm:

撞 *vong1* ‘to strike$_{\textbf{(Motion)}}$ horizontally$_{\textbf{(Path)}}$ with great force$_{\textbf{(Manner)}}$ using the palm of a hand$_{\textbf{(Instrument)}}$’

盪 *tong3* ‘to strike$_{\textbf{(Motion)}}$ with great force$_{\textbf{(Manner)}}$ using the palm of a hand on the face$_{\textbf{(Figure)}}$’

② with the fist:

搒 *pong2* ‘to strike$_{\textbf{(Motion)}}$ with a fist$_{\textbf{(Instrument)}}$ with great force loudly$_{\textbf{(Manner)}}$ on the body$_{\textbf{(Figure)}}$’

搥 *cui5* ‘to strike$_{\textbf{(Motion)}}$ with a fist$_{\textbf{(Instrument)}}$ forcefully$_{\textbf{(Manner)}}$ on the back$_{\textbf{(Figure)}}$’

ii. with other instruments

① with things that are thin, long and light

扳 *pan1* ‘to strike$_{\textbf{(Motion)}}$ with something that is long and thin such as a belt$_{\textbf{(Instrument)}}$

抽 *su1* ‘to strike with something that is long and thin such as a whip$_{\textbf{(Instrument)}}$’

② with things that are heavy and thick

掄 *lun1* ‘to strike$_{\textbf{(Motion)}}$ with a stick$_{\textbf{(Instrument)}}$, often on purpose$_{\textbf{(Manner)}}$’

沒 *mut8* ‘to strike$_{\textbf{(Motion)}}$ unexpectedly$_{\textbf{(Manner)}}$ a dog or a snake$_{\textbf{(Figure)}}$ with something that is heavy and thick such as a stick$_{\textbf{(Instrument)}}$ so as to cause death$_{\textbf{(Result)}}$’

Referring to the process of decomposition and lexicalization, we observe that Levin and Rappaport Hovav’s (1991) study, in practice, apply these two concepts to analyze verbs of removal and their subclasses in English, although they do not point that out explicitly.

### 3.1.3 Frame and perspective

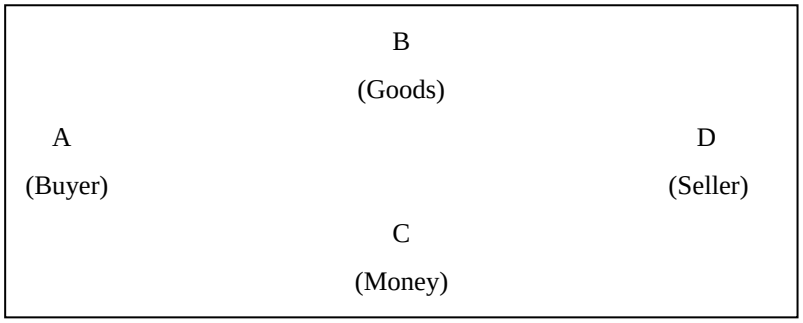
Semantic concepts do not simply float around randomly in the mind. There are semantic relations between words and their corresponding concepts. These concepts belong together because they are associated in experience. The need for another means to organize concepts has led to a variety of similar proposals, each with its own name, such as frame, schema, script, cognitive model, experiential gestalt, base, and scene (Fillmore 1985: 223). Fillmore (1982) and Lakoff (1987) both make similar claims that speakers have folk theories about the world, based on their experience and rooted in their culture. An important insight of Fillmore and Lakoff in their early works on frames/domains is that the knowledge represented in frame is itself a conceptualization of experience that often does not match to the reality. Fillmore gives an example of how these folk theories might work by using the word *bachelor*. It is interesting that some bachelors are more prototypical than others; for example, the Pope is far from a prototypical bachelor. Fillmore and Lakoff suggest that there is a division of our knowledge about the word *bachelor*: part is a dictionary-type definition (perhaps simply 'an unmarried man') and part is an encyclopedia-type entry of cultural knowledge about the bachelorhood and marriage.

Frame semantics[1] holds that a lexical meaning cannot be understood without

[1] Langacker (1987) illustrates his approach to the question with the meaning of the word *radius*. He describes the relationship between RADIUS and CIRCLE as one of a profile and a base, which is

reference to a particular background frame or scene, which designates a coherent individuatable perception, memory, experience, action, or object (Fillmore 1977, 1982, Fillmore and Atkins 1992, 2000). Take Fillmore's classic frame of BUY for example. The action category BUY includes a reference to at least four other categories, namely a Buyer, a Seller, Goods and Money. The configuration of interacting categories is summarized in Figure 3.1.

Figure 3.1 The BUY frame (Fillmore 1977: 104)




These four components of the BUY frame can be mapped to four syntactic slots in the syntactic pattern as in (7), in which Buyer (Mary) as subject, Goods (a secondhand book) as direct object, Seller (Peter) as the first adverbial and Money (ten dollars) as the second adverbial.

---

identical to Fillmore's frame. Profile is defined as a substructure within the base that is designated and achieves a special degree of prominence (Langacker 1987: 186f, 491) while base as the cognitive structure against which the designatum of a semantic structure is profiled (Langacker 1987: 486). Moreover, Langacker's idea of the profiling of participants in an interactive network as syntactic figure and ground is very similar to the notion of perspectivizing two elements of a frame as subject and object from Fillmore. Both approaches share the belief that clause patterns cannot be seen in isolation, but against their cognitive background (i.e. the interactive networks or frames repectively). However, the frame notion has a wider scope: while Langacker is exclusively interested in the two prominent entities, i.e. the syntactic figure (or subject) and the syntactic ground (or object), Fillmore also considers indirect object and adverbials.

(7) Mary bought a secondhand book from Peter for ten dollars.

This assignment of syntactic roles, which to a large extent governed by the choice of the verb *buy*, is called the syntactic perspective of the sentence, and the notion of perspective, i.e. perspectivization relies on the principle of prominence.

Using Figure 3.1 as a basis for a more general COMMERCIAL EVENT frame, we can indicate the difference between the verb *buy* and other three related transaction verbs *sell*, *charge*, *pay* by highlighting those components of the frame that make up the subject and object for each verb, as illustrated in (8-10).

(8) Peter *sold* a secondhand book to Mary for ten dollars.

Seller-subject; Goods-direct object; Buyer; Money

(9) Peter *charged* Mary ten dollars for a secondhand book.

Seller-subject; Buyer-direct object; Money; Goods

(10) Mary *paid* ten dollars to Peter for a secondhand book.

Buyer-subject; Money-direct object; Seller; Goods

The frame approach also shows up in the fact that the COMMERCIAL EVENT frame even captures cognitive categories whose prominence is so low that they are not expressed on the linguistic surface at all, as examples in (11-12).

(11) Mary *spent* ten dollars on a secondhand book.

Buyer -subject; Money-direct object**;** Goods; [Seller]

(12) The secondhand book *cost* Mary ten dollars.

**Goods -subject; Buyer -direct object;** Money; [Seller]

Both verbs imply a Seller who cannot be manifested in the syntactic structure (and is therefore put in the brackets). Instead the perspective directs the attention to the Buyer and the Money when *spend* is used, to the Goods and the Buyer when the verb *cost* is used.[2] Therefore, it is claimed that speakers have folk theories about the world, based on their experience and rooted in their culture, that is, conventionalized knowledge (Fillmore 1982, Lakoff 1987). Furthermore, an important insight of Fillmore and Lakoff in their early works on frames/domains is that the knowledge represented in frame is itself a conceptualization of experience that often does not match to the reality.

### 3.2 The constructional approach

Constructionists, challenging the compositional model of grammar, point out that idiosyncrasy and conventionality of idiomatic constructions cannot be predicted by the general rules of the syntactic and semantic components and their linking rules. Fillmore, Kay and O'Connor (1988), instead of treating idioms as a problematic phenomenon, argue that the proper way to represent speakers' knowledge of idioms is

[2] Talmy's attentional imaging system displays that languages can place a portion of a coherent referent situation into the foreground of attention by the explicit mention of that portion, in his term windowing; while placing the remainder of that situation into the background of attention by not mentioning it, in his term gapping. Refer to Tamly (2000b) for details.

as constructions. That is, some elements of the construction are lexically open, so the idioms fitting the description cannot simply be listed in the lexicon. Many studies following this tenet have treated various constructions: *let alone* in Fillmore, Kay and O'Connor (1988), *There*-construction in Lakoff (1987), *Nominal Extraposition* in Michaelis and Lambrecht (1996), the 'time'-*away* construction in Jackendoff (1997), the *What's X doing Y?* construction in Kay and Fillmore (1999), and so on. Goldberg (1995) takes a step further and argues that basic sentences are constructions – form-meaning pairings existing independently of any particular verbs. The crucial concern of these studies has been to develop Construction Grammar as a model in which we can describe, analyze and generate all the linguistic constructs of a language, incorporating both the core and the periphery in a single grammatical system. Goldberg (2006: 5) concludes all levels of grammatical analysis involve constructions. That is, constructions are stored pairings of form and function, including morphemes or words, idioms, partially lexically filled and fully general linguistic patterns. Examples are given in Table 3.1.

Table 3.1 Examples of constructions, varying in size and complexity

| | |
|---|---|
| Morpheme | e.g., *pre- , -ing* |
| Word | e.g., *avocado, anaconda, and* |
| Complex word | e.g., *daredevil, shoo-in* |
| Complex word (partially filled) | e.g., [N-s] (for regular plurals) |
| Idiom (filled) | e.g., *going great guns, give the Devil his due* |
| Idiom (partially filled) | e.g., *jog* <someone's> *memory*, *send* <someone> *to the cleaners* |
| Covariational Conditional | The Xer the Yer (e.g., *the more you think about it, the less you understand*) |
| Ditransitive (double object) | Subj V Obj1 Obj2 (*he gave her a fish taco*; *he baked her a muffin*) |
| Passive | Subj aux VPpp ($PP_{by}$) (e.g., *the armadillo was hit by a car*) |

Analyzing event structures, Goldberg (2005) observes a potential counterexample to the Argument Realization Principle (ARP), followed by many researchers (Grimshaw and Vikner 1993; van Hout 1996; Rappaport Hovav and Levin 1998; Kaufmann and Wunderlich 1998) and further modified by Rappaport Hovav and Levin (1998) into the Subevent Identification Condition (SIC). The ARP has been cited in order to account for the unacceptability of example (13a) in which both arguments in boldface in (13b) must be overtly expressed as they are in (13c) (Goldberg 2005: 19).

(13) a. *Phil swept onto the floor.

b. **Phil** ACT <swept>

BECOME [**dust** <onto the floor>]

c. Phil swept the dust onto the floor.

The SIC can be further used to explain that each of the two subevents in (13b) is identified by a lexical predicate: the ACT subevent is identified by *swept*; the BECOME subevent is identified by *onto*. However, there is in fact a third subevent CAUSE but there is no lexical predicate that identifies this causing relation. That is, neither *sweep* nor *onto* designates a causal event. This problem can be easily solved if we take constructions as meaning-bearing units. Take the sentence in (13c) for example: the verb *sweep* is integrated with the resultative construction (CAUSE-BECOME construction) (Goldberg 1995: 189) in Figure 3.2, determined by two principles:

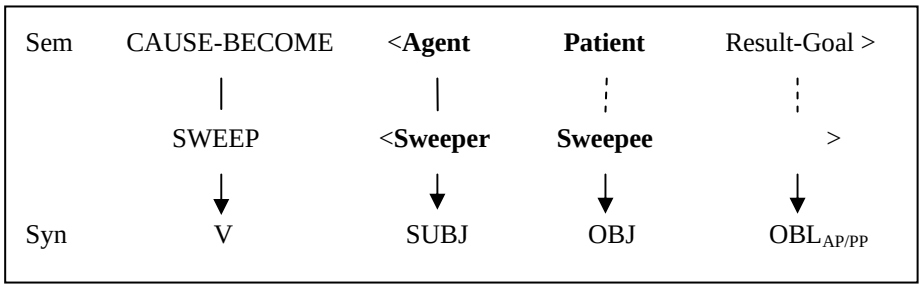
(14) the Semantic Coherence Principle:

Only roles which are semantically compatible can be fused.

(15) the Correspondence Principle:

Each participant role that is lexically profiled and expressed must be fused with a profiled argument role of the construction.

Figure 3.2 Composite Fused Structure: CAUSE-BECOME + *sweep*




The semantic roles associated with the construction (=argument roles) are fused

with those associated with the verb (=participant roles). Thus the two participant roles of *sweep,* sweeper and sweepee, are put in correspondence with the two argrument roles, Agent and Patient. The resultative construction therefore contributes a Result-Goal role not associated with a participant role of the verb. And the CAUSE subevent is incorporated with BECOME subevent in the resultative construction. That is, both the causal relation and the oblique argument role can be realized by the constructional meaning.

Further, constructionist theories do not derive one construction from another, as is generally done in mainstream generative theory. They hold that an actual expression typically involves the combination of at least half a dozen different constructions. The sentence in (16) involves the list of constructions given in (17) (Goldberg 2006: 10).

(16) what did Liza buy Zack?

(17) a. *Liza*, *buy*, *Zach*, *what*, *do* constructions

b. Ditransitive construction

c. Question construction

d. Subject-Auxiliary inversion construction

e. VP construction

f. NP construction

Although very promising in handling cases like this one, the constructional

approach in Goldberg's sense does not explicate how to rule out the ungrammatical sentences. Consider the sentences in (18-23) below:

(18) *Monica removed the bag.

(19) Doug cleared the table.

(20) Kay wiped the counter.

(21) *Monica removed the bag of groceries.

(22) Doug cleared the table of dishes.

(23) *Kay wiped the counter of fingerprints.

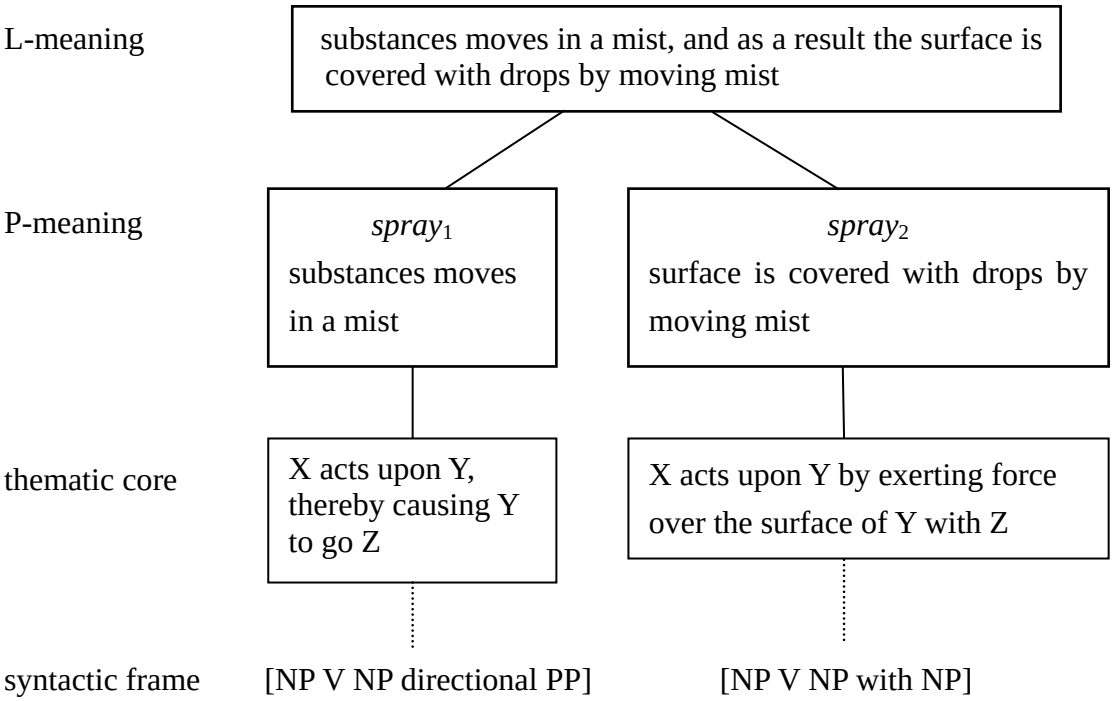
Considered as the same construction, sentence (18) is ungrammatical whereas (19) and (20) are grammatical. Why does the constructional meaning not contribute to (18)? Likewise, why does the constructional meaning not contribute to (21) and (23), in contrast to (22)? In fact, the unacceptability of these examples is closely related to the event frame of the verbal meaning. Although frame semantics is mentioned to be essential in determining verbal meanings, Goldberg's framework does not clearly state how different verbal meanings can influence different fusion of various constructions. That is, Goldberg's approach might ignore the fine-grained nuances among verbal meanings. In addition, that Goldberg treats constructions as independent form-meaning pairs might overlook the common ground among constructions which have the same verbs in them, like sentences in (19) and (22). It

will be odd if we treat these three sentences as three independent constructions without considering their common verb, *clear*. Hence, Iwata (2005a, b) proposes two levels of verbal meanings, Lexical Head Level Meaning, or L-Meaning, and Phrase Level Meaning, or P-meaning, to explicate the interaction of the abundant inherent verbal meanings and constructions. Iwata shows that locative alternation as in (24) can be adequately handled by this L-meaning/P-meaning model as in Figure 3.3.

