國立交通大學

外國語文學系外國文學與語言學碩士班

碩士論文

無語法化之構式化:

論臺灣國語中「用」之新功能的形式與語意重組

Constructionalization without Grammaticalization:

The Form-meaning Reassociation in the Novel Use of *YONG* in Taiwan Mandarin

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國立交通大學
外國語文學系外國文學與語言學碩士班 碩士論文 1896 A Thesis

Submitted to Department of Foreign Languages and Literatures

College of Humanity and Social Science

National Chiao Tung University

for the Degree of Master of Arts

July 2013

Hsinchu, Taiwan, Republic of China

中華民國一〇二年七月

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摘 要

本文旨在藉由臺灣國語中「用」一詞的新功能之詞彙語意研究,探討其生成之緣起與機制。近年來,臺灣國語中之「用」一詞出現二種新功能:代動詞與指事動詞,此二新功能係源自臺灣閩南語移入,並已廣泛使用於國語非正式、口語語境中。代動詞「用」之功能係取代語篇中已經前述之先行動詞詞組,以免同一動詞詞組於語篇中重複贅述。指事動詞「用」之功能則為概略指稱以某種特定方式發生的事件類型,而非如同一般動詞具體描述實際發生之事件。「用」的此二種功能雖然語法表現不同,語意卻非常相似,因此,本文試圖藉由「構式語法」、「框架語意」及「屬性結構」等多項互補相成之理論框架,系統性地解釋並呈現「用」之詞彙語意特徵。

國語中「用」之新功能的生成與語言接觸誘發之語言變遷息息相關。由於此一現象涉及跨語言之對應詞項的功能整合,在此過程中,國語中舊有詞項「用」之語音形式被賦予來自閩南語的新語意功能,進而產生「用」在國語中的新功能,因此,此一演化過程或可視為「詞彙重整」機制。同時,此一演化過程係藉由重組舊有詞項之形式與語意搭配關係以產生新構式,且並未涉及目標語國語中之內部語法化機制,由是,以歷時性構式語法觀點而言,此一演化過程應屬「無語法化之構式化」機制之流變,亦即,此一過程非如過往文獻所定義之「語言接觸誘發語法化」,而係經語言接觸所致之構式化。

本文最終希冀經由此一個案研究,能突顯台灣地區語言的特色與新興的變化,探究 生活中真實的語言使用狀況,使語言學研究貼近自然語料。在理論上則以構式語法作為 整合性的理論框架,連繫動詞詞彙語意與語法變遷之間互動關聯,使跨此二領域之研究 能依據同一理論背景解釋並呈現。

關鍵詞:構式化、詞彙重整、語言接觸誘發語法化、框設動詞、指事動詞、代動詞、詞彙語意、構式語法、框架語意、屬性結構、臺灣國語、臺灣閩南語

Constructionalization without Grammaticalization: The Form-meaning Reassociation in the Novel Use of YONG in Taiwan Mandarin

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ABSTRACT

With an elaboration of its grammatical function and semantic properties, this thesis aims to explore the mechanisms by which the novel use of *YONG* came into being in Taiwan Mandarin. In recent years, the novel use of *YONG* as either an anaphoric pro-verb or a process-referring verb had got transferred from Taiwan Southern Min to Taiwan Mandarin and has been widely used in informal or colloquial registers. When being used as s a pro-verb, *YONG* substitutes a forementioned antecedent VP to avoid redundant repetition in discourse. When being used as a process-referring verb, *YONG* sketchily denotes a process fulfilled in certain manner rather than specifies the actual event undertaken as other ordinary verbs do. Though these two functions of *YONG* are syntactically different, they share plenty of semantic similarities. To deal with their lexical semantics, the multiple complementary approaches combining Construction Grammar, Frame Semantics and Qualia Structure are adopted. Thus, verbal semantics of these novel uses of *YONG* can be accounted for and presented effectively in a systematic way.

The core issue of this thesis concerns the contact-induced language change involved in the emergence of the novel use of *YONG*. In terms of grammatical convergence, the interlingual identification of *YONG* with a new form-meaning pairing can be viewed as a process of relexification (Lefebvre, 2009), since it is essentially a kind of "relabelling" of an existing form with a new meaning of a lexical item from another language. From the perspective of diachronic construction grammar (Bergs and Diewald, 2008; Traugott, 2011), the emergence of the novel function of *YONG* in Taiwan Mandarin demonstrates a process of constructionalization without grammaticalization, since it is the creation of a new construction by re-association of the existing form-meaning pairing, but without the internal grammaticalization in the target language, Taiwan Mandarin. In other words, the novel

functions of *YONG* do not resulted from contact-induced grammaticalization, as defined in the literature (Heine and Kuteva, 2003), but presents a case of constructionalization due to language contact.

Finally, by providing the case study on the emergence of the novel use of *YONG* in Taiwan Mandarin, this thesis reveals characteristics and the on-going novel change of Taiwan languages. Only by probing into the actual language use in the real daily life, linguistic studies will factually reflect natural language. Theoretically, this thesis attempts to link researches of verbal lexical semantics and grammatical change with an integrated theoretical framework, namely, the constructional approach. Consequently, a unified explanation to the interrelation between these two linguistic areas can be established.

Key words: constructionalization, relexification, contact-induced grammaticalization, frame-setting verb, process-referring verb, pro-verb, lexical semantics, Construction Grammar, Frame Semantics, Qualia Structure, Taiwan Mandarin,

Taiwan Southern Min

謝誌

匆匆之間,四載只在流光轉瞬,而今論文既成,畢業在即,回顧過往,學業苔有所成,實乃得惠於各方諸君,在此謹致忱謝,以表感恩。

首先,感謝恩師劉美君教授,先生堪稱學術研究、為人處事之典範,受業期間,先生引導學習、訓練思辨能力,平日又多所關照門生,提攜之恩永難忘懷,所謂大恩無以言謝,言語難盡,莫過如是。其次,感謝口試委員連金發教授與鄭縈教授為本篇論文批評指引,提供諸多寶貴意見,令論文增色,受益良多,能獲二位先生提點指教,實屬莫大榮幸。再者,感謝交大外文所許慧娟、劉辰生、賴郁雯教授等諸位師長,以及師大華教所蕭惠貞教授,傳授教誨語言學知識,啟蒙基礎研究能力,受用無窮。

交大四年,幸有良師,更得益友,能以切磋琢磨,長進學業。在此首要感謝 VerbNet 團隊研究伙伴,與大家合作共事,同心協力為目標而努力的革命情誼彌足珍貴,無論治學研討,或者出遊同樂,相聚時光總令人懷念。團隊之中,特別感謝佳音學姊,在團隊研究事務以及個人論文寫作等諸多方面為我指點迷津,親切和善且條理清明,每能從旁點破困惑迷惘,令人豁然開朗,學姊亦師亦友,有幸結識學姊,可謂良師益友兼得。其次,同窗三載,感謝碩班同學晉廷時時砥礪,相互討論學習,修業並進,是我碩班生涯之中最難能可貴之諍友。此外,感謝摯友達維、佩蓉、仕達等人,在研究生涯中相互關懷勉勵,共度歡樂與失意。

最後,感謝父母雙親手足和家族親戚的全力支持與包容,使我求學期間得無後顧之 憂,免於勞頓,尤其特別感謝姨母李華芸女士提供居所,多方照顧,使生活無虞,特此 忱謝。

碩班生涯中,儘管苦樂交織,憂歡起伏,幸得親善敬愛之諸君襄助,終能順利完成 學業,求學期間受惠多方,凡若以上列舉,不及一一備載,恐有疏漏。然則,受恩不忘, 銘感在心,本人在此謹致至忱之謝意與祝福,報以諸方,姑以微薄聊表無盡感恩。

求學生涯將告段落,人生新途伊始,滿載各方的期許與祝福,在未來的人生旅途, 我深自期許,能毋忝所得,不負所學,莫忘初衷。

一〇二 夏 記於竹湖

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List of Abbreviations

Abbreviation	Marker	Lemma
Caus.	causative marker	令、讓、使、教
CEM	consequent-event marker	就
CL	classifier	e.g. 個、鍋、件、本
DE	DE complement	得
Disp.	disposal marker	把
EPF	experiential perfective aspectual marker	過
PAS	passive marker	被
PF	perfective aspectual marker	了、矣(TSM)
Purp.	purposive marker	來/去
QM	question marker	呢、嗎
RM	realis marker 1896	有
RP	relational particle	的
PRG	progressive aspectual marker	在
SI	stative imperfective	著
UFP	utterance-final particle	e.g. 啊、啦