(24) a. Jack sprayed paint onto the wall. (locative variant)

b. Jack sprayed the wall with paint. (*with* variant)

Figure 3.3 The L-meaning/P-meaning model of *spray* (Iwata 2005a: 369)

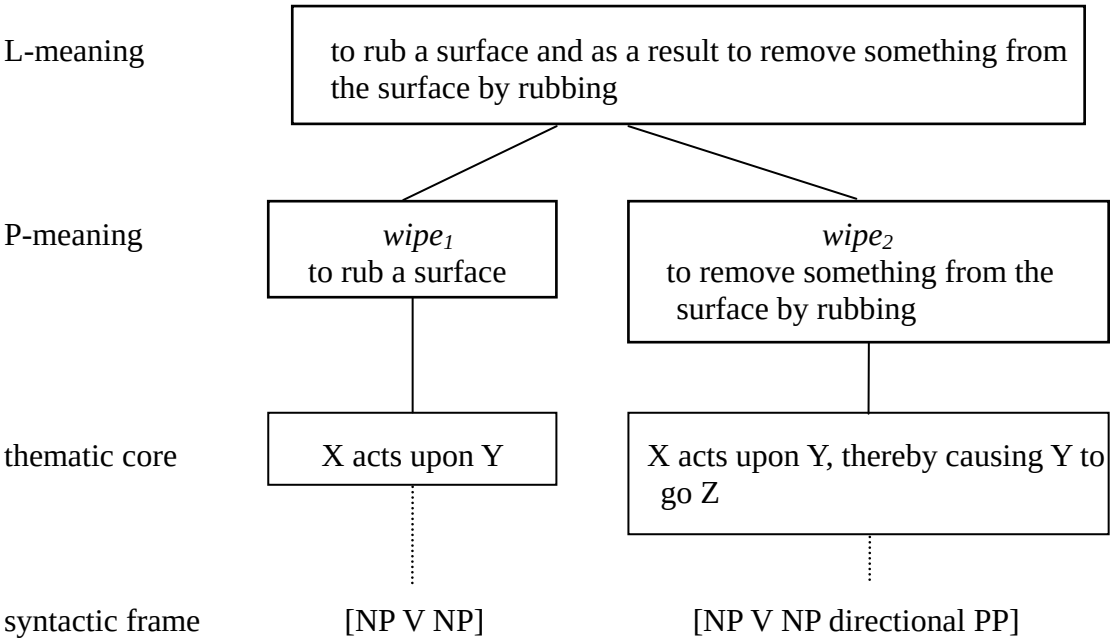



Iwata (2005a: 371f) argues that the idea that a single L-meaning gives rise to

two P-meanings is not new. This could be found in Langacker (1987) and Goldberg (1995). A verb can appear in a syntactic frame when its L-meaning is compatible with the semantics of a construction. Syntactic frames are associated with identifiable meanings, and this pairing of form and meaning amounts to 'construction' in the sense of Goldberg (1995). The verb *spray*, whose L-meaning includes both 'putting' and 'covering', is thus capable of taking both forms. Which syntactic frame is chosen is determined by which aspect of L-meaning is profiled, this process being an 'alternate construal of the same situation' in the sense of Langacker (1987). With more investigation into the alternations of different verbs, Iwata (2005b:114f) further concludes that the L-meaning of a verb in locative alternation contains two scenes, which are related through a scenario as with *pack*, a higher-order schema as with *trim*, or two related image schema as with *roll*.

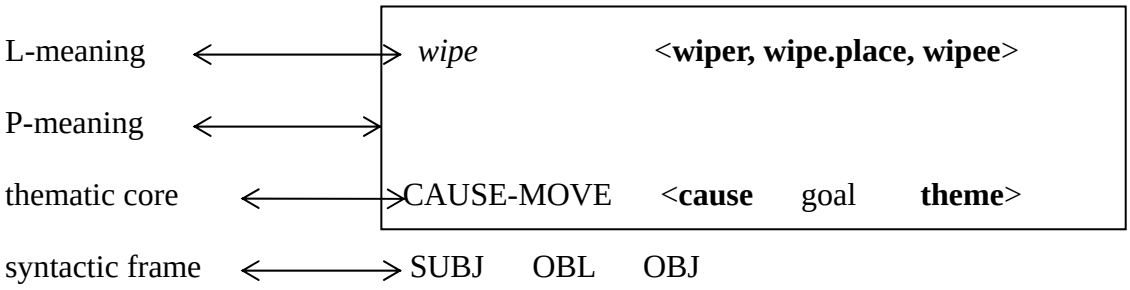
In addition to explicating locative alternation, Iwata's model also fulfill our needs in displaying the fine-grained nuances among other verbal meanings. Following Boas' (2000) conception of verbal meaning, Iwata delineates the verb *wipe* in Figure 3.4.

Figure 3.4 The L-meaning/P-meaning model of *wipe* (adapted from Iwata 2005a: 382)




Comparing Goldberg's model with Iwata's, Figure 3.5 gives us an idea of the correspondences between the elements in Goldberg's (1995) and Iwata's (2005a) models.

Figure 3.5 Correspondences between models by Goldberg (1995) and Iwata (2005a)




The differences between Iwata's account and Goldberg's concern the contribution of the constructions and the relationship among the constructions. While Goldberg aims to capture form-meaning correspondences that fall outside of

lexical meaning, Iwata is concerned with the syntactic and semantic information lexically encoded in L-meaning, and constructions here simply highlight aspects of verb meaning that are already there. And while Goldberg treats each construction as an independent unit, Iwata reveals the subtle relationship among constructions, connected by verbs.

### 3.3 Remarks

Like the lexical approach, Iwata's model puts more emphasis on lexical meanings. Iwata further gives two levels of verbal meaning, L-meaning/P-meaning, to explain the motivation of integrating *wipe* verbs with different syntactic frames, and hence obtain the so called extended meaning in Levin and Rappaport Hovav's term. Iwata also displays the procedure of bridging lexical and syntactic frames by means of thematic cores. On the other hand, like the constructional approach, Iwata focuses on various surface forms and treats each of them as a meaning-bearing unit. However, complementing Goldberg's account, Iwata makes the most of the semantic compatibility between lexical items and syntactic structures, which establishes reasonable constraints on constructional meanings.

# CHAPTER IV

# ANALYSIS

Based on the previous studies and theories, this chapter will demonstrate step by step the integration of verbal meanings and constructions in Hakka. In section 4.1, according to Jackendoff's decompositional theory, verbs of removal in Hakka will first be decomposed into several semantic concepts to represent the common event conceptual structure. This common conceptual structure forms the universal L-meaning of verbs of removal in our two-level-meaning model. Moreover, through Talmy's lexicalization, we identify six verbs[1] with different conflated semantic components, which result in different syntactic realizations from phrasal to sentential levels. Taking frame semantics into consideration, section 4.2, at a phrasal level, deals with the profiled and shaded semantic elements of each verb manifested on [V X] constructions, including [V O] constructions and [V C] constructions. The profiled elements will be treated as the P-meanings in our discussion. After the semantic frames, L-meanings and P-meanings, are constructed, various constructions of these verbs can be successively figured out through the transitional level, thematic

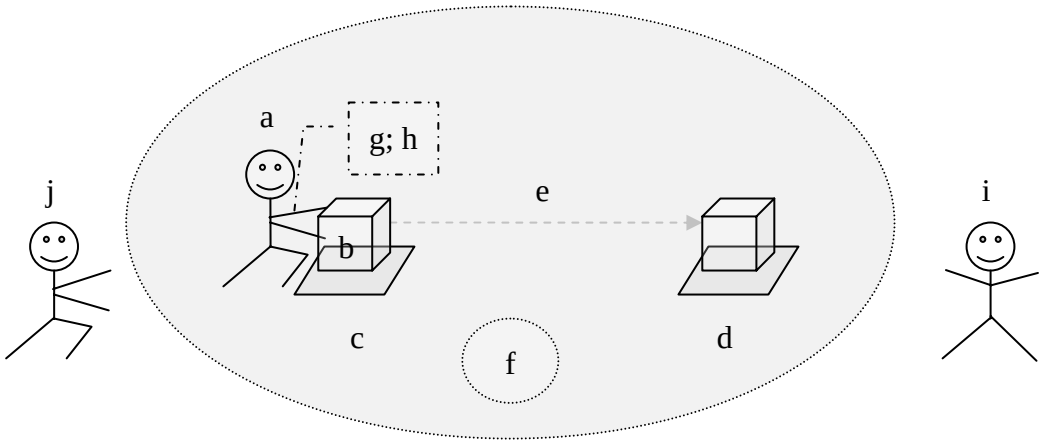
[1] Levin (1993) classifies over 3,000 English verbs based on their shared meanings and linguistic behavior. In accordance to Levin's classification of verbs of removing (1993: 122), six corresponding verbs of removal in Hakka are selected in this thesis.

cores. Consequently, these syntactic structures obtain their constructional meanings, developing into form-meaning pairings. Furthermore, sections 4.3 and 4.4, expanding into the sentential level, discuss the interactions of profiled participant roles in [V X] constructions and larger constructions, such as BUN and LAU constructions, respectively. Section 4.5 gives a brief summary of the analysis.

## 4.1 Conceptual structures of verbs of removal

Verbs of removal, such as *ban1* 搬 'to remove', *got2* 割 'to cut', *cin1* 清 'to clear', *sen3* 擤 'to blow one's nose', *cut8* 捽 'to wipe', *ha1* 下 'to unload', etc., generally describe an animate agent contacting with the surface of a location through a certain motion for the purpose of causing a patient to move away from the source to the goal, as shown in Figure 4.1 (L&RH 1991, Liu 2000). And this conceptual structure can be decomposed into several elements, as shown in (1) (cf. Gao 2001).

Figure 4.1 Decomposed conceptual structure of verbs of removal in Hakka



(1) Elements in the conceptual structure of verbs of removal:

a. Agent (Ag): the remover in the event frame, prototypically animate;

b. Patient (Pa): the removee, the entity undergoing the effect of the action, including undergoing a change in both location and state;

c. Source (So): the location from which the removee moves.

d. Goal (Go): the location toward which the removee moves;

e. Direction (Di): the direction of path by which a removal action is performed;

f. Result (Re): the resultant state after a removal action is performed;

g. Instrument (Ins): the means by which a removal action is performed;

h. Manner (Man): the manner by which a removal action is performed;

i. Beneficiary (Be): the beneficiary due to the action

j. Comate (Co): the comate whom the agent or the remover performs with.

Next, six removal verbs are distinguished by their different conflation with these semantic elements. First, the general removal verb *ban1* 搬 'to remove' describes the general action of removing, without any conflated roles, indicating an agent acting upon a patient, thereby causing the patient to leave from the source. Second, the removal verb *got2* 割 'to cut' has the instrument role, such as a knife, conflated in its lexical meaning. That is, the removal verb *got2* 割 specifies the instrument meaning in its conceptual structure. Third, the removal verb *cin1* 清 'to clear' specifies the resultant state after a removal action is performed. Fourth, the removal verb *sen3* 擤 'to blow one's nose' has the source role, nose, in its lexical meaning. Fifth, the removal verb *cut8* 捽 'to wipe' performs a removal action with

a specific manner in gesture, focusing on the contact motion. Sixth, the removal verb *ha1* 下 'to unload' specifies the direction along with the removal action.

After building up the L-meaning of verbs of removal through decomposition and lexicalization, in the following sections, we will illustrate how perspectivization, shaping P-meanings, influences the syntactic behavior at phrasal levels, [V X] constructions.

## 4.2 [V X] constructions

In section 4.2 we will discuss how verbs of removal interact with [V X] constructions, where X is replaced by different semantic elements in order to examine the grammaticality of each pattern. The observation is illustrated in Table 4.1, which shows three possible patterns – [V O] constructions, [V C] constructions, and adjuncts.[2] In section 4.2.1, we will display different manifestations of [V O] construction, including [V Pa], [V So], and [V Go] constructions. Different levels of intimacy between the verb and the object account for the grammaticality of [V O] constructions. Next, section 4.2.2 investigates those constructions where the verbs are followed by complements, including [V Di], and [V Re] constructions. In addition to the mapping procedure from profiled arguments to [V X] constructions, we will illuminate the delicate differences between legitimate and illegitimate

[2] Adjuncts deal with the roles which cannot be profiled in [V X] constructions

syntactic behavior, based on whether the participant role of a verb can be profiled or not in its particular frame, P-meaning. And, in section 4.2.3, we will briefly introduce those elements which cannot be profiled in [V X] constructions. Last, section 4.2.4 is the generalization of [V X] constructions.

Table 4.1 Different syntactic realizations of verbs of removal in [V X] constructions in HakkaT[3]

| Lexical items | | *ban1* 搬 ‘to remove’ | *got2* 割 ‘to cut’ | *cin1* 清 ‘to clear’ | *sen3* 擤 ‘to blow one’s nose’ | *cut8* 捽 ‘to wipe’ | *ha1* 下 ‘to unload’ |
|---|---|---|---|---|---|---|---|
| Semantic elements | | [Ag, Pa, So, Go, Di, Re, Ins, Man, Be, Co] | | | | | |
| Conflated elements | | n/a | Ins | Re | So | Man | Di |
| [V O] constructions | [V Pa] constructions | *ban1 zok4-e2* 搬桌仔 ‘to remove the table’ | *got4 vo5* 割禾 ‘to cut the rice harvest’ | *cin1 lep4-sep4* 清垃圾 ‘to clear garbage’ | *sen3 pi3* 擤濞 ‘to blow one’s nose’ | *cut8 hon3* 捽汗 ‘to wipe off sweat’ | *ha1 fo2* 下貨 ‘to unload cargo’ |
| | [V So] constructions | *ban1 vuk4* 搬屋 ‘to move (out of the house)’ | *got4 tien5-kam1* 割田崁 ‘to cut the grass from the ridge (between fields)’ | *cin1 fong5-gien1* 清房間 ‘to clean the room’ | * conflated | *cut8 zok4-e2* 捽桌仔 ‘to wipe the table’ | * |
| | [V Go] constructions | *ban1 vuk4* 搬屋 ‘to move (into the house)’ | * | * | * | * | * |
| [V C] constructions | [V Di] constructions | *ban1 cut4-hi3* 搬出去 ‘to remove (sth) out’ | *got4 ha1- loi5* 割下來 ‘to cut down’ | *cin1 cut4-hi3* 清出去 ‘to clear out’ | *sen3 cut4-loi5* 擤出來 ‘to blow out one’s nose’ | *cut8 hi2- loi5* 捽起來 ‘to wipe clean’ | * conflated |
| | [V Re] constructions | *ban1 ciang5-ciang5* 搬淨淨 ‘to empty out’ | *got4 ciang5-ciang5* 割淨淨 ‘to completely cut (sth)’ | *cin1 kung1* 清空 ‘to clear (sth) off’ | *sen3 ciang5-ciang5* 擤淨淨 ‘to blow … clean’ | *cut8 ciang5-ciang5* 捽淨淨 ‘to wipe clean’ | *ha1 kung1-kung1* 下空空 ‘to unload completely’ |
| Adjuncts | [V Ins] constructions | * | * | * | * | * | * |
| | [V Man] constructions | * | * | * | * | * | * |
| | [V Be] constructions | * | * | * | * | * | * |
| | [V Co] constructions | * | * | * | * | * | * |

[3] I thank Professor Chinfa Lien for valuable comment in constructional classification.

### 4.2.1 [V O] constructions

Iwata's model shows that a legitimate [V O] construction requires the compatibility of two levels, the P-meaning level and the syntactic level. At the P-meaning level, the patient role needs to be prominent enough to be profiled, while the others are shaded. At the syntactic level, the [V O] construction is a meaning bearing unit that describes the action and the entity affected directly by the action.

There are three types of [V O] constructions in Hakka, which are [V Pa], [V So], and [V Go] constructions. First, the [V Pa] construction is introduced. The argument realizations of six removal verbs in [V Pa] constructions are summarized in Table 4.2.

Table 4.2 Argument realizations of verbs of removal in [V Pa] constructions in Hakka

| Lexical items | *ban1*<br>搬<br>'to remove' | *got2*<br>割<br>'to cut' | *cin1*<br>清<br>'to clear' | *sen3*<br>擤<br>'to blow one's nose' | *cut8*<br>捽<br>'to wipe' | *ha1*<br>下<br>'to unload' |
|---|---|---|---|---|---|---|
| Participant roles | [Ag, **Pa**, So, Go, Di, G, Re, Ins, Man, Be, Co] | | | | | |
| Conflated elements | n/a | Instrument | Result | Source | Manner | Direction |
| **Profiled patient roles** | ***zok4-e2***<br>**桌仔**<br>**'the table'** | ***vo5***<br>**禾**<br>**'the rice harvest'** | ***lep- sep4***<br>**垃圾**<br>**'garbage'** | ***pi3***<br>**濞**<br>**'snot'** | ***hon3***<br>**汗**<br>**'sweat'** | ***fo2***<br>**貨**<br>**'cargo'** |
| [V Pa] constructions | *ban1 zok4- e2*<br>搬桌仔<br>'to remove the table' | *got4 vo5*<br>割禾<br>'to cut the rice harvest' | *cin1 lep4-sep4*<br>清垃圾<br>'to clear garbage' | *sen3 pi3*<br>擤濞<br>'to blow one's nose' | *cut8 hon3*<br>捽汗<br>'to wipe off sweat' | *ha1 fo2*<br>下貨<br>'to unload cargo' |

Croft (1998) discusses how the causal interaction of participant roles determines the choice of subject, object, and oblique for a variety of single clauses in English. The choice of subject, object, and oblique is not chaotic. Rather it associates with control and affectedness, namely control for subjects and affectedness for objects. Dixon (1991, 2005) also deals with the patient roles using the concept of affectedness. The affect verbs are prototypical transitive verbs, involving three semantic roles - "Agent moves or manipulates something (referred to as the Manip role) so that it comes into contact with something or some person (the target roles). Either the Manip or the Target (or occasionally, both) will be physically affected by the activity" (Dixon 1991:102; 2005:110). Hence, the Target (i.e. the patient role), directly affected by removing, becomes more prominent in the concept structure of verbs of removal. Also, the Target is naturally realized as the direct object of the verb.

Here, [V Pa] constructions in Hakka echo the prototypical event type called the 'transmission-of-force' model by Talmy (1976) and the 'billiard-ball' model by Langacker (1991): One participant interacts with another participant and transmits its force to the other participant, which then undergoes a change. When this force-dynamic relationship is expressed by a simple active transitive verb, the agent is construed as acting entirely under his or her volition (i.e. control), and brings about a

complete change of state to the patient, so that the patient cannot change any further in the causal chain (i.e. affectedness). Hence, an agent and a patient are normally assigned to the subject and the object position in an active sentence, respectively.

Furthermore, Dowty (1991: 572) provides five contributing properties to describe proto-patient roles, as shown in (2):

(2) Contributing properties and examples for patient proto-roles (in Object NP):

a. undergoes change of state: e.g., John moved the rock.

b. incremental theme: e.g., John filled the glass with water.

c. causally affected by another participant: e.g., Smoking causes cancer.

d. stationary relative to movement of another participant: e.g., The bullet entered the target.

e. does not exist independently of the events, or not at all: e.g., John built a house.

These features provide a solid basis for analyzing the patient roles of verbs of removal. *Zok- e2* 桌仔 'the table', for example, undergoes a change a state, which is location changed. It is also causally affected by the action *ban1* 搬 'to remove', and it does not come into or out of existence without independence of the event. Last, *zok4-e2* 桌仔 'the table' belongs to an incremental theme, since the event of removing the

tables (to the basement) is partially or completely done based on how many tables in question are partly or completely moved (to the basement). Consider these features with the selection principle in (3).

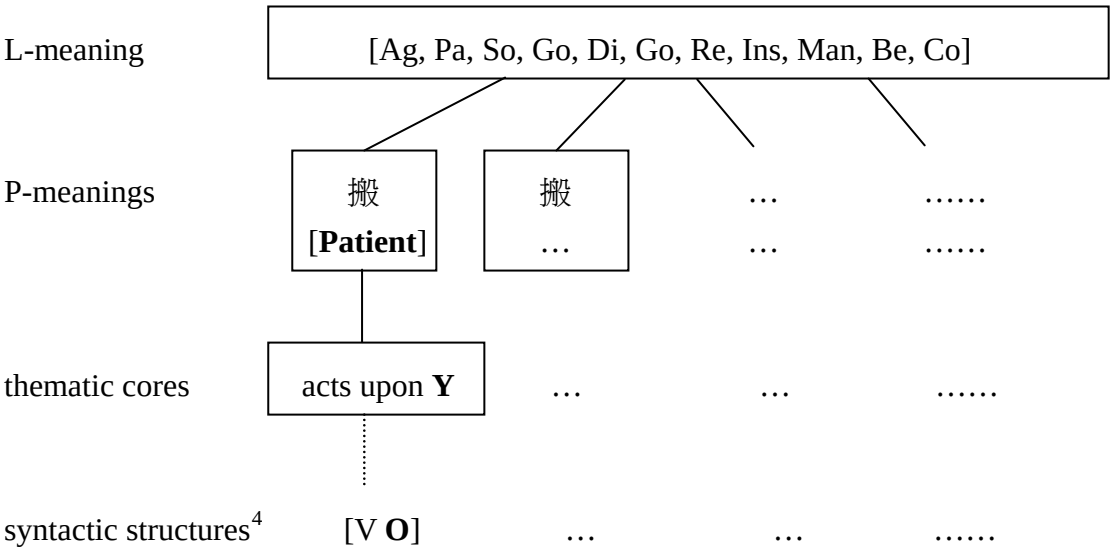
(3) Argument selection principle: (Dowty 1991: 576)

> In predicates with grammatical subject and object, the argument for which the predicate entails the greatest number of Proto-Agent properties will be lexicalized as the subject of the predicate; the argument having the greatest number of Proto-Patient entailments will be lexicalized as the direct object.

*Zok4-e2* 桌仔 'the table' gains most of the proto-patient entailments from the predicate *ban1* 搬 'to remove', so it can be naturally mapped into the direct object position. The high prototypicality of the patient role is also associated with Croft's argument in subject and object assignment. Other objects, like *vo5* 禾 'the rice harvest', *lep4-sep4* 垃圾 'garbage', *pi3* 鼻 'snot', *hon3* 汗 'sweat', and *fo2* 貨 'cargo', also possess the same features as *ban1* 搬 'to remove' does and they can be treated as prototypical patient roles as well.

Accordingly, back to Iwata's two-level-meaning model, all of the patient roles of verbs of removal observed so far can be profiled in or integrated with the [V O] construction to signify 'X acts upon Y', meaning 'to move an entity'. Take *ban1* 搬 'to remove' for example, as demonstrated in Figure 4.1.

Figure 4.1 The L-meaning/P-meaning model of BAN in the [V Pa] construction




In Figure 4.1, the universal concept of verbs of removal, L-meaning, is first carried out. Next, the P-meaning under discussion depicts one of the semantic elements which we are focusing on, i.e., the patient role. Then, through the thematic core, 'acts upon Y', denoting 'to act upon the patient', the verbal meaning inevitably integrates with its corresponding syntactic structure, the [V O] construction. The prominence of the patient role and the semantic compatibility of verbal meanings and constructions also account for the transitivity of verbs of removal. That is, if the patient role is not mentioned, the expression will be puzzling, as in sentence (4).

(4) a. 先生　　愛　佢　　搬去　　外背。

*Sin1-sang1　oi3　gi5　ban1-hi3　ngoi3-boi3*
Teacher　ask　him　move-to　outside
'The teacher wants him to move outside.'

[4] The term 'syntactic frames' in Iwata's (2000, 2005a, b) model is modified hereafter, because the concept of 'frame' in this thesis has followed Fillmore's (1982) definition.

(4) is obscure because it lacks the patient roles, so that the reader will be curious about ‘what’ is asked to be moved outside.

For the same reason, all the other patient roles are manifested in [V Pa] constructions in Table 4.2, although the verbs are conflated with different roles. Each patient role undergoes a change of state (or location) and is directly affected by its verb. For example, *vo5* 禾 ‘the rice harvest’ is apart from the field because of the cutting motion; *lep4-sep4* 垃圾 ‘garbage’ is out of the house because of the clearing motion; *pi3* 濞 ‘snot’ is cleaned up because of the blowing motion; *han3* 汗 ‘sweat’ is gone because of the wiping motion; *fo2* 貨 ‘cargo’ leaves the truck because of the unloading motion. Therefore, at the P-meaning level, all these roles are prominent enough to be profiled. Integrating with the syntactic structures, the patient roles become the direct objects of the removal verbs, and then constitute form-meaning pairs, denoting ‘removing something’.

In addition to patient roles, source and goal roles, in the conceptual structure of the removal verbs can appear in [V O] constructions. Consider examples in (5).

(5) a. [V So] construction

清　　房間
*cin1 fong5-gien1*
clear　room
‘to clear the room’

b. [V Go] construction

搬　　屋[5]

*ban1*　*vuk4*
move　house
'to move (out of the house)'

In (5a) the direct object of *cin1* 清 'to clear' is the source role *fong5-gien1* 房間 'room'. It can be understood that something (the patient role) has been cleared from the room. In (5b) v*uk4* 屋 'house' is the location from which the furniture or anything else is removed. And it implies 'to move (out of the house)'.

However, the frequency of the combination of the six removal verbs and these two roles is much lower. Not all these roles can freely combine with all the six verbs, like the patient roles do. Consider the following examples.

(6) a. *[V So] construction

*下　　貨車
*ha1*　*fo3-ca1*
unload　truck
'to unload (cargo) from the truck'

b. *[V Go] construction

*清　　外背
*cin1*　*ngoi3-boi3*
clear　outside
'to clear (garbage) to outside'

[5] The meaning of *ban1 vuk4* 搬屋 'to move' in ambiguous. It refers to 'moving into the house', where *vuk4* 屋 'house' is the goal, or it refers to 'moving out of the house', where *vuk4* 屋 'house' is the source. See the detailed analysis in the following paragraphs.

(6a) shows that the verb *ha1* 下 'to unload' is not allowed to take the source role *fo3-ca1* 貨車 'truck' as its direct object. In (6b) the goal role *ngoi3-boi3* 外背 'outside' is prohibited to combine with the removal verb *cin1* 清 'to clear'.

These two ungrammatical sentences show that the source and the goal roles are not as prominent as the patient role and they are not directly affected by the removal action as the patient roles are. Nevertheless, in some grammatical sentence these roles are required. The examples in (7) can illustrate.

(7) a. [V So] construction

佢 𡃁 你 捽 *(桌仔)。
*Gi5 gam1 n5 cut8 zok4-e2*
He force you wipe table
'He forced you to wipe the table.'

b. [V Go] construction

佢 舊年 搬*(屋)。
Gi5 kiu3-ngien5 ban1-vuk4
He last year move
'He moved last year.'

In both sentences in (7), the source and the goal role have to be profiled after the removal verb, or the sentence will be incomplete.

Table 4.3 shows that some removal verbs can be combined with the source roles, but some cannot. The grammaticality of [V So] constructions is different from verb to verb.

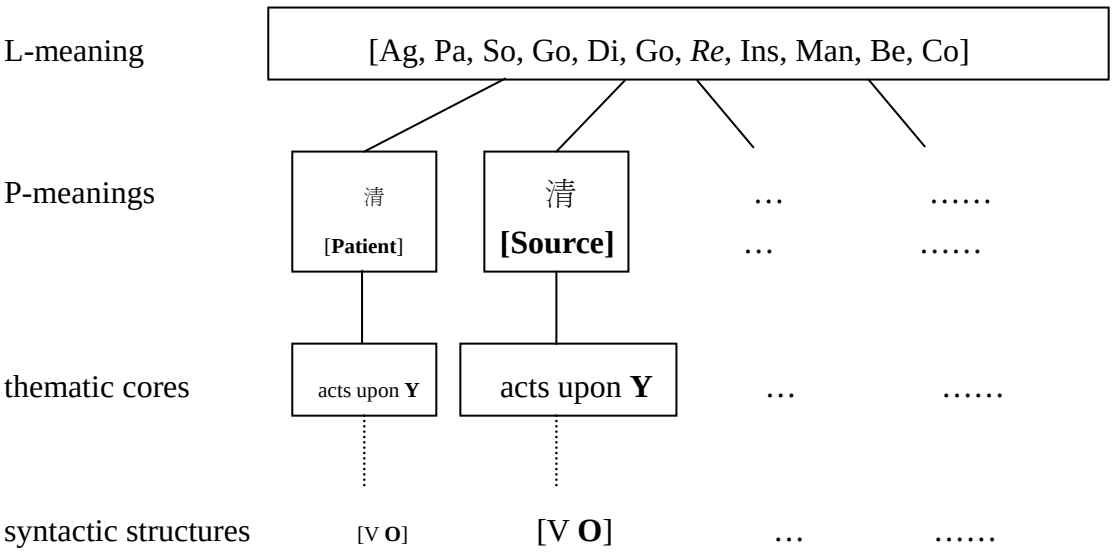
Table 4.3 Argument realizations of verbs of removal in [V So] constructions in Hakka

| Lexical items | *ban1* 搬 ‘to remove’ | *got2* 割 ‘to cut’ | *cin1* 清 ‘to clear’ | *sen3* 擤 ‘to blow one’s nose’ | *cut8* 捽 ‘to wipe’ | *ha1* 下 ‘to unload’ |
|---|---|---|---|---|---|---|
| Participant roles | [Ag, Pa, **So**, Go, Di, Go, Re, Ins, Man, Be, Co] | | | | | |
| Conflated elements | n/a | Instrument | Result | Source | Manner | Direction |
| **Profiled Source roles** | ***vuk4* 屋 ‘the (original) house’** | ***tien5-kam1* 田崁 ‘the ridge (between rice fields)’** | ***fong5-gien1* 房間 ‘the room’** | * conflated | ***zok4-e2* 桌仔 ‘the table’** | * |
| Particular frames | MOVING | FARMING | | | | |
| [V Source] constructions | *ban1 vuk4* 搬屋 ‘to move (out of the house)’ | *got4 tien5-kam1* 割田崁 ‘to cut the grass from the ridge (between rice fields)’ | *cin1 fong5-gien1* 清房間 ‘to clear the room’ | * | *cut8 zok4-e2* 捽桌仔 ‘to wipe the table’ | * |

Only four of the six removal verbs are compatible with this construction, which are *ban1* 搬 ‘to remove’, *got2* 割 ‘to cut’, *cin1* 清 ‘to clear’, *cut8* 捽 ‘to wipe’. As for *cin1* 清 ‘to clear’ and *cut8* 捽 ‘to wipe’, they can be integrated with [V So] constructions, because the removee cannot be cleared or wiped without contacting the location. It means that the source roles (i.e., *vuk4* 屋 ‘house’, *tien5-kam1* 田崁 ‘ridge’, *fong5-gien1* 房間 ‘room’, and *zok4 e2* 桌仔 ‘table’), like the patient roles, are directly affected by their verbs. Take *cin1* 清 ‘to clear’ for example. The image of ‘clearing something’ highly overlaps with that of cleaning ‘some place’. When the garbage is cleared, the room becomes clean at the same time. Figure 4.2

depicts the integration between verbal meanings and constructions.

Figure 4.2 The L-meaning/P-meaning model of CIN in the [V So] construction

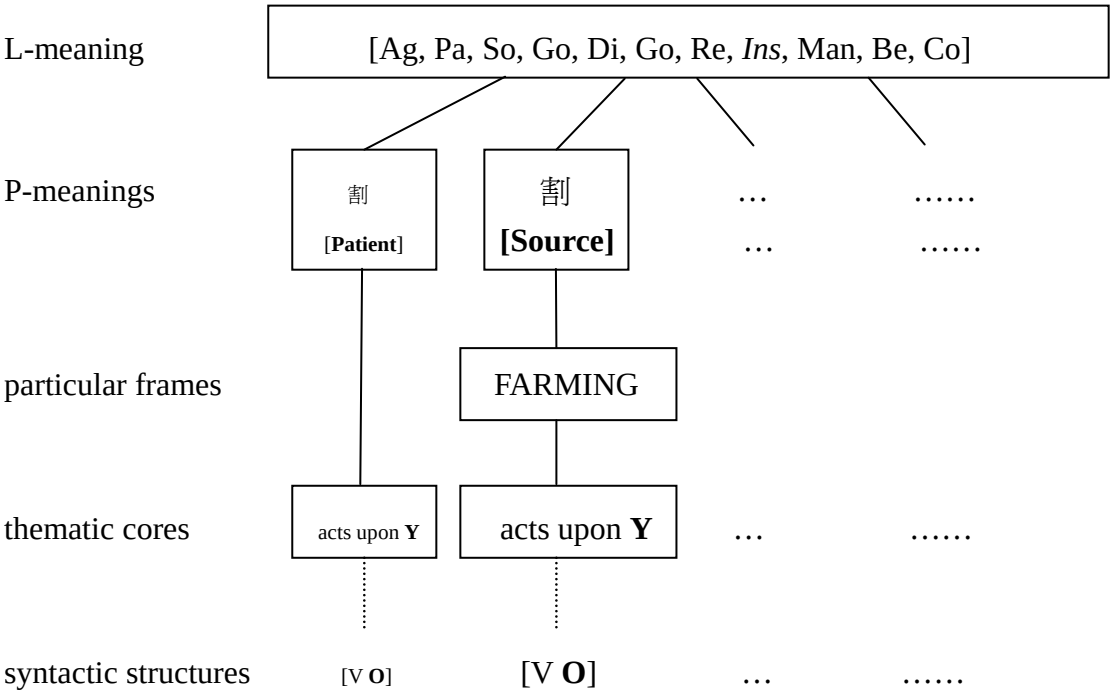



The L-meaning lays out the universal concept of verbs of removal with a slight difference, where the italic result role is lexicalized in the verbal meaning of *cin1* 清 ‘to clear’. This figure also demonstrates that the source role, like the patient role, is prominent enough to be profiled as P-meaning. And the [V So] construction, denoting the actions and the places affected by the actions, can be positively integrated with the P-meaning, profiled with the source role, through the thematic cores, ‘act upon Y’, where Y symbolizes anything influenced by the action.

With respect to *ban1* 搬 ‘to remove’ and *got2* 割 ‘to cut’, understanding their meanings in [V So] constructions requires particular frames, such as the MOVING frame and the FARMING frame, respectively, because an agent does not contact with

the source when acting upon the patient. Take *got2* 割 ‘to cut’ for instance. The image of cutting the ridge of a rice field is different from that of cutting the grass. Hence, without a particular frame, say FARMING frame, we may not interpret the meaning of this [V So] construction. Figure 4.3 elucidates this concept.

Figure 4.3 The L-meaning/P-meaning model of GOT in the [V So] construction




First, the instrument role is conflated in the lexical meaning of *got2* 割 ‘to cut’. Second, P-meaning profiles the source role. Next, before connecting with the thematic roles, we need some particular frame, the FARMING frame, to eliminate the gap between the image of cutting the ridge of a rice field and cutting the grass. Finally, the [V So] construction with the verb *got2* 割 ‘to cut’ can be successively

induced through the thematic core ‘act upon Y’. As to the predicate *ban1* 搬 ‘to remove’, the MOVING frame is activated, because it is a common cultural concept possessed by Hakka language users. To be more specific, the predicate ‘move’ combining with the source role ‘house’ in the [V So] construction in English does not activate the MOVING frame, so the pattern ‘move the house’ would mean literally moving the house physically.