Introduction

Verbal lexical semantics and diachronic syntactic changes have been two widely well-studied categories in Chinese linguistics. However, the interrelation between the two spheres has not been fully discussed. An integrated approach based on a unified theoretical framework is still needed to account for issues simultaneously involving the two spheres. So far, this need has not been perfectly satisfied yet. As Liu (2005) has noted, most lexical semanticists share a common assumption that the syntactic behavior of a verb, especially its argument expression, is determined by the meaning of the verb (cf. Levin, 1993; Pustejovsky, 1995. etc.). Based on this assumption, if a verb's meaning changes, its syntactic behavior would change as well. By providing the case study of the emerging novel usage of *YONG* in Taiwan Mandarin, this study attempts to link verbal lexical semantics and syntactic change with an integrated theoretical framework, and thus achieve a unified explanation to the interrelation between these two linguistic areas.

1.1 The Issue

As a multi-function verb, 用 *YONG* is commonly used in Mandarin Chinese. In Sinica Corpus¹, there exist various usages of *YONG*. *YONG* is prototypically used as a verb or a co-verb with the meaning 'to use'. Based on this prototypical sense, it can be semantically extended to the use as a verb meaning 'to dine/eat/drink', or as a modal verb meaning 'need/have to'. Examples are given in the following table:

¹ Academia Sinica Balanced Corpus of Modern Chinese (Sinica Corpus) is developed by the CKIP group in Academia Sinica, Taiwan. It contains a total of 5 million words collected from 1981 to 1997. Among these 5 millions of words, about 69.7 thousands of words are spoken data.

Syntax	Meaning	Example			
verb		(1)	a. 我們老師在 用 我們的錢		
			women laoshi zai yong women de qian		
			we teacher PRG YONG we RP money		
	'to use'		'Our teacher is using our money.'		
			b. 我可以用偷的、用搶的,		
			wo keyi yong toude, yong qiangde		
			I can YONG steal-RP YONG rob-RP		
			'I can use (the means of) stealing or robbing.'		
		(2)	a. 他用哈薩克話罵你,		
	'to use'		ta yong hasakehua ma ni		
			he YONG Kazakh scold you		
			'He uses Kazakh to scold you.'		
1			b. 領導者要仔細傾聽, 用 溝通傳達意見。		
co-verb			lingdaozhe yao zixi qingting, yong goutong chuanda yijian		
			leader should carefully listen YONG communicate		
			convey opinion		
			'The leader should listen carefully and use		
			communication to convey opinion.'		
		(3)	那還用你解釋嗎?		
	'need, have to'		na hai yong ni jieshi ma		
modal			that still YONG you explain QM		
			'(Does it) need you to explain it?'		
		(4)	我們兩點多在雙龍鎮用了午餐,		
	' to dine,		women liangdian duo zai shuanglongzheng yong le wucan		
verb	to eat/drink'		we two-o'clock more at Shuanglong-Town YONG-PF lunch		
			'We had/ate lunch at Shuanglong Town around two o'clock.'		

Tab. 1 Functions of YONG in Sinica Corpus

The usage of *YONG* in (1) is viewed as a verb in Chao (1968) and in Li and Thompson (1981). It functions as an ordinary main verb taking an Instrument NP (我們的錢 women de qian 'our money' in (1a)) or a Means VP (偷/搶 tou/qiang 'steal/rob' in (1b)) as its object. In (2), *YONG* co-occurs with the main verb (罵 ma 'to scold' in (2a) and 傳達 chuanda 'to convey' in (2b)) and introduces the Instrument (哈薩克話 hasakehua 'Kazakh' in (2a)) or Means (e.g. 溝通 goutong 'communicate' in (2b)) for fulfilling the

event coded by the main verb. This usage of YONG, with its preposition-like function in the [S + YONG + NP1 + V (+ NP2)] construction, is thus considered as a "co-verb" by Chao (1968), Yip and Don (2004), and Kwan (2011)². In (3), YONG is used as a modal auxiliary meaning 'need/have to'. It takes an object NP (你 ni 'you') as its complement. In (4), YONG functions as a verb meaning 'to dine/eat/drink'. It takes an object NP (e.g. 午餐 wucan 'lunch' in (4)) of the sense 'meal/food/drink' as its complement.