Although the patient and the source are influenced by *ban1* 搬 ‘to remove’ and *got2* 割 ‘to cut’ in a different way, there is still a close relationship between these two roles. That is, the former belongs to or is part of the latter. For example, the furniture, the patient of *ban1* 搬 ‘to remove’, is part of the house, the source of *ban1* 搬 ‘to remove’; the grass, the patient of *got2* 割 ‘to cut’, belongs to the ridge between rice fields. This close relationship can also explain the incompatibility of the removal verb *sen3* 擤 ‘to blow one’s nose’ or *ha1* 下 ‘to unload’ and the [V So] construction, in that the patient *pi3* 濞 ‘snot’ is not part of the source *pi3-gung1* 鼻公 ‘nose’ and the patient *fo2* 貨 ‘cargo’ does not belong to the source *fo3-ca1* 貨車 ‘truck’ Furthermore, because the verb *sen3* 擤 ‘to blow one’s nose’ lexicalizes the source role *pi3-gung1* 鼻公 ‘nose’ in its verbal meaning without other options, it would be redundant to express this role again.

Next, when goal roles are specified in [V O] constructions, the verbal meanings

profile the location which the removee is moved to, and the syntactic structures signify the actions and the entities, here the goals, affected by the actions. As we can see in Table 4.4, the [V Go] constructions are very restricted, in which only *ban1* 搬 'to remove' can integrate with the goal role in [V O] constructions.

Table 4.4 Argument realizations of verbs of removal in [V Go] constructions in Hakka

| Lexical items | *ban1* 搬 'to remove' | *got2* 割 'to cut' | *cin1* 清 'to clear' | *sen3* 擤 'to blow one's nose' | *cut8* 捽 'to wipe' | *ha1* 下 'to unload' |
|---|---|---|---|---|---|---|
| Participant roles | [Ag, Pa, So, **Go**, Di, G, Re, Ins, Man, Be, Co] | | | | | |
| Conflated elements | n/a | Instrument | Result | Source | Manner | Direction |
| **Profiled Source roles** | ***vuk4* 屋 'the (original) house'** | * | * | * | * | * |
| Particular frames | MOVING | | | | | |
| [V Goal] constructions | *ban1 vuk4* 搬屋 'to move (out of the house)' | * | * | * | * | * |

This restricted phenomenon is because the conception of the removal verbs does not focus on the place to which the removee will go after the action. Verbs of removal focus more on the place which the removee is moved from, i.e., the source, because what is mattered to the agent is to remove something from some place. However, only the neutral removal verb *ban1* 搬 'to remove' dose not have this limitation. Both locations which are moved to or moved from are prominent in its

concept. And because of its peculiar use in both [V So] and [V Go] construction, *ban1* 搬 ‘to remove’ have vague readings between ‘moving in’ and ‘moving out’ with respect to the MOVING frame, as illustrated in (8).

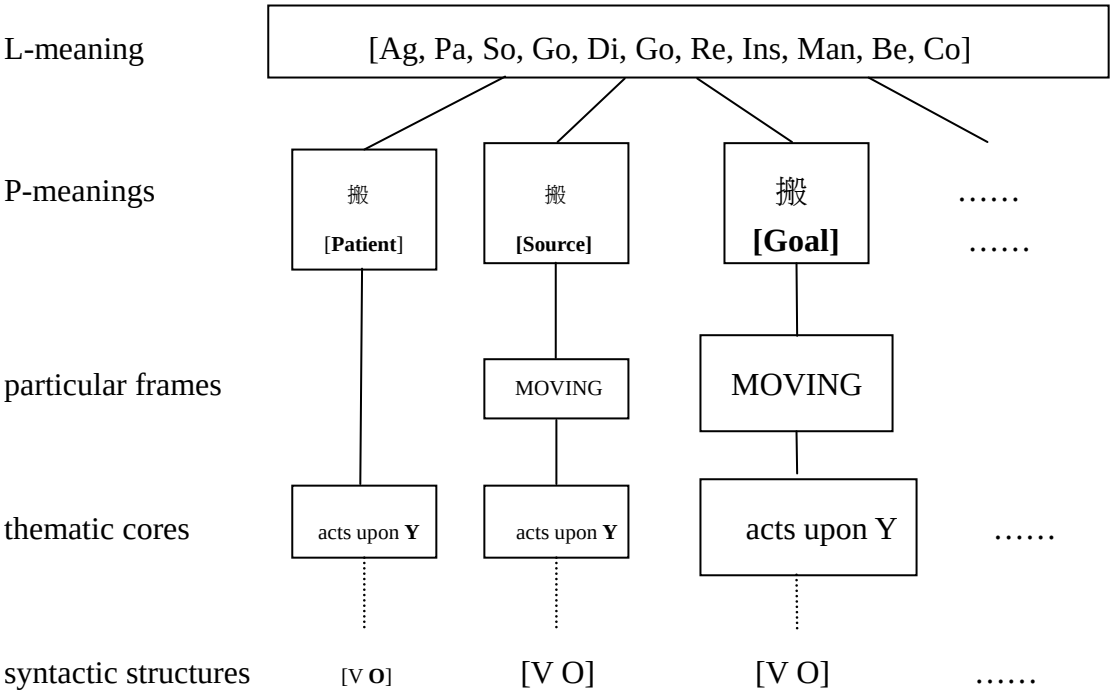
(8) 佢 當在該 搬屋。

*Gi5 dong1-cai3-ge3 ban1-vuk4*
He DONG-CAI-GE move
‘He is moving.’

(8) may be interpreted in two ways. One is moving into the house, and the other is moving out of the house. The interpretation is highly dependant on the context and the MOVING frame. When the agent is moving stuff in front of his new house, he may be moving into this house. If the speaker sees him moving furniture out of a house, the speaker may think the agent is moving to another place.

Leaving the vagueness in (8) aside, this [V Go] construction with the verb *ban1* 搬 ‘to remove’ is grammatical. It is because that its lexical meaning is semantically compatible with its syntactic structure. Figure 4.4 may manifest this interaction.

Figure 4.4 The L-meaning/P-meaning model of BAN in the [V Go] construction




Among so many semantic roles existing in the universal concept, i.e., L-meaning, of the removal verbs, the goal role is profiled in this [V O] construction at the P-meaning level. Then, the particular MOVING frame helps us to understand why moving a location (or goal), *vuk4* 屋 'house,' can be interpreted as moving something to the location, and furthermore, can be interpreted as 'changing one's house.'

### 4.2.2 [V C] constructions

There are still other roles, which are also in the conceptual structure of the removal verbs, can appear in [V X] constructions. Consider examples in (9).

(9) a. [V Di] construction

擤　　出來

*sen3*　*cut4-loi5*
blow　exit-come (out)
‘to blow one’s nose’

b. [V Re] construction

下　　空空

*ha1*　　*kung1-kung1*
unload　　empty
‘to unload completely’

In (9a) the direction role *cut4-loi5* 出來 ‘exit-come (out)’ is succeeded to the action *sen3* 擤 ‘to blow one’s nose’. It means ‘to blow something out of the nose’ without pointing the filth out. In (9b) the resultant state *kung1-kung1* 空空 ‘empty’ of the source *fo3-ca1* 貨車 ‘truck’ is described right after the verb *ha1* 下‘to unload’, which means ‘to unload the cargo from the truck, so that the truck becomes empty’.

These two participant roles are considered as complements, because in some grammatical sentence these roles are required. The examples in (10) can illustrate.

(10) a. [V Di] construction

佢　　拮　　桌仔　　搬　　*(出去)。
*Gi5　lau1　　zok4-e2　ban1　cut4-hi3*
He　　LAU　　table　remove　exit-go
'He moved the table out.'

b. [V Re] construction

佢　　拮　　房間　　清　　*(空空)
*Gi5　lau1　　fong5-gien1　cin3　kung1-kung1*
He　　LAU　　room　　clear　empty
'He cleared the room.'

In (10), either the source role *cut4-hi3* 出去 'exit-go' or the goal role *kung1-kung1* 空空 'empty', has to be profiled after the removal verb. Otherwise, the sentence will be incomplete. Hence, unlike the adjuncts,[6] these [V X] constructions are together considered as [V C] constructions.

Like [V O] constructions, legitimate [V C] constructions have two conditions as well. For the lexical frame, the complements need to be prominent enough to be profiled, while the others are shaded. For the syntactic structure, on the other hand, [V C] constructions are able to point out the actions and the complements affected by the actions. Due to these two conditions, the lexical frame and the syntactic structure will then be semantically compatible to each other. Therefore, the verbal meanings can integrate with the constructions. In the following paragraphs, we will

[6] The detailed comparison between complements and adjuncts will be clarified in section 4.2.3.

expound how different integrations between verbs and complements bring about the grammaticality of [V C] constructions.

Gao (2001) distinguishes nine directional verbal compounds in Mandarin functioning as directional complements that will be discussed in relation to the physical action verb, as in Table 4.5.

Table 4.5 Directional verbal compounds in Mandarin (Gao 2001: 71)

| | | | |
|---|---|---|---|
| a. *chu1-lai2* | 出來 | ‘exit-come’ | outward movement |
| b. *chuu1-qu4* | 出去 | ‘exit-go’ | outward movement |
| c. *guo4-lai2* | 過來 | ‘cross-come’ | 1. moving towards the speaker<br>2 turning around towards the speaker |
| d. *guo4-chu4* | 過去 | ‘cross-go’ | 1. moving away from the speaker<br>2. turning the side away from the speaker |
| e. *shang4-lai2* | 上來 | ‘ascend-come’ | motion from a lower to a higher position |
| f. *shang4-qu4* | 上去 | ‘ascend-go’ | 1. motion from a lower to a higher position<br>2. distance far away from the speaker |
| g. *xia4-lai2* | 下來 | ‘descend-come’ | 1. motion from a higher to a lower position<br>2. moving something away from a position |
| h. *xia4-qu4* | 下去 | ‘descend-go’ | 1. moving from a higher to a lower position<br>2.moving something from somewhere |
| i. *qi3-lai2* | 起來 | ‘rise-come’ | upward movement |

Following Gao's study, we examine these nine directional compounds with verbs of removal in Hakka, and their combination of the verbs into compounds forms in the [V Di] construction. A legitimate [V Di] construction requires the direction role to be profiled in the lexical frame and the syntactic structure denoting the action and the entity, i.e., the path, affected by the motion. As we can see in Table 4.6, the allowance for the direction roles in [V Di] constructions is different from verb to verb.

Table 4.6 Argument realizations of verbs of removal in [V Di] constructions in Hakka

| Lexical items | *ban1* 搬 'to remove' | *got2* 割 'to cut' | *cin1* 清 'to clear' | *sen3* 擤 'to blow one's nose' | *cut8* 捽 'to wipe' | *ha1* 下 'to unload' |
|---|---|---|---|---|---|---|
| Participant role | [Ag, Pa, So, Go, **Di**, Go, Re, Ins, Man, Be, Co] | | | | | |
| Conflated element | n/a | Instrument | Result | Source | Manner | Direction |
| **Profiled argument (Direction)** | ***cut4-hi3*** **出去** **'out'** | ***ha1-loi5*** **下來** **'down'** | ***cut4- hi3*** **出去** **'out'** | ***cut- loi5*** **出來** **out** | ***hi4-lo15*** **起來** **upward** | * |
| [V Direction] construction | *ban1 cut4-hi3* 搬出去 'to remove (sth) out' | *got4 ha1-loi5* 割下來 'to cut down' | *cin1 cut4-hi3* 清出去 'to clear out' | *sen3 cut4-loi5* 擤出來 'to blow out one's nose' | *cut8 hi2- loi5* 捽起來 'to wipe clean' | * |

Only *ha1* 下 'to unload' can not occur in the [V Di] construction, since the direction meaning is already conflated in the removal verb *ha1* 下 'to unload'. Hence, taking the complement denoting a downward direction, like *ha1-loi5* 下來 **'**decend-come**'** or

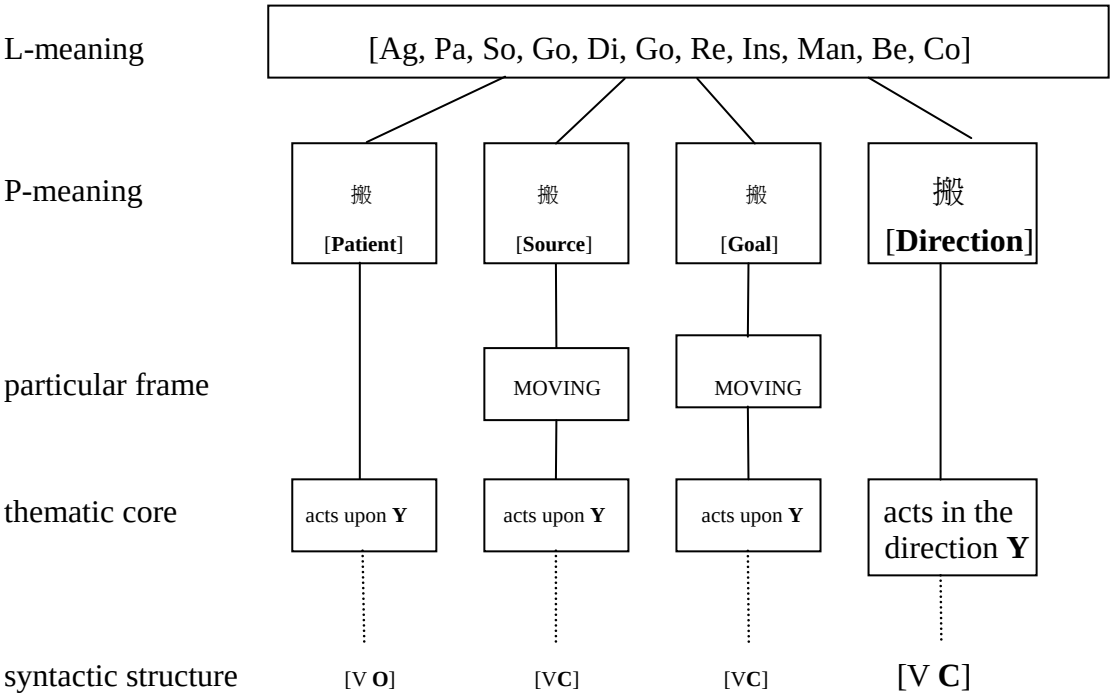
*ha1-hi3* 下去 ‘decend-go’ results in redundancy, while taking the other directional complement, like *song1-loi5* 上來 ‘ascend-come’ or *cut4-hi3* 出去 ‘exit-go’, results in semantic incompatibility.

Although *got2* 割 ‘to cut’, *cin1* 清 ‘to clear’, *sen3* 擤 ‘to blow one’s nose’, and *cut8* 捽 ‘to wipe’ can have the direction roles as their complements, the variations of directional patterns are strictly limited. *Sen3* 擤 ‘to blow one’s nose’, like *pi3* 呸 ‘spit’, a verb incorporated with body-waste Source, only takes directional phrase *cut4-loi5* 出來 ‘exit-come’ for its complement. *Cin1* 清 ‘to clear’, with a container concept referring to its source, only combines with horizontal directional complements like *cut4-hi3* 出去 ‘exit-go’ or *cut4-loi5* 出來 ‘exit-come’. *Got2* 割 ‘to cut’, on the other hand, takes horizontal directional complements, parallel to hand level, without a container concept, such as *go3-loi5* 過來 ‘cross-come’ or *go3-hi3* 過去 ‘cross-go’. It also takes vertical directional complements, mainly downward, like *ha1-loi5* 下來 ‘descend-come’ or *ha1 hi3* 下去 ‘descend-go’. *Cut8* 捽 ‘to wipe’ only works with the upward movement, *qi3-loi2* 起來 ‘rise-come’, meaning ‘to wipe something off’.[7] Last, *ban1* 搬 ‘to remove’ can freely combine with nine directional compounds in the [V Di] constructions since it is a neutral verb without

[7] Huang and Chang (1996) studies the various V-*qilai* constructions in Mandarin based on metaphorical extension. According to their analysis, there are three meanings, including the directional-*qilai*, the inchoative-*qilai*, and the completive-*qilai*, derived from the basic one through the interaction with the lexical semantics of different classes of verbs (H&C 1996: 202). They also mention that movement words, which is compatible with the directional reading, like *cut8* 捽 ‘to wipe’ in Hakka, are ambiguous in these meanings, but can be disambiguated by context (H&C 1996: 205).

specifying any direction meaning in its lexical meaning. Take *ban1* 搬 ‘to remove’ for example; the integration of verbal meanings and the constructions is revealed in Figure 4.5.

Figure 4.5 The L-meaning/P-meaning model of BAN in the [V Di] construction




The P-meaning of *ban1* 搬 ‘to remove’ points out that the direction role is perspectivized in this context. Through the thematic core ‘acts in the Direction Y’, the direction role is manifested from the lexical meaning to the syntactic structure.

Last, when the complements specify the result roles, the resultant states have several possibilities, referring to the result of the agent after performing an action, or that of the patient after being influenced by an action, or that of the source and the goal after an action is performed. Again, a grammatical [V C] construction requires

semantic compatibility between lexical meanings and syntactic structures. For the former, the result role should be profiled. For the latter, the [V Re] construction represents the action and the state after the action is performed. Because the resultant state can be profiled from various perspectives, the result role is taken by verbs much more freely. All six removal verbs can be manifested in the [V Re] constructions, as illustrated in Table 4.7.