Recently, unlike those functions listed above, a special use of *YONG* has emerged in Taiwan Mandarin. Examples are provided in the following:

- (5) a. 我實在很懶得洗碗,就叫我老公去用。 [Google, 2012/8/11] wo shizai hen lan de xi wan, jiu jiao wo laogong qu yong I really very lazy DE wash dish, CEM Caus. I husband Purp. YONG 'I was too lazy to wash dishes. I asked my husband to do it.'
 - b. A:你可以幫我洗碗嗎?

 A: ni keyi bang wo xi wan ma

 A: you can help I wash dish QM

 'Can you wash the dishes for me?'

 B: Hao, wo lai yong

 B: okay, I Purp. YONG

 'OK, I'll do it/wash the dishes.

As in (5), the verb *YONG* can be used to substitute the previously-mentioned verb phrase *xi wan* 'wash dishes', functioning as a pro-form of this VP. Moreover, in some other cases, *YONG* can even be used independently without any "replaced verb" mentioned in the context, as in the following:

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- (6) a. 喂我肚子餓了,幫我用早餐 [Google, 2012/10/2] wei wo duzi ele bang wo yong zaocan hey I stomach hungry-PF help I YONG breakfast 'Hey! I am hungry. Prepare/cook breakfast for me!'
 - b. 最近很忙...一回家就要忙著用報告 [Google, 2012/12/24] zuijin hen mang ... yi hui jia jiu yao mangzhe yong baogao recently very busy...once come-back home CEM should busy-SI YONG paper 'I am very busy recently. Once I reached home, I have to continue to write my paper busily.'
 - c. 醫生一直用針去用我的韌帶, [Yam Blog, 2012/11/17] yisheng yizhi yong zhen qu yong wo de rendai doctor always use needle Purp. YONG I RP ligament 'The doctor keeps using the needle to probe my ligament'

In (6), there is no any "replaced verb" in the context for *YONG* to refer to. *YONG* here does not indicate the actual specific event undertaken. The reading 'prepare/cook' in (6a), 'writing' in (6b) and 'probe' in (6c) of *YONG* can only be obtained via pragmatic inference or other contextual information. Noteworthily, in (6c), the second *YONG* is distinct from the first *YONG*. The first *YONG* is a co-verb meaning 'to use' and takes an Instrument NP \$\pm\$ then 'needle' as its object while the second *YONG* is the novel use of *YONG* which depicts the doctor's action of probing the speaker's ligament.

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Compared with the existing uses of *YONG*, as listed in Tab. 1, it can be figured out that this special emerging use of *YONG* may be similar to or different from the existing uses in terms of their shared or distinct syntactic and semantic properties. Take the Instrument/Means verb and co-verb *YONG* for example, they are syntactically similar to the emerging use of *YONG* since they all can be used in VO structure, as shown in (1), (2) and (6). However, they are semantically different in that Instrument/Means verb and co-verb *YONG* are used with its prototypical meaning 'to use' while the meaning of the emerging

(7) A:你今天要剪頭髮嗎?

B:不用了。

A: ni jintian yao jian toufa ma 💉

B: buyongle

A: you today want cut hair QM

B: not YONG-PF

'Do you want to have your hair cut

a. 'I do not want to do it/have my hair cut'

today?'

b. 'I do not need/have to have my hair cut.'

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In (7), the pattern 不用了 buyongle may have two different interpretation (a) and (b). In (7a), YONG is interpreted as 'do it', or more precisely, 'have my hair cut'. In other words, it is similar to the function of the emerging YONG in (5) since it substitutes and refers back to the forementioned VP 剪頭髮 jian toufa 'have one's hair cut'. In (7b), YONG functions as a modal auxiliary meaning 'need/have to'. Since both the two readings (a) and (b) are possible for the same pattern 不用了 buyongle, the ambiguity thus arises. Finally, the emerging YONG is similar to the dining YONG in that they both share the pattern 用餐 yong can, as shown in (4) and (6). However, they are semantically different in their respective meanings. In (4), YONG has the meaning 'to dine/eat/drink' while in (6), it has the contextual interpretation 'to cook'. The only similarity in their semantics is that they do not have the prototypical sense of YONG, namely, the meaning 'to use'.