Table 4.7 Argument realizations of verbs of removal in [V R] constructions in Hakka

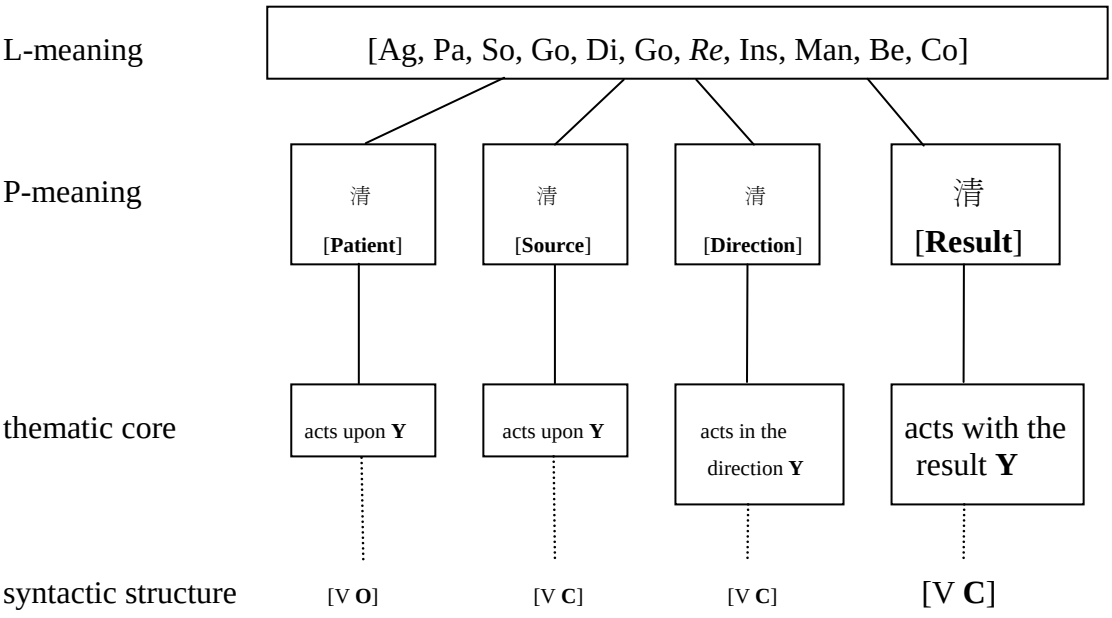
| Lexical item | *ban1* 搬 'to remove' | *got2* 割 'to cut' | *cin1* 清 'to clear' | *sen3* 擤 'to blow one's nose' | *cut8* 捽 'to wipe' | *ha1* 下 'to unload' |
|---|---|---|---|---|---|---|
| Participant role | [Ag, Pa, So, Go, Di, Go, **Re**, Ins, Man, Be, Co] | | | | | |
| Conflated element | n/a | Instrument | Result | Source | Manner | Direction |
| **Profiled argument (Result)** | ***ciang5-ciang5*** **淨淨** **'clean'** | ***ciang5-ciang5*** **淨淨** **'clean'** | ***kung1*** **空** **'empty'** | ***ciang5-ciang5*** **淨淨** **'clean'** | ***ciang5-ciang5*** **淨淨** **'clean'** | ***kung1-kung1*** **空空** **'empty'** |
| [V Result] construction | *ban1 ciang5-ciang5* 搬淨淨 'to empty out' | *got4 ciang5-ciang5* 割淨淨 'to completely cut (sth)' | *cin1 kung1* 清空 'to clear (sth) off' | *sen3 ciang5-ciang5* 擤淨淨 'to blow… clean' | *cut8 ciang5-ciang5* 捽淨淨 'to wipe clean' | *ha1 kung1-kung1* 下空空 'to unload emptily' |

As we have mentioned above, all removal verbs can be modified by all kinds of results. The combination is free and productive. The situations we discuss in Table 4.7 all describe the resultant states of the source. There are some other situations describing the results of other roles. For example, *sen3 fung5-fung5* 擤紅紅 'to be blown red' means the nose (the source role) becomes red after blowing; *got4 fai2-tet4*

割壞-忒 ‘to be cut broken’means the knife (the instrument role) is broken.

One point has to be noticed here. Although *cin1* 清 ‘to clear’ has conflated with the result in its lexical meaning, it can still take the result roles without redundancy. It is because that these result complements are used to remark the nuance of the resultant state additionally. The integration process is shown in Figure 4.6.

Figure 4.6 The L-meaning/P-meaning model of CIN in the [V Re] construction




With the conflated result role in the L-meaning, *cin1* 清 ‘to clear’ profiles the same role to emphasize the resultant state after ‘clearing’. The result of clearing may have different situations, such as ‘clean’, ‘neat’, etc. And the expression *cin1 kung1* 清空 ‘to clear (sth) off’ in Table 4.6 points out the resultant state ‘empty’ after clearing.

### 4.2.3 Adjuncts

As to the rest of the roles, the instrument, manner, benefactive, and comate roles, none of these roles appears in the [V X] constructions. Different from the complements we have discussed in section 4.2.2, these roles are considered as adjuncts. Mathew (1981: 124-6) proposes a list of criteria for justifying the complement-adjunct distinction. First, the type of semantic relation that holds between the dependent and its head: The complement is a participant in the event, while the adjunct is a circumstantial dependent. Second, the presence of collocational relations: The presence of a collocational relation implies that the syntactic dependent is a complement, and the absence of collocational relations implies that the syntactic dependent is an adjunct. Mathew's third criterion is whether or not the expression of the dependent is obligatory. The last criterion is about latency, which is the requirement for a definite interpretation of a dependent if that dependent is left syntactically unexpressed. The example of a complement and an adjunct is given in (11):

(11) 佢 [用 抹桌布] adjunct 捽 [桌仔] complement。

*Gi5 yiung3 mi5-zok4-bu3 cut8 zok4-e2*
He use wiper wipe table
'He wiped the table with a wiper.'

*The table* is a participant in the event, and *the wiper* describes the instrument with which the action proceeded. Then, the absence of a collocational relation between 'wipe' and 'wiper' implies the prepositional phrase is an adjunct. Additionally, *the table* in (11) is an obligatory element of the transitive clause, but 'with a wiper' is an optional element of the same clause. Last, one can say *cut8 ciang5-ciang5* 捽淨淨 'to wipe clean' only when a definite referent for the direct object is accessible in the discourse context (e.g., the table).

Furthermore, if we think over again with respect to those roles which are conflated and which are profiled or not in a [V X] construction, we can make a rough distinction among six verbs, as shown in Table 4.8.

Table 4.8 Core and peripheral roles of verbs of removal in Hakka

| Verbs of removal in Hakka | Role | | |
|---|---|---|---|
| | Conflated | Core | Peripheral |
| *ban1* 搬<br>'to remove' | n/a | Ag, Pa, So, Go, Di, Re | Ins, Man, Be, Co |
| *got2* 割<br>'to cut' | Ins | Ag, Pa, So, Di, Re | Go, Man, Be, Co |
| *cin1* 清<br>'to clear' | Re | Ag, Pa, So, Di, Re | Go, Ins, Man, Be, Co |
| *sen3* 擤<br>'to blow one's nose' | So | Ag, Pa, Di, Re | Go, Ins, Man, Be, Co |
| *cut8* 捽<br>'to wipe' | Man | Ag, Pa, So, Di, Re | Go, Ins, Man, Be, Co |
| *ha1* 下<br>'to unload' | Di | Ag, Pa, So, Re | Go, Ins, Man, Be, Co |

For *sen3* 擤 ‘to blow one’s nose’ and *ha1* 下 ‘to unload’, the roles which are conflated in their lexical meanings can not be profiled in [V X] constructions; for the other verbs, the conflated roles might be profiled in [V X] constructions or in adjuncts. In addition, roles which can be profiled in [V X] constructions are core roles, while roles which cannot be profiled in [V X] constructions are peripheral roles. Core roles can appear in both [V X] constructions and adjuncts, depending on the information prominence of the context. However, peripheral roles may only be profiled in adjuncts. Accordingly, sections 4.3 and 4.4 will illustrate how core and peripheral roles interact with larger constructions such as BUN and LAU constructions, respectively.

### 4.2.4 The generalization of [V X] constructions

To give a brief summary, we have seen the nuance integrations between verbs and constructions from two [V X] constructions, the [V O] constructions, including [V Pa], [V So], and [V Go] constructions, and the [V C] constructions, including [V Di], [V Re] constructions. A legitimate [V X] construction always exhibits certain compatibility between the lexical frame and the syntactic structure, which can be demonstrated through the modified two-level meaning model. Take a [V Pa] construction for example. Almost every patient role of the verb integrates with its

syntactic structure, because of their semantic compatibility. From the representation of the L-meaning/P-meaning model, we may conclude that the [V Pa] construction simply highlights the patient role (P-meaning), which already exists in the lexical frame (L-meaning). The same situation occurs in the other four constructions, [V So], [V Go], [V Di], [V Re] constructions, as well. A little difference in [V So] or [V Go] constructions is that some particular frame has to be considered together with its lexical frame, such as the MOVING frame with the verbal frame of *ban1* 搬 'to remove', the FARMING frame with that of *got2* 割 'to cut'.

As to those illegitimate [V X] constructions, there are several possibilities. First, the profiled element causes redundancy, because it has already conflated in the verbal meaning. For example, the source role, *pi3* 鼻 'nose', in [V So] constructions associated with the verb *sen3* 擤 'to blow one's nose', or the direction role, *ha1 hi3* 下去 'descend-go', in [V Di] constructions with the verbs *ha1* 下 'to unload'. Second, the profiled element causes semantic incompatibility, which includes two situations. One is that the participant role is not prominent enough to be profiled in the [V X] construction. For example, the goal is not focused in the removing action, so the goal roles of the removal verbs, except for *ban1* 搬 'to remove', cannot be profiled in the [V Go] constructions. The other situation is when the supposed profiled participant role does not belong to its verbal frame. The

directional compound, *song1 loi3* 上來 ‘ascend-come’ denotes an opposite direction to the verbal meaning of *ha1* 下 ‘to unload’. It means that the direction role *song1 loi3* 上來 ‘ascend-come’ is never part of the conceptual frame of *ha1* 下 ‘to unload’. Last, as to those roles which cannot be profiled in [V X] constructions, we will discuss them later as they are in other constructions, which are treated as adjuncts traditionally.

**4.3 BUN constructions**

Lai (2001) illustrates that BUN in Hakka exhibits five grammatical functions. Being a verb, BUN involves two functions. First, in (12a-b), BUN acts like a double-object verb, involving dative alternation. Second, BUN can be used as a causative verb, indicating giving someone the permission to do something, as in (12c). In (12d), BUN becomes a goal marker, marking the recipient of the giving activity. The use of BUN in (12e) appears to link two clauses. Last, BUN in (12f) functions as an agent marker, denoting the following noun phrase as the performer of the action.

(12) a. 佢 分 一 枝 筆 俾。 (Lai 2001: 139)

*Gi5 bun1 yit4 zii5 bit4 nga5i.*
He BUN one CL pen me
‘He gave a pen to me.’

b. 佢 分 俚 一 枝 筆。

*Gi5 bun1 ngai5 yit4 zii1 bit4*
He BUN me one CL pen
'He gave me a pen.'

c. 佢 會 分 俚 去 台北。

*Gi5 voi3 bun1 ngai5 hi3 toi5-bet4*
He would BUN me go Taipei
'He would let me go to Taipei.'

d. 佢 送 一 枝 筆 分 俚。

*Gi5 sung3 yit4 zii1 bit4 bun1 ngai5*
He give one CL pen BUN me
'He gave to pen to me.'

e. 佢 帶 東西 分 狗仔 食。

*Gi5 dai3 dung1-xi1 bun1 gieu2-e2 siit8*
He bring thing BUN dog eat
'He brought the food for the dog to eat.'

f. 佢 分 俚 打。

*Gi5 bun1 ngai5 da2*
He BUN me beat
'He was beaten by me.'

Among these five functions, only two of them will be discussed in section 4.3, goal-marking and agent-marking. Since the use of the verb, as a giving verb or a causative verb, which has its own conceptual frame, does not have direct interaction with verbs of removal in discussion, the two functions will not be discussed here. Furthermore, when BUN acts like a complementizer, connecting two clauses, the

meaning scope of the whole sentence is beyond that of verbs of removal. That is, the complimentizer BUN does not directly integrate with verbs of removal, and will not be discussed, either. In section 4.3.1 and 4.3.2, we will discuss the two remainder functions in terms of the roles they may profile, the goal role and the agent role. Section 4.3.3 is the generalization of BUN constructions.

### 4.3.1 Profiling goal

In this section, we examine the integration of the goal-marking BUN and the verbs of removal in grammatical [V X] constructions. Take *ban1* 搬 'to remove' for example; only [V O] or [V Pa] constructions can combine with BUN constructions, as in (13), while [V C] constructions cannot do so, as illustrated in (14).

(13) 佢 搬 桌子 分 俾 / *屋 。

*Gi5 ban1 zok4-e2 bun1 ngai5 / * vuk4*
He move table BUN me / house
'He moved a table to me/*the house.'

(14) a. *佢 搬 屋 分 俾。

*Gi5 ban1 vuk4 bun1 ngai5*
He move house BUN me
'*He moved the house to me.'

b. */?佢 搬 出去 分 俾 。

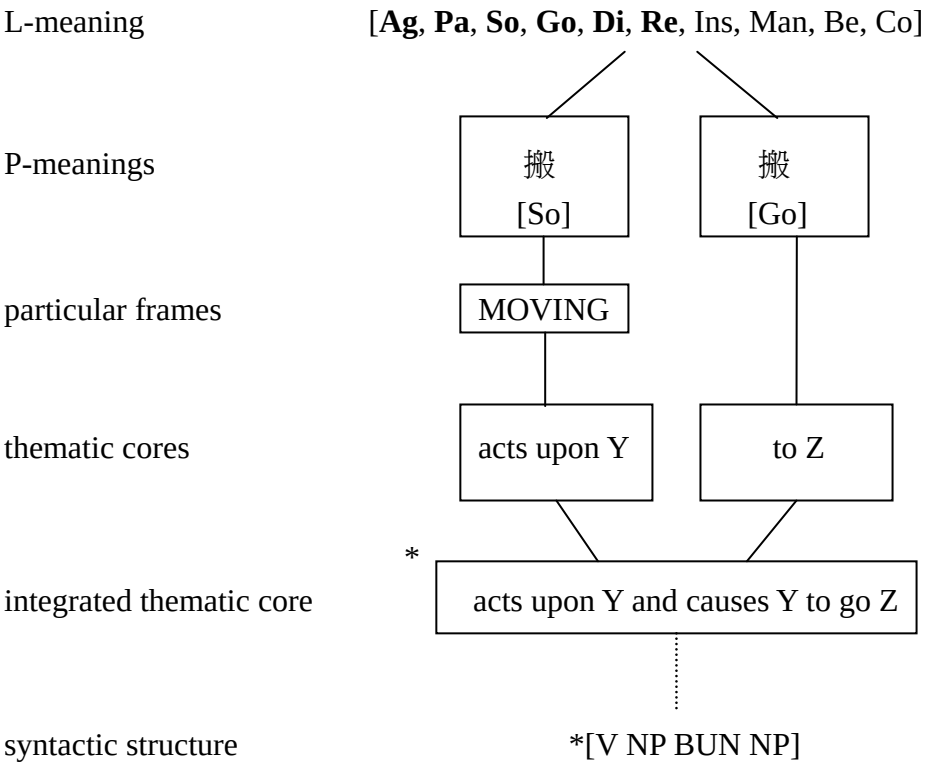
*Gi5 ban1 cut4-hi3 bun1 ngai5*
He move exit-go BUN me
'*He moved out to me.'

c. */?佢　搬　淨淨　分　俚。

*Gi5　ban1　ciang5-ciang5　bun1　ngai5*
He　move　empty　BUN　me
‘*He moved empty to me.’

In sentence (13), the goal role profiled by BUN is asked to be animate, which is more like a recipient role. If we want to profile an inanimate role, we have to incorporate another construction, the DO constructions in Hakka. From (14a) to (14c), all the grammatical [V X] constructions of *ban1* 搬 ‘to remove’ fail to occur in BUN constructions. Take 搬 in [V So] constructions for instance; the failure integration can de displayed through the L-meaning/P-meaning model, as in Figure 4.7.

Figure 4.7 The integration of [V So] and [BUN Go] constructions in BAN



As we can see in Figure 4.7, the L-meaning lays out the universal concept of verbs of removal; the core roles in the verbal meaning of *ban1* 搬 'to remove' are highlighted with boldface, while the peripheral ones are not. Next, the P-meanings profile the source and goal roles which we focus in the [V So] and [BUN Go] constructions, respectively. However, the integrated thematic core results in a meaningless sentence, because we cannot 'move a house and cause the house to go to the Goal'. Therefore, the syntactic structure [V NP BUN NP] in (14a) is ungrammatical.

The same problem occurs in (14b) and (14c) as well. There are two interpretations in (14b). It is ungrammatical because the integrated thematic core of [V Di] and [BUN Go] results in 'acts in the direction Y and causes Y to go Z'. And it is odd because we cannot cause a 'direction' to go anywhere. On the other hand, one may treat it as a problematic sentence because he or she feels something such as the patient role should have been mentioned. The [V Di] construction of BAN implies that some patient role has been moved out. When the [V Di] construction has been combined with [BUN Go], it implies an integrated thematic core like 'acts upon Y (the patient) and causes Y (the patient) to go Z'. That is, the patient role is still focused in terms of the direction. Therefore, if the syntactic structure does not reveal a grammatic position for the patient role, the mapping of the integrated thematic core and the syntactic structure would be challenged. This problem can be

solved if we use the LAU construction to profile the patient role, which will be discussed in section 4.4.1.