From the observation above, it can be figured out that though these existing usages of *YONG* may share some syntactic or semantic similarities with the emerging use of *YONG*, they do not perfectly match in all respects with the emerging *YONG*. In other words, this emerging use of *YONG*, as shown in (5-6), is a wholly novel use of *YONG* due to the fact that it is not completely identical to the existing functions of *YONG* in all respects of its form and meaning. Furthermore, this novel usage of *YONG* has not been discussed in literatures. It is also not found in earlier-built corpora such as Sinica Corpus. Nevertheless, it is commonly used in Taiwan Mandarin nowadays, mostly in colloquial registers. It can be widely found in daily conversations and informal writings such as internet forums and personal blogs. Then, a number of questions arise: what is unique about this special usage of *YONG*? What are its grammatical function and lexical semantics? Why and how does this *YONG* come into being in Taiwan Mandarin? Is this novel usage a result of grammatical change? If it is, what kind of change it may be?

1.2 Scope and Goal

To adequately answer the questions raised above, the scope of this thesis will be focused on the novel usage of *YONG* in Taiwan Mandarin. In other words, the two novel functions of *YONG* illustrated in examples (5-6) will be discussed in the current study. The first is the function of *YONG* which is used to substitute a forementioned VP in the previous context, as in (5). The second is the function of *YONG* which predicates the process done in a certain manner, rather than indicate the actual specific action or event done in a sentence, as in (6). The goal of this thesis is to answer the questions raised in the end of the previous section. That is, with an elaboration of its unique grammatical function and semantic properties, this study aims to explore the mechanism by which this novel use of *YONG* came into being in Taiwan Mandarin.

1.3 Theoretical Framework

To tackle the first research question: what is unique about the novel usage of *YONG* in terms of its grammatical function and semantic properties? three theoretical frameworks are adopted in the current study: Construction Grammar, Frame Semantics and Qualia Structure. Construction Grammar is used to define the form-meaning pairing of *YONG* and its associated pattern in which *YONG* is used. Frame Semantics is utilized to describe the semantics of *YONG* with the representation of the possible scenario in which various activities denoted by *YONG* take place. Qualia Structure is exploited to account for and differentiate the potential ambiguity of *YONG* in context by semantic coercion from the complement of *YONG*. To deal with the second research question (i.e. why, how and by what mechanism does this *YONG* come into being in Taiwan Mandarin?), constructional approach is also used to account for the emergence of the novel use of *YONG* in Taiwan Mandarin. By adopting constructional approach, the lexical semantics of *YONG* and its related grammatical change can thus be explained with a unified theoretical framework.

1.3.1 Construction Grammar

According to Goldberg (1995), the definition of a construction is that "C is a CONSTRUCTION iff_{def} C is a form-meaning pair $\langle F_i, S_i \rangle$ such that some aspect of F_i or some aspect of S_i is not strictly predictable from C's component parts or from other previously established constructions." In other words, constructions are defined as form-meaning pairings which serve as the basic units of language. Namely, a construction functions in the same way as a lexical item functions in language. Like lexical items, one construction thus has its own meaning and can endow a particular interpretation for its component parts. The English Ditransitive (double-object) Construction would be a

significant example (Goldberg, 1995): the form of the construction is [Subj V Obj₁ Obj₂], and the meaning of the construction is [X CAUSE Y to RECEIVE Z] (intended or actual transfer). For instance, the word "bake" is not essentially a verb coding actions of transfer. Nevertheless, in a sentence like "She baked him a cake", the Ditransitive Construction would coerce its meaning on the verb "bake". "Bake" here thus obtains the transfer sense from the Ditransitive Construction.

Taking a similar viewpoint, in Radical Construction Grammar, Croft (2001) defined constructions as "pairings of form and meaning that are at least partially arbitrary". Constructions are thus symbolic units conceived as the model in the following:

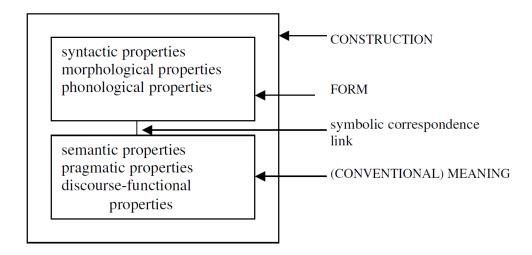


Fig. 1 Model of the symbolic structure of a construction in Radical Construction Grammar (Croft, 2001)

For this reason, a construction can be a language unit of any size from individual words to larger phrasal pattern or even a sentence. Following this perspective, the lexical item *YONG* itself is definitely a form-meaning pairing and thus should be viewed as a construction. On the other hand, as shown in (6), the actual event in the [*YONG* + NP] pattern (e.g. 用早餐 *yong zaocan* 'to prepare/cook breakfast') is underspecified and the meaning of this pattern is not strictly predictable from its internal components. Due to its opaque semantic interpretation, this pattern surely could be regarded as a construction. Besides, as shown in

(6), YONG may have various meanings like 'to cook', 'to write' and 'to probe'. However, it is cognitively uneconomical to list all these meanings as polysemous senses of YONG because it would neglect the creative use of YONG in context and because "an elaborate construction should be able to economically predicate the coerced interpretation without burdening to list extra senses or rules in the lexicon" (Chang, 2005). The seemingly irrelevant contextual interpretations of YONG (i.e. 'to cook', 'to write' and 'to probe' in (6)) may share some semantic properties endowed by the [YONG + NP] pattern. Accordingly, the constructional approach is adequate to be exploited here to account for the meaning encoded in the novel use of YONG in its related patterns. In sum, Construction Grammar is used to define the form-meaning pairing of the novel use of YONG and its associated pattern in the current study.

Further more, since the emergence of this novel use of *YONG* in Taiwan Mandarin is essentially a grammatical change involving re-association of an existing form with a new meaning, the construction-based approach thus would be adequate to study the development of this novel *YONG* in Taiwan Mandarin.

1.3.2 Frame Semantics

Fillmore and Atkins (1992) have proposed that verbal semantics can only be acquired in reference to the associated semantic frame. A "semantic frame" is defined as "a structure background of experiences, beliefs or practices, constituting a kind of conceptual prerequisite for understanding the meaning" by Fillmore and Atkins (1992). In other words, a "semantic frame" is the conceptual structure, or more precisely, the image schema, which supports and motivates a word's meaning. For instance, the "commercial transaction" frame contains four core participants (i.e. frame elements) involved in a commercial transaction event: BUYER, SELLER, MONEY and GOODS. The lexical semantics of a verb belonging

to this frame (e.g. buy, sell, spend and pay etc.) is thus characterized by virtue of its profiled frame elements.

group of Mandarin verbs only "denote a manner, rather than naming a specific activity". These verbs are "used to 'set a frame' for various activities to take place". However, Liu (2005) also noted that these "frame-setting" verbs are unique in that "the frame is lexically inferred rather than syntactically realized with an array of arguments ('frame elements')". She takes 趕 GAN for example, the semantic frame set by GAN may be spelled out with its four properties: Presupposition, Manner, Telicity and Agent-control. Since YONG and GAN share similar "frame-setting" functions, Frame Semantics surely could be adequately utilized to probe into its lexical semantics in the similar fashion. Therefore, in the current study, the frame-based approach will be exploited to depict the verbal semantics of the novel use of YONG.

1.3.3 Qualia Structure

According to Pustejovsky (1995), Qualia Structure specifies four essential dimensions of the meaning of a word:

- CONSTITUTIVE: the relation between an object and its constituents, or proper parts.
- FORMAL: factors which distinguish the object within a larger domain.
- TELIC: purpose and function of the object.
- AGENTIVE: factors involved in the origin or "bring about" of an object.

As Pustejovsky (1995) has clarified, Qualia Structure not only characterizes our knowledge of words, but also suggests interpretations of words in context. Take the English verb "enjoy" for example:

- (8) a. Mary enjoyed the movie last night. (watching)
 - b. John quite enjoys his morning coffee. (drinking)

The different contextual meanings of "enjoy" are rendered from information of the complement. More specifically, it is the Telic role of "movie" and "coffee" that project the activities of "watching the movie" and "drinking coffee" respectively to the interpretation of the VP. In other words, "Qualia Structure provides a compositional means for meaning coercion based on characterizations of the four different roles: Constitutive, Formal, Telic, and Agentive." (Liu, 2005).

Further more, another advantage of Qualia Structure is that it can solve the potential ambiguity in the interpretation of the predication in a sentence. For example, as illustrated in Pustejovsky (1991), the English sentence "John began a novel." may have two possible readings:

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- (9) a. John began to **read** a novel.
 - b. John began to write a novel.