The problem of sentence (14c) is the same as that of (14b). The only difference is that the implied but focused semantic element in the [V Re] construction is the source role, not the patient role. The expression *ciang5-ciang5* 淨淨 'empty' is describing the resultant state of the place which the patient is moved from. And when the syntactic structure lacks the position of the source role, the integration of the verbal meaning and the construction will be blocked. This problem can also be solved if we have the LAU construction to bring out the source role in the same sentence. We will have a detailed discussion in section 4.4.2.

On the contrary, the integrated thematic role of [V Pa] and [BUN Go] is grammatical in that it indicates 'to move a table and cause the table to go to the goal', as illustrated in Figure 4.8.

Figure 4.8 The integration of [V Pa] and [BUN Go] constructions in BAN

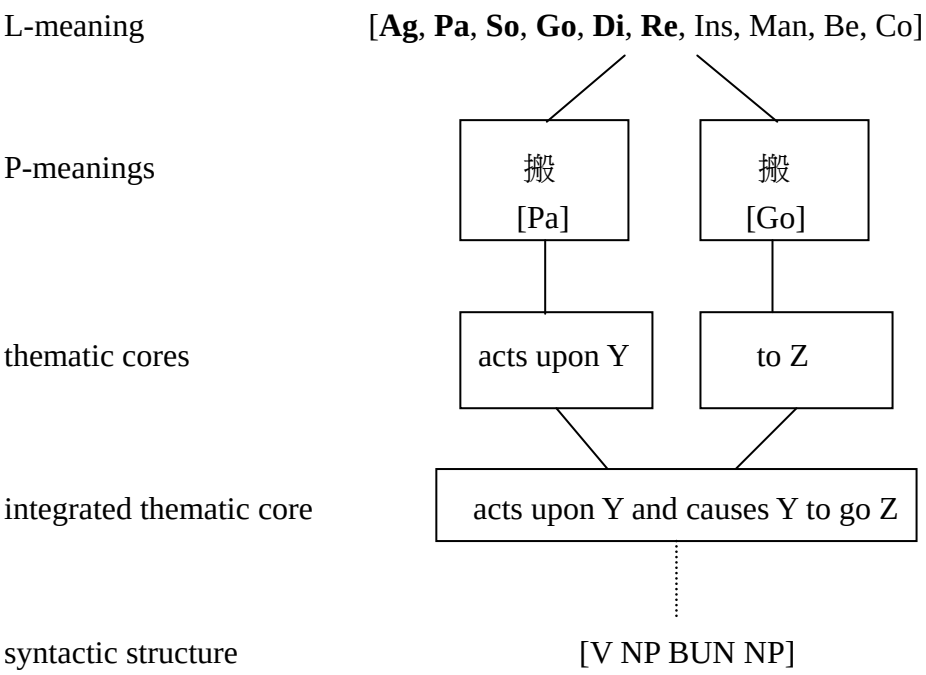



Figure. 4.8 displays the integration of the [V Pa] and [BUN Go] construction in sentence (13). The L-meaning shows the universal concept structure of the removal verbs, including the core roles and regular peripheral roles. At the P-meaning level, the patient role and the goal role are windowed in the context, and each has its thematic core to map with. Through the combination of two thematic roles, the meaningful integrated thematic core is formed, and hence brings out the grammatical sentence structure, [V NP BUN NP].

### 4.3.2 Profiling agent

The BUN construction that profiles the agent role is [NP BUN NP V], as illustrated in (12f), repeated below.

(15) 佢　　分　　偃　　打。

*Gi5　bun1　ngai5　da2*

He　BUN　　me　　beat

'He was beaten by me.'

Lai (2001) points out that the competition of verbhood between BUN and *da2* 打 'beat' happens in this serial verb construction, and BUN was decategorized into a preposition. However, the causative sense of BUN is remained, which implies that the subject allows the object to take over the action denoted. Moreover, if the action done by the object has some impact on the subject, BUN acquires an agent-marking sense, indicating that the object turns out to be the agent of the action, while the subject becomes the patient. Accordingly, the passive construction is brought about.

Examining the integration of the agent-marking BUN and the verbs of removal in this passive construction, we find out that all the patient roles, originally in active [V Pa] constructions can map with the subject positions. Take *cin1* 清 'to clear' for instance.

(16) a. 佢　　清　　哩　　垃圾。

*Gi5*　*cin1*　*le1*　　*lep4-sep4*

He　clear　PART[8]　　garbage

'He cleared garbage.'

b. 垃圾　　分　佢　清　　空空。

*Lep4-sep4*　*bun1*　*gi5*　*cin1*　*kung1-kung1*

Garbage　　BUN　he　clear　empty

'The garbage is cleared emptily by him.'

The sentence in (16a) is an active construction, embracing the [V Pa] construction. The agent role *gi5* 佢 'he' is in the subject position, and the patient role *lep4-sep4* 垃圾 'garbage' is in the object position, as we discussed in section 4.2.1. *Le1* 哩 is an aspect marker denoting a finished action. In (16b), the passive construction, BUN, as an agent marker, maps the agent role with the object position, and the patient role with the subject position. It means that the action *cin1* 清 'to clear' done by object *gi5* 佢 'he' has a direct impact on the subject *lep4-sep4* 垃圾 'garbage'. *Kung1-kung1* 空空 'empty' marks the resultant state of the source. The aspect marker *le1* 哩 in (16a) and the resultant state *kung1-kung1* 空空 'empty' in (16b) are obligatory adjuncts, one way of marking a clause informative; that is, providing a successful focus (G&A 2001).

[8] The abbreviation 'PART' is used for the grammatical function 'particles.'

In addition to the patient roles, the source roles, originally in grammatical [V So] constructions can also map with the subject positions in passive constructions, as illustrated in (17).

(17) a. 佢　揌　　哩　　桌仔。

*Gi5　cut8　let1　　zok4-e2*
He　wipe　PART　table
'He wiped the table.'

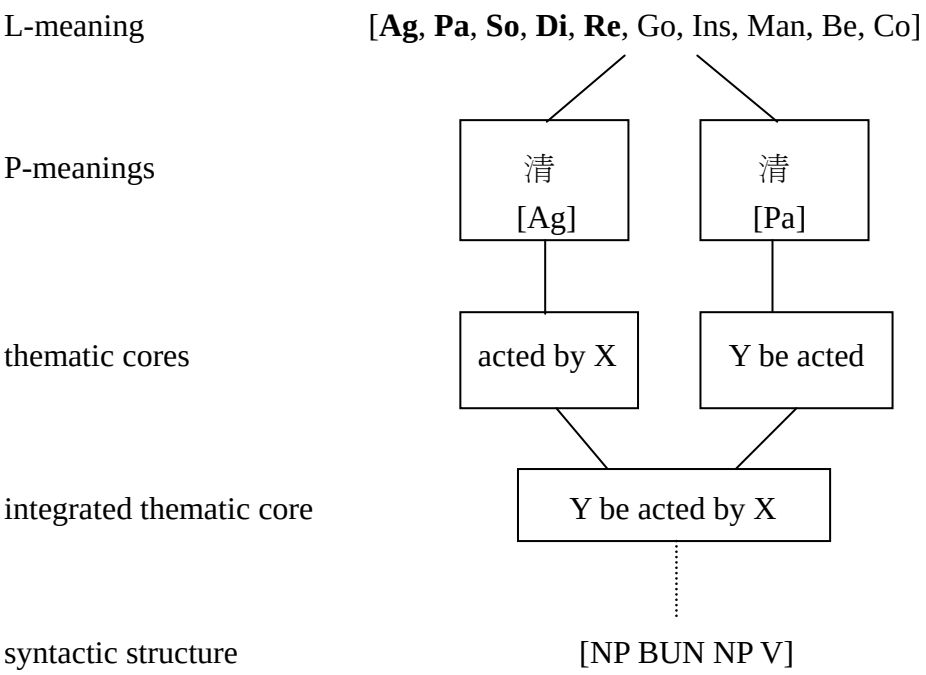
b. 桌仔　　分　　佢　　擦　　淨淨。

*Zok4-e2　bun1　gi5　cut8　ciang5-ciang5*
Table　　BUN　he　　wipe　　clean
'The table was wiped clean by him.'

As to (17a), we have discussed in 4.2.2 that the image of 'clearing something' highly overlaps with the image of 'clear some place'. And the overlapping image results in the grammatical [V So] construction. The source role, like the patient role, is mapped with the object position. Similarly, this overlapping image occurs in the passive construction as well. In (17b), *zok4-e2* 桌仔 'the table', which is directly influenced by the action *cut8* 揌 'to wipe', is assigned to the subject position, while BUN assigns the agent role to the object position, in which *gi5* 佢 'he' occurs.

The interaction of the active construction and the passive construction can be explained by the two-level meaning model. Take (16) for example, as shown in Figure 4.9.

Figure 4.9 The integration of [V Pa] and [BUN Ag] constructions in CIN




In Figure 4.9, the L-meaning level displays the universal concept of the removal verb, and distinguishes the core roles which is specific to the verb *ban1* 搬 'to remove'. Then, the P-meaning level profiles the roles we are focusing on, the agent and the patient roles. Each role has its corresponding thematic core depending on the context. After each thematic core is integrated, the syntactic structure is succeedingly brought out.

### 4.3.3 The generalization of BUN constructions

We have discussed the goal-marking and the agent-marking functions of the BUN construction. When BUN is used as a goal marker, only the [V O] or [V Pa] construction can combine with it to form a grammatical structure like [V $NP_{(Pa)}$ BUN

$NP_{(Go)}$]. Here, the goal role is much more like a patient role, because of its animating trait. In addition, [V C] constructions cannot appear in the BUN construction profiling the goal role, because the integrated thematic core of [V C] construction and the BUN construction will result in a meaningless sentence or an incomplete sentence.

When BUN is used as an agent marker, it brings out a passive construction as well. Only the patient roles and some source roles can be the subjects of the passive constructions, because these roles are directly influenced by the action, corresponding to its thematic core ‘Y be acted’. Through the integration with the thematic core of the BUN construction, ‘acted by X’, the grammatical structure is formed.

It is noticed that the same two semantic roles, the agent and the patient roles can be also profiled in an active construction. Take (16a) for example, repeated in (18).

(18) 佢 清 哩 垃圾。

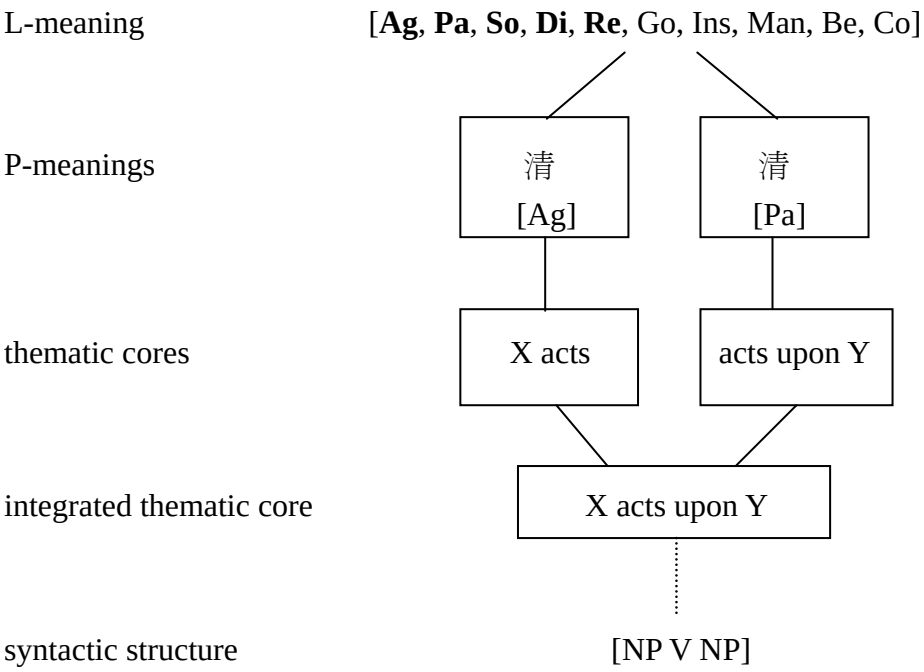
*Gi5 cin1 let1 lep4-sep4*

He clear PART garbage

‘He cleared garbage.’

In the active sentence (18), *Gi5* 佢 ‘he’ is the subject of the sentence and the agent role of the action as well, while *lep4-sep4* 垃圾 ‘garbage’ is the object and the patient. The two-level meaning analysis is displayed in Figure. 4.10.

Figure 4.10 The active construction of CIN




Comparing Figure 4.10 with Figure 4.9, we find that there is no difference between the L-meaning level and the P-meaning level. However, the thematic cores show the differences, depending on the speaker's choice. When the speaker emphasizes on the agent role more than the patient roles, he or she will choose the active voice. It can also explain the sentence in (19).

(19) 佢 清 過 哩。
*Gi5 cin1 go3 le1*
He clear PART PART
'He has cleared.'

In (19), the patient role which is cleared through the action does not appear in the sentence. And this sentence is still acceptable if there is enough information in the

context. On the other hand, the speaker uses the passive voice to put emphasis on the patient roles rather than the agent roles. We also have the passive construction without the agent role, as illustrated in (20).

(20) 垃圾　　分　　清　　忒　　哩。

*Lep4-sep4　bun1　cin1　tet4　le1*

Garbage　BUN　clear　drop　PART

'The garbage has been cleared off.'

In sentence (20), the patient role is the most prominent role in the context, and is mapped to the most prominent subject position. Although the agent role does not appear, it is still implied by the BUN construction. If the context has enough information, we can figure it out, too. The implicit agent role is implied by the BUN construction. Furthermore, it will become a more idiomatic expression if BUN is not expressed. Take (21) for example.

(21) 垃圾　　清　　忒　　哩。

*Lep4-sep4　cin1　tet4　le1*

Garbage　clear　drop　PART

'The garbage has been cleared off.'

In (21), both BUN and the agent role are omitted, but the passive meaning is still remained. It is said that the whole pattern [NP V TET] turns out to be a fixed construction, a form-meaning unit, expressing passive voice without the passive

marker, BUN.

We have analyzed the integration of [V X] constructions and the BUN construction. In the next section, the interaction of [V X] constructions and LAU constructions, and that of adjuncts and LAU constructions will be examined thoroughly.

**4.4 LAU constructions**

Lai (2003a, b) presents that Hakka LAU, similar to Mandarin BA and Taiwanese Southern Min KA, marks multiple roles functioning as a patient marker, a source marker, a goal marker, a benefactive marker, and a comitative marker, as shown in (22), respectively.

(22) a. 阿明 𣍐 杯仔 打爛 哩。 (Lai 2003b: 534)

*A1-min5 lau1 bi1-e2 da2-lan3 le1*
Amin LAU cup hit-break PART
'Amin broke the cup.'

b. 阿英 𣍐 佢 借 錢。

*A1-min5 lau1 gi5 zia3 cien5*
Amin LAU him borrow money
'Amin borrowed money from him.'

c. 阿英 𣍐 阿明 講 故事。

*A1-yin1 lau1 A1-min5 gong2 gu2-sii3*
Ayin LAU Amin tell story
'Ayin told a story to Amin.'

d. 阿英 拹 其 賴仔 買 一 坵 田。

*A1-yin1 lau1 gia1 lai3-e2 mai1 yit4 kiu1 tien5*
Ayin LAU her son buy one CL[9] land
'Ayin bought a piece of land for her son.'

e. 阿英 拹 阿姨 共下 去 街頂。

*A1-yin1 lau1 a1-yi5 kiung3-ha3 hi3 gie1-dang2*
Ayin LAU aunt together go downtown
'Ayin, together with her aunt, went downtown.'

In the following sections, these five functions will be analyzed from the two-level meaning perspective. Section 4.4.1 studies the interaction of [V X] constructions and LAU constructions in profiling the patient, source, and goal roles, which are either objects or complements as we discussed in the 4.2.1 and 4.2.2. In section 4.4.2, we will investigate how the roles which are considered as adjuncts in 4.2.3 integrate with LAU constructions. Section 4.4.3 is the generalization of LAU constructions.

### 4.4.1 Profiling patient, source and goal

First let us consider how LAU constructions profile patient roles in a complete sentence. Consider the following examples.

(23) a. 佢 拹 桌仔 搬 出去。

*Gi5 lau1 zok4-e2 ban1 cut4-hi3*
He LAU table remove out

[9] The abbreviation 'CL' is used for the grammatical function 'classifiers.'

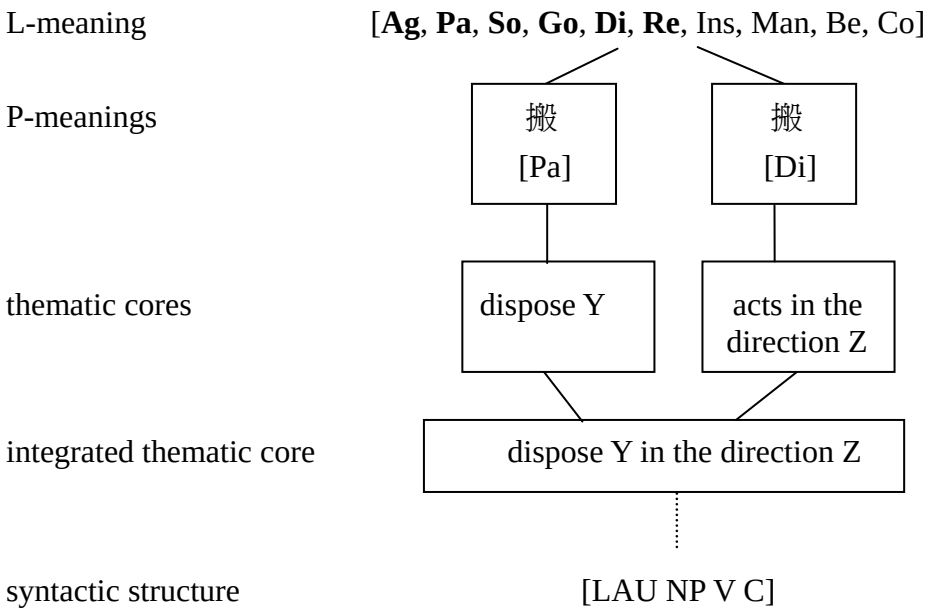
‘He moved out the table.’

b. 佢　　拂　　汗　　捽　　淨淨。

*Gi5*　*lau1*　*hon3*　*cut8*　*ciang5-ciang5*
He　LAU　sweat　wipe　clean
‘He wiped off sweat.’

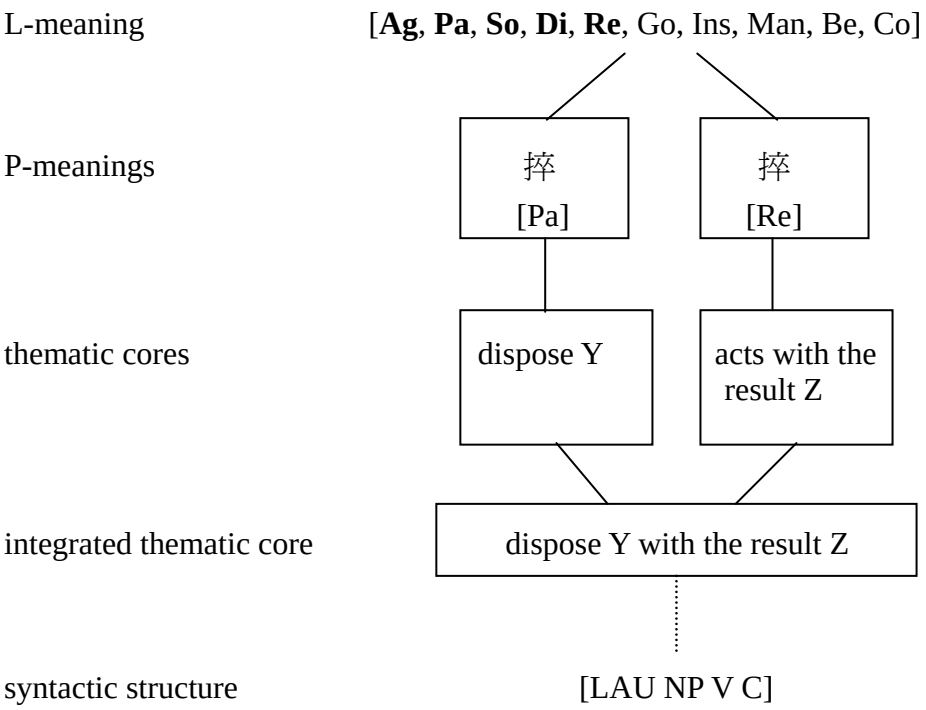
Either in example (23a) or (23b) in which a disposal meaning is detected, LAU marks its noun phrase as a patient role, indicating that it is *zok4-e2* 桌仔 ‘table’ or *hon3* 汗 ‘sweat’ that has undergone a change of state caused by the action of removing or wiping. The only difference is that the LAU construction in (23a) interacts with the [V Di] construction and the LAU construction in (23b) interacts with the [V Re] construction. The two-level meaning analyses are illustrated in Figure 4.11 and Figure 4.12, respectively.

Figure 4.11 The integration of [LAU Pa] and [V Di] constructions in BAN



The L-meaning displays the universal concept of the removal verbs and specifies the core roles in BAN. The P-meaning level profiles the patient role and the Direction role we are focusing on in the context. Different from the [V Pa] construction, which also profiles the patient role, the [LAU Pa] construction here emphasizes the disposive manner, which reflects in its thematic core. Through the integrated thematic core, the grammatical syntactic structure is revealed. Let us also consider the integration in Figure 4.12.

Figure 4.12 The integration of [LAU Pa] and [V Re] constructions in CUT




The L-meaning level again lists all the semantic roles in the universal concept of the removal verbs, while the core roles of *cut8* 捽 'to wipe' are specific. The patient and result roles are profiled in the P-meaning level, and they map with the thematic cores depending on the speaker's choice. Finally, the chosen thematic chosen thematic cores are integrated to form a corresponding syntactic structure.

In section 4.2.2 We have discussed that a [V So] construction may profile the source role in the context, but some of the removal verbs, like *sen3* 擤 'to blow' and *ha1* 下 'to unload', cannot have this construction. However, we can profile all the source roles if we use LAU constructions. Consider the examples as follows.

(24) a. 佢　拺　　鼻公　　擤　　淨淨。

*Gi5*　*lau1*　*pi3-gung1*　*sen3*　*ciang5-ciang5*
He　LAU　nose　blow　clean
'He blew his nose clean.'

b. 佢　拺　　貨車　　下　　空空。

*Gi5*　*lau1*　*fo3-ca1*　*ha1*　*kung1-kung1*
He　LAU　truck　unload　empty
'He unloaded the truck completely.'

Through LAU constructions, the source roles of *sen3* 擤 'to blow' and *ha1* 下 'to unload', which are *pi3-gung1* 鼻公 'nose' and *fo3-ca1* 貨車 'truck', can be profiled in the sentence. In addition, the result roles are profiled in [V Re] constructions in both sentences. The analyses are illustrated in Figure 4.13 and 4.14.

Figure 4.13 The integration of [LAU So] and [V Re] constructions in SEN

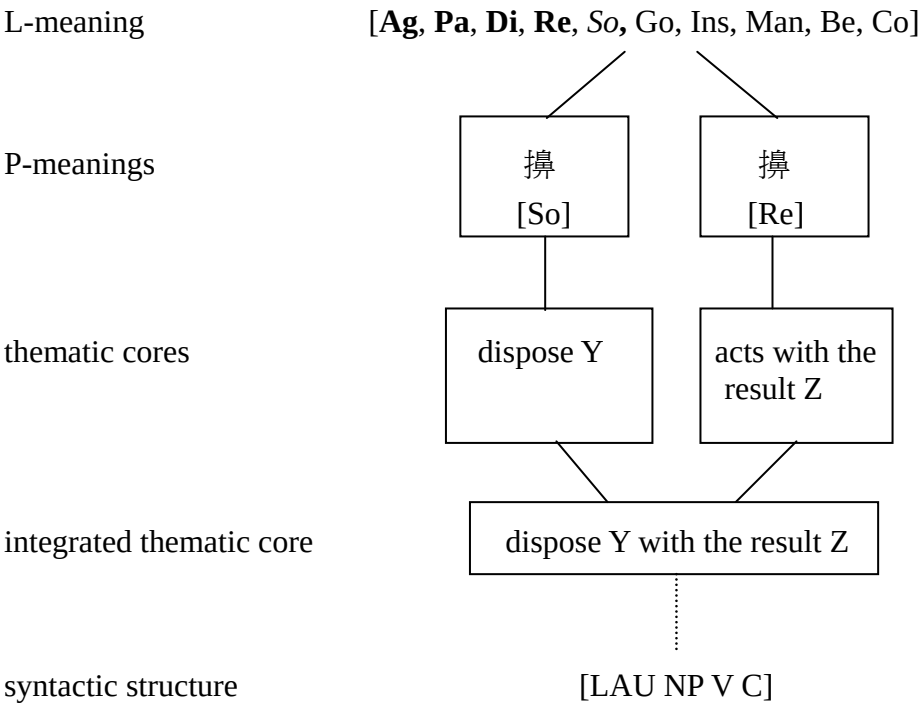
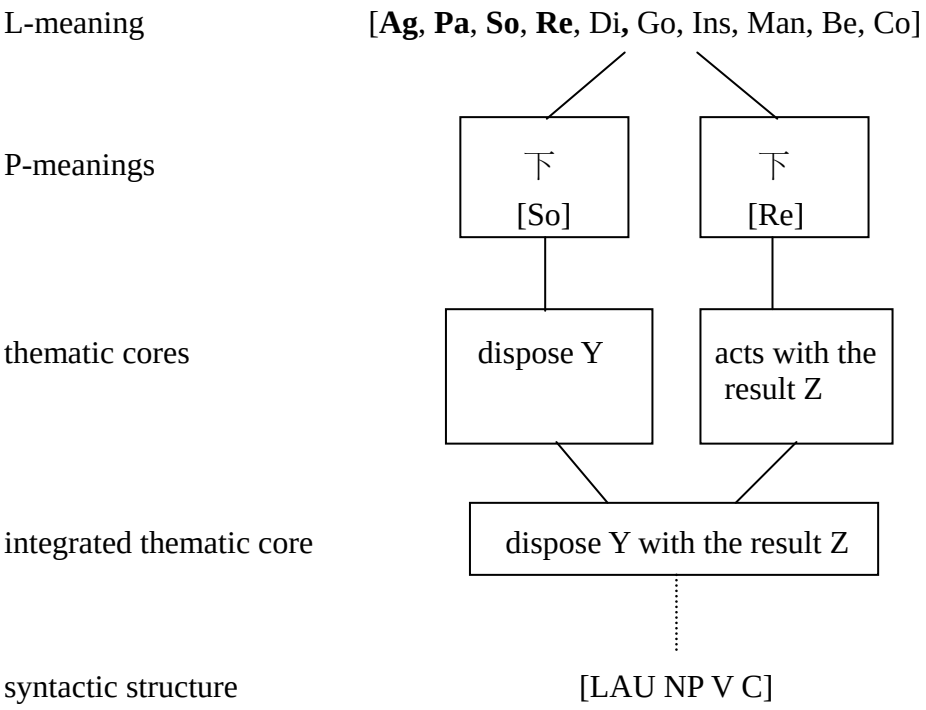


Figure 4.14 The integration of [LAU Pa] and [V Re] constructions in HA




At the L-meaning level of *sen3* 擤 ‘to blow’, beside the universal semantic roles of the removal verbs and the specified core roles, there is a conflated role, the source role, in its meaning concept. Originally, it is impossible to profile the conflated source role in the [V X] construction. However, we can highlight this conflated role through the LAU construction, which reveals the disposive meaning. At both P-meaning levels, the source and the result roles are profiled and mapped with their thematic cores. It means that the sources, *pi3-gung1* 鼻公 ‘nose’ and *fo3-ca1* 貨車 ‘truck’, are disposed by the actions *sen3* 擤 ‘to blow’ and *ha1* 下 ‘to unload’, and then result in the state of *ciang5-ciang5* 淨淨 ‘clean’ and *kung1-kung1* 空空 ‘empty’.

Last, the goal role can only be profiled in the [V Go] constructions of *ban1* 搬 ‘to remove’, which is the neutral removal verb. It is because all the other removal verbs do not pay attention to the place to which the removee will go after the removing action. The same situation happens in LAU constructions. The LAU construction is used to emphasize its following noun phrase disposed by the action and to see how this noun phrase is affected during or after the action. Hence, speakers, using the removal verbs, always care much less about the goal roles, needless to discuss how these goal roles are disposed. Even for the neutral verb *ban1* 搬 ‘to remove’, the usage is still controversial, as illustrated in (25).

(25) ? 佢 拹 房間 搬 來 一 張 桌仔。

| *Gi5* | *lau1* | *fong5-gien1* | *ban1* | *loi5* | *yit4* | *zong1* | *zok4-e2* |
|---|---|---|---|---|---|---|---|
| He | LAU | room | move | come | one | CL | table |

‘He moved a table to the room.’

In example (25), the goal role of the removing action, *fong5-gien1* 房間 ‘room’, is highlighted in the LAU construction, because the speaker wants to emphasize how it is affected by the action. That is, the room turns out to have one more table in it.[10] However, some people feel odd when they hear the sentence, if there is no direction signal *loi4* 來 ‘come’ in the sentence. And they prefer to use the putting verb *biong3* 放 ‘to put’ instead of the phrase *ban1-loi5* 搬-來 ‘move-come’. It is

[10] The benefactive reading will be derived. Refer to 4.4.2 for detailed discussion.

because the central concept of *ban1* 搬 ‘to remove’ is still ‘removing’ for them. Therefore, we can infer that the phrase *ban1-vuk4* 搬屋 ‘to move (into the house)’, which is acceptable to people, is a fixed and highly idiomatic expression.

### 4.4.2 Profiling Comate and Benefactive

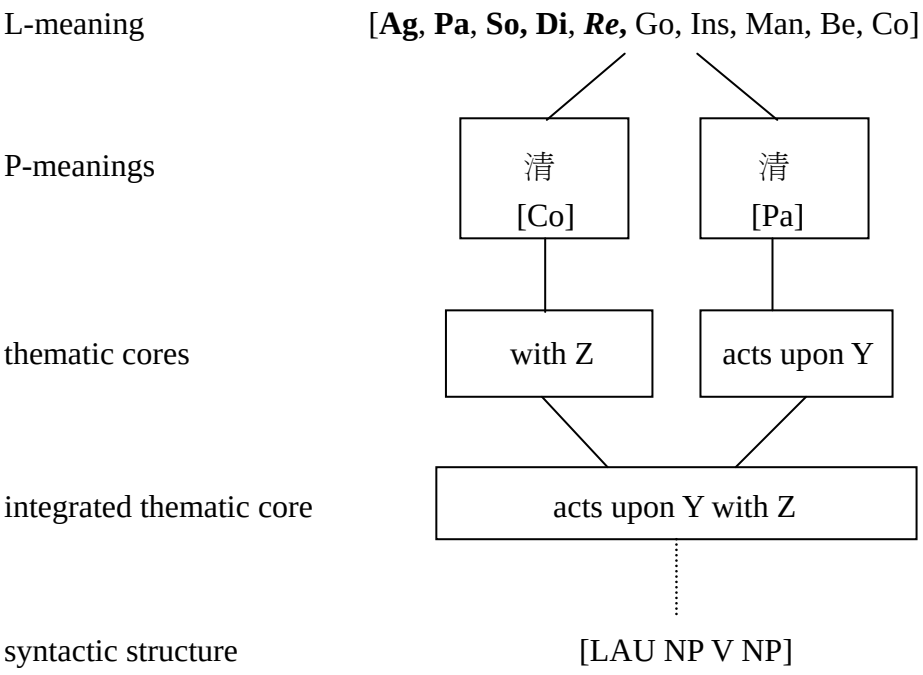
Lai (2003a) argues that the comitative function of LAU includes two different types. One is a comitative preposition, and the other is a coordinative conjunction. Both of them express more than one participant. Some characteristics of the predicates may help distinguish the preposition LAU and the conjunction LAU. Verbs that inherently involve more than one participant, such as verbs of social interaction, verbs of verbal interaction, or verbs of fighting, always select for a collective subject, and bring out the conjunctive function of LAU. On the other hand, if the verb does not select a collective subject, it is usually accompanied with an adverb such as *kiung3-ha3* 共下 ‘together’ to indicate that the first subject is doing the activity together with the second entity denoted by the LAU construction (Lai 2003a: 358); take the sentence (26) for example.

(26) 佢 拹 阿明 共下 清 垃圾。

*Gi5 lau1 A1-min5 kiung3-ha3 cin1 lep4-sep4*
He LAU Amin together cleared garbage
‘He and Amin cleared the garbage together.’

The predicate *cin1 lep4-sep4* 清垃圾 'to clear' does not inherently imply that more than one participant is involved, so it does not have to select a collective subject. Hence, the sentence brings out a distributive reading. That is, the first subject, *gi5* 佢 'he', together with the noun phrase marked by LAU, *Amin*, cleared the garbage together. The following model gives an analysis of the sentence.

Figure 4.15 The integration of [LAU Co] and [V Pa] constructions in CIN




With the conflated role, the result role at the L-meaning level, *cin1* 清 'to clear' profiles the comate and the patient roles at the P-meaning level. After combining each thematic core, the comative noun phrase is brought out by the LAU construction and the patient noun phrase is carried by the [V X] construction.

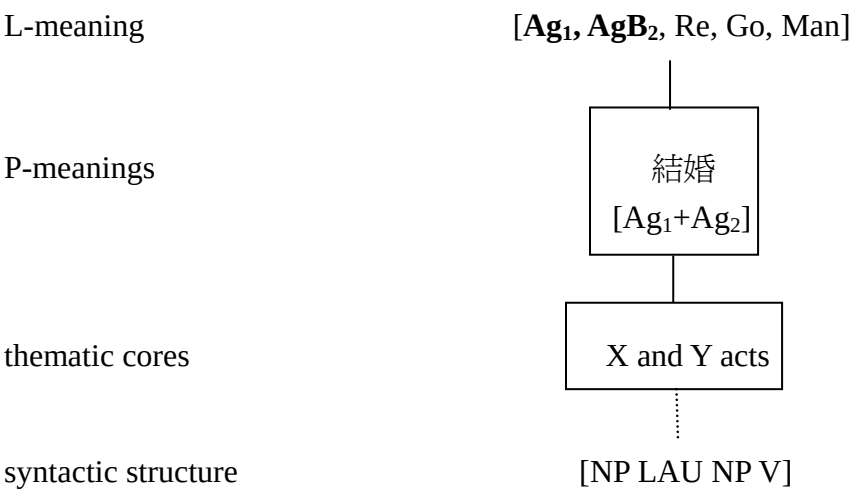
We can also use the two-level meaning model to explain why the verbs that

select collective subjects will bring out the conjunctive readings. Take the sentence (27) for instance, and the analysis is shown in Figure 4.16.

(27) 阿英 拺 阿明 結婚。 (Lai 2003a: 358)

*A1-yin1* *lau1* *A1-min5* *giet4-fun1*
Ayin LAU Amin marry
'Ayin and Amin married.'

Figure 4.16 LAU as a conjunctive function in GIET-FUN




The predicate *giet4-fun1* 結婚 'marry' in example (26) takes two participants, which are listed as two agent roles at the L-meaning level in Figure 4.16. These two agent roles are profiled at the P-meaning level and map with the syntactic structure, in which the conjunction LAU connects the two corresponding noun phrases, Ayin and *Amin*, as a collective subject.

Last, we will discuss the benefactive function of LAU. According to Lai's (2003a) analysis, some verbal groups, like verbs of creation or verbs of obtaining,

express the concept that the subject causes the direct object to exist or be owned for the benefit of the indirect object, and then the subject can give it over to the indirect object. The following examples can illustrate this concept:

(28) a. Verbs of creation: (Lai 2003a: 364ff)

阿英 拹 佢 捲 煮飯

*A1-yin1 lau1 gi5 ten3 zu2-fan3*
Ayin LAU him help cook
'Ayin helped him to cook.'

b. Verbs of obtaining:

其 爸 拹 阿英 買 一 坵 田。

*Gia1 ba1 lau1 A1-yin1 mai1 yit4 kiu1 tien5*
His dad LAU Ayin buy one CL land
'His father bought a piece of land for Ayin.'

Such a benefactive scenario can be extended to verbs of removal as well. Consider the following:

(29) a. 阿明 拹 阿英 捽 汗。

*A1-min5 lau1 A1-yin1 cut8 han3*
Amin LAU Ayin wipe sweat
'Amin wiped sweat for Ayin.'

b. 阿英 拹 阿明 割 田坎。

*A1-yin1 lau1 A1-min5 got4 tien5-kam1*
Ayin LAU Amin cut ridge
'Ayin cut the grass for Amin.'

Both in example (29a) and in (29b), the noun phrase marked by LAU is the beneficiary of the subject doing the activity involved. Lai (2003a) also mentions that the benefactive sense can be linked to the context in which the action performed by the subject brings some negative effect to the LAU phrase. Example (30) can show this phenomenon.

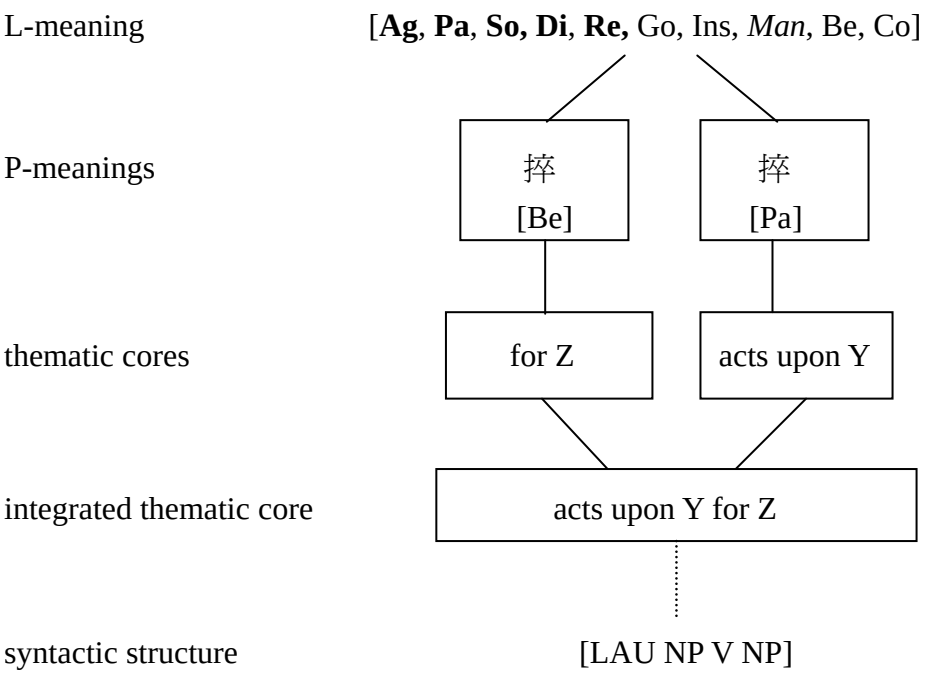
(30) 阿明 𣍐 阿英 捽 爛 一 張 桌仔。

*A1-min5* *lau1* *A1-yin1* *cut8* *lan3* *yit4* *zong1* *zok4-e2*
Amin LAU Ayin wipe worn-out one CL table
'Amin wiped broken (one of) Ayin's table.'

In example (30), the predicate *cut8-lan3 yit4-zong1 zok4-e2* 捽爛一張桌仔 'to wipe broken a table' indicates that the subject, *Amin*, causes Ayin's table to be broken because of his wiping action. The LAU phrase therefore signifies a malefactive relation between the participants involved.

Let us use the two-level meaning model to analyze the above discussion in which a LAU construction profiles the benefactive role, as illustrated in Figure 4.17.

Figure 4.17 The integration of [LAU Be] and [V Pa] constructions in CUT




Take example (29a) for example. Figure 4.17 displays the integration of the LAU phrase and the [V X] construction. The L-meaning of *cut8* 捽 'to wipe' presents the universal concept of the removal verbs, but with the specific conflated manner role. At the P-meaning level, the benefactive role and the patient role are profiled to be the focus in the discourse. These two roles bring out their thematic cores separately, and then are integrated into a unified concept. Finally, the syntactic structure combining the LAU phrase and the [V Pa] are constructed.

### 4.4.3 The generalization of LAU constructions

We have see five functions of LAU constructions. First, the LAU phrase is used as a patient marker to highlight the disposal manner. And because the focus of

the discourse is on the disposing process, the influence on the patient is always mentioned in the same context. Therefore, some description like the direction or the result of the affected patient role will appear in the following [V X] construction.

In the second case, LAU is considered as a source marker. We examine the verbs such as *sen3* 擤 'to blow' and *ha1* 下 'to unload' which cannot occur in [V So] constructions originally, but now their source roles can be profiled in LAU constructions. In addition, the LAU phrases here also have disposive meanings, so they are always accompanied with the [V X] constructions which describe the effects on the source roles. As a goal-marker, the LAU phrase becomes more restricted in its usage. It is because when people use removal verbs, they do not care where the patient will be moved from, not to mention using the LAU phrase to highlight the goal roles.

The comitative function of a LAU phrase is used as a comitative preposition, according to the characteristics of the inherent verbal meaning. Verbs that involve collective readings always bring out the conjunctive functions of LAU. On the contrary, the distributive meanings will be brought out, and are always together with the adverb *kiung3-ha3* 共下 'together'. As to the benefactive or malefactive function of LAU, it depends on whether the effect is positive or negative to the party marked by the LAU phrase. To explore the semantic and syntactic complexity of the

multiple functions displayed by the LAU constructions, this section, implementing the two-level meaning model, has featured the fine-grained integration between verbal meanings and LAU constructions.

Before finishing our discussion on the LAU construction, let us examine the sentences which display some synthetic phenomena among the constructions we've discussed. Observe the following expressions:

(31) a. 阿英 搬 一 張 桌仔 分 阿明。

*A1-yin1* *ban1* *yit4* *zong1* *zok4-e2* *bun1* *A1-min5*
Ayin move one CL table BUN Amin
'Ayin moved a table to Amin.'

b. 阿英 拹 阿明 搬 一 張 桌仔。

*A1-yin1* *lau1* *A1-min5* *ban1* *yit4* *zong1* *zok4-e2*
Ayin LAU Amin move one CL table
'Ayin moved a table for Amin.'

(32) 阿英 拹 桌仔 搬 出去 分 阿明。

*A1-yin1* *lau1* *zok4-e2* *ban1* *cut4-hi3* *bun1* *A1-min5*
Ayin LAU table move out to Amin

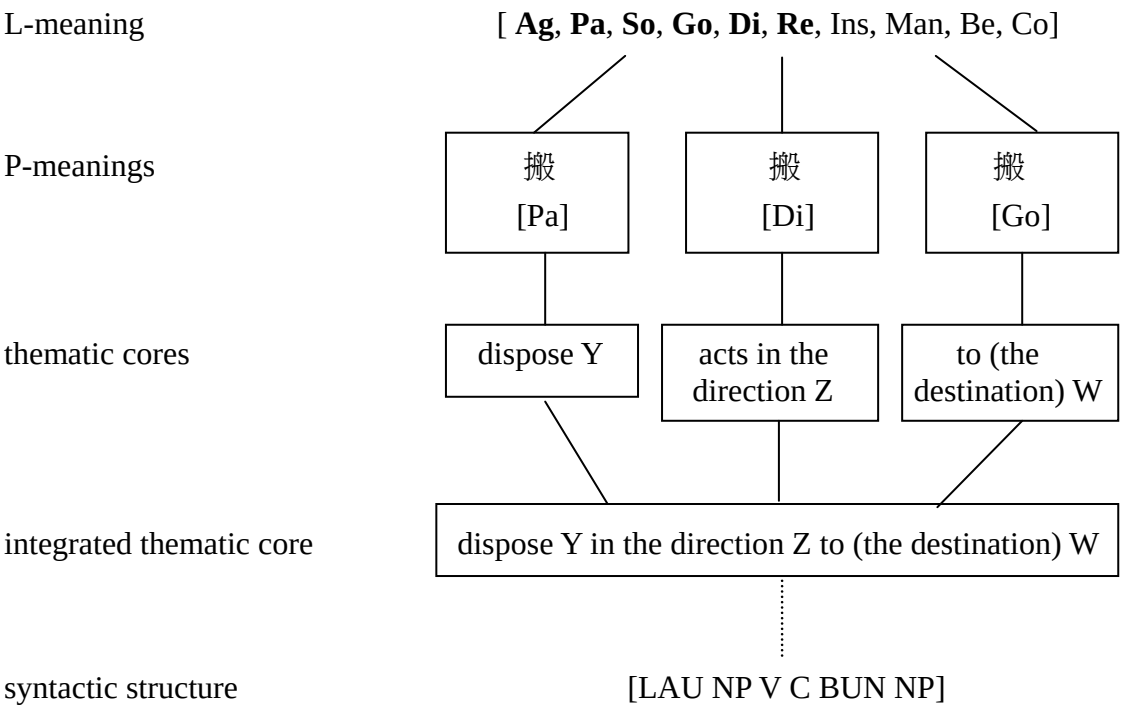
'Ayin moved out the table to Amin.'

In example (31), we see the alternation of BUN and LAU phrases when expressing a similar context, in which the table (the patient role) was moved by Ayin, and was received by Amin. However, these two constructions display different perspectives from the speakers. In example (31a), the removee, the table, is emphasized and

Amin is marked as a goal by BUN; in example (31b), the receiver, Amin, is emphasized and marked as a beneficiary by LAU.[11]

In example (32), we observe three constructions integrated in one sentence, LAU constructions, [V X] constructions, and BUN constructions. The two-level meaning model can display the integration among them, as illustrated in Figure 4.18.

Figure 4.18 The integration of LAU, [V X] and BUN constructions in BAN




The L-meaning level in Figure 4.18 displays the consistent pattern of *ban1* 搬 'to remove' as we have discussed in other constructions. What is different is that there are three roles profiled at the P-meaning level, the patient role, the direction role, and

[11] See Lai (2004) for detailed discussions on different syntactic grounding and conceptualization of Hakka BUN and LAU. The study is investigated from three perspectives - semantic constraints, co-occurrence restrictions, and word order variations.

the goal role. These roles are revealed by the LAU construction, the [V X] construction and the BUN construction, respectively. After all the concepts are integrated, the complete syntactic structure of the expression is formed.

**4.5 Summary**

This chapter gives a detailed analysis of the integration of verbal meanings and constructions with regard to three different domains. First, two types of [V X] constructions, [V O] and [V C] constructions, have been examined. Through the acceptability of each construction, the core or peripheral status of each semantic role has been determined, which is different from verb to verb. In the last two sections, we extend the phrasal level to the sentential level, comprising more than one construction. All the constructions we have discussed in this chapter can be analyzed by the two-level meaning model. By means of this model, the integration from the general concept of a verbal meaning to the specific usage of a construction is completely displayed.

# CHAPTER V

# CONCLUSION

In section 5.1, we will give a summary of what we have discussed in this thesis. Then, the comparative and the contrastive analysis of Iwata's model and the present one will be provided in section 5.2. And finally, we will present further research issues in section 5.3.

## 5.1 Summary of the thesis

On the basis of Levin and Rappaport Hovav's (1991, 1993) study of verbs of removal in English, Liu's (2000a) study of verbs of surface contact in Mandarin, and Lien's (2006) study of the *wipe*-type verbs in Taiwanese Southern Min, we have analyzed verbs of removal in Hakka through the modified two-level meaning model. The original model is provided by Iwata (2005a, b). The modified model comprises several elements. The first one is the L-meaning level, whose concept is based on Jackendoff's (1972) decompositional theory and Talmy's (1985) lexicalization theory. Second, the concept of P-meaning is from the linking mechanism, which has been studied by many researchers, such as Langacker's (1987) profiling approach, Fillmore's (1977) perspectivization notion, and Talmy's (2000b) attentional imaging

system. Third, we need the concept of frame, claimed by Fillmore (1982) and Lakoff (1987), to explain the conventionalized knowledge rooted in language users' culture. And then, we need thematic core tiers to conceptualize our floating semantic components into concrete syntactic structures.

Following the preceding studies, we have presented the fine-grained integration of verbal meanings and constructions through the multilateral model, from the phrasal level to the sentential level. At the phrasal level, we have examined the interaction between six removal verbs in Hakka and different [V X] constructions, in which X is substituted for semantic roles existing in the universal concept of the removal verbs. [V Pa] constructions, display highly semantic compatibility with the removal verbs; that is, all of these verbs belong to causative or transitive verbs and all of the removing actions give direct impacts on another party. However, the acceptability of the other constructions, such as [V So], [V Go], [V Di], and [V Re] constructions, varies from verb to verb, which can be explained by several reasons. First of all, profiling the role which is exactly the conflated role of the verb may result in redundancy. Second, profiling the semantic role which is not prominent enough to be profiled or the supposed participant role which does not belong to its verbal frame will cause semantic incompatibility. At the sentential level, we have combined [V X] constructions, BUN constructions, and LAU constructions for discussion. The

semantic roles which can appear in [V X] constructions can also be profiled by BUN or LAU constructions. However, using different constructions represents different perspectives. For example, the patient role can be profiled in both [V C] constructions and LAU constructions. The patient role marked by a LAU phrase is focused on its disposed effect, while the patient role in [V O] constructions describes a plain activity.

As to those semantic components which cannot appear in [V X] constructions, they can be brought out in BUN or LAU constructions instead. Take the agent role for example. It will always be mapped to the subject of the predicate according to the argument selection principle; that is, it is unlikely to profile the agent role as a direct object in [V X] constructions. Nevertheless, the word order or the syntactic positions of the participant roles can be rearranged through various constructions. And again, a speaker's attitude can be revealed by choosing a specific construction. When people use a BUN phrase to profile the agent role, we first notice that the agent role is not in the subject position anymore, and the role which is influenced most by the activity is moved to the subject position instead. In other words, the prominence of the agent role is attenuated in a BUN construction, and what becomes more important is the affectee and its changing state. Moreover, those roles which are not prominent enough to be profiled in [V X] constructions, i.e. adjuncts, can be revealed

by LAU constructions through the comitative and the benefactive roles. The discussion again shows that we can implement particular constructions to organize floating concepts into an appropriate syntactic structure, which can be used to communicate with others.

**5.2 Contrast between Iwata's model and the present model**

Abiding by Iwata's model, we have first analyzed the verbal meaning from two levels: the L-meaning level, representing the general concept scene, and the P-meaning level, representing the profiled event scene. We have also examined the constructional meaning from its corresponding thematic core. And finally we have expounded the semantic compatibility between verbal meanings and constructional meanings, making their combination more reasonable and less arbitrary.

However, we have made some modifications of Iwata's two-level meaning model for the present study. Different from Iwata's study, which focuses on the syntactic alternations exhibited by the same verb, this thesis observes verbs in a family concept, verbs of removal. To distinguish the fine-grained nuances among each subclass, we additionally incorporate Jackendoff's decompositional theory and Talmy's lexicalization approach and Fillmore's frame and perspective notion to build up the concept structure and the inherent lexicalized meanings of each subclass in our analysis.

## 5.3 Future study

We have analyzed the integration of verbal meanings and constructions with regard to six verbs of removal in Hakka through the modified multilateral model, and some directions for future study are successively provided. First, other verbs of removal in Hakka, such as *bok4* 剝 'to flay', *guat4* 刮 'to scrape', *pat4* 撥 'to get rid of', *so3* 掃 'to sweep', *to1* 拖 'to drag', *co3* 搓 'to roll between the hand', *mat4* 抹 'to rub', and so on, need to be investigated to complete the family concept of removal, and to find out the prototipicality of each removal verb.

Second, there are so many constructions that we cannot introduce one by one in this thesis. In the future study, based on more authentic data and corpora, we can examine more constructions, such as resultative complement constructions, topicalization constructions, inchoative/causative constructions, etc, and discuss their fusion processes with the verbal meanings. And finally, the modified multilateral model needs to be testified to explore the integration of other verb families and linguistic phenomena in different languages.

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