The two distinct interpretations can be viewed as deriving from two distinct roles of the NP complement. More specifically, the Telic role [Telic = read] and the Agentive role [Agentive = write] of "novel" project the two interpretations 'read' and 'write' to (9a) and (9b) respectively.

As illustrated previously, the novel use of *YONG* does not specify the actual event undertaken. Instead, it only denotes the manner by which the activity is fulfilled. The crucial information about the "ellipsed" event is supplied by *YONG*'s complement object NP. Therefore, the application of Qualia Structure would be profitable to explain how contextual meanings of the predication in the associated pattern of *YONG* can be obtained

by semantic coercion of the complement's pre-defined Qualia role. As a result, how the various contextual interpretation of *YONG* in (6) as 'to cook', 'to write' and 'to probe' in the [*YONG* + NP] construction are obtained can be efficiently accounted for via Qualia Structure. Thus, in this vein, by incorporating Construction Grammar and Qualia Structure, the potential semantic ambiguity of *YONG* in the same context can be differentiated and accounted for in a systematic way.

1.4 Database

An initial observation shows that the novel use of *YONG* is mainly used in informal registers, especially in casual speech or informal writing. This novel use of *YONG* is not found in the Sinica Corpus since it contains limited data from informal or colloquial registers and most of the data collection are from an earlier period (1981-1997) in which this special use of *YONG* had not been widely used in Taiwan Mandarin yet. In order to obtain more data from informal registers, internet resources such as personal blogs (e.g. Wretch Blog, Yahoo Blog), on-line search engines (Google Search) and the Bulletin Board System sites (PTT) are utilized as databases for analysis. Data from these internet resources are collected during the period from September 2011 to June 2013. Besides, since spoken data are usually disfluent due to factors like speech error, stutter, repetition, interruption and so on, made-up examples based on the author's competence as a native speaker of Taiwan Mandarin is used for descriptive convenience. Since ungrammatical sentences cannot be found, made-up examples are also used for syntactic tests. Five native speakers of Taiwan Mandarin, aged from 19 to 29, who often use this special use of *YONG* are consulted for these made-up examples.

1.5 Organization of the Thesis

This thesis is organized in the following sequence. Chapter one is the introduction of the background information, elucidating the issue, scope and goal, database and theoretical frameworks of this thesis. Chapter two is the literature review. Chapter three and four explores the lexical semantics of the novel use of *YONG* in Taiwan Mandarin with elaboration of the findings in the data. In these chapters, Frame Semantics, Construction Grammar and Qualia Structure theories are adopted for the analysis. With the constructional approach, chapter five investigates the probable source, development, as well as the potential mechanisms by which the novel use of *YONG* came into being in Taiwan Mandarin. Lastly, chapter six is the conclusion, summarizing the findings and the theoretical analysis of the current study. In this chapter, the theoretical implication, the significance of this thesis and the possible direction for further researches are proposed as well.

Literature Review

This chapter reviews previous researches on topics relevant to the novel use of *YONG* concerned in the current study. These topics are discussed from various theoretical perspectives in terms of their associated linguistic phenomena. Literatures in topics on English pro-verb *do*, Mandarin verbs of doing, and Mandarin frame-setting verbs, will be briefly reviewed in the following sections.

2.1 English Pro-verb Do

The novel usage of *YONG* in Taiwan Mandarin is reminiscent of a significant case: the English pro-verb *do*. *Do* is termed as "pro-verb" in virtue of its two particular functions: verbal anaphora (cf. Spears, 1991; Trask, 1993; Biber et al, 1999; Matthews, 2007; Crystal, 2008; Richards and Schmidt, 2010 etc.) and process referring (cf. Halliday, 1977; Biber et al, 1999).

In terms of its verbal anaphora function, *do* is termed as "pro-verb" due to the fact that it can be used to substitute a forementioned antecedent verb phrase in context. It functions as a VP pro-form to avoid redundant repetition of an identical VP expression in discourse. Briefly, *do* is termed as "pro-verb" for its substitution use. For instance, Spears (1991) defined a "pro-verb" as "a verbal construction using some form of the verb *do* to stand for a full verb phrase". Biber (1999) further indicates that "In one common pattern, *do* combines with a following pronoun *it* or *this/that* to form a transitive pro-verb construction". The following examples illustrate the verbal anaphora function of "pro-verb" *do*:

(1) a. I like films and John does too. [Crystal, 2008]

- b. I asked Lisa to proofread the typescript, and she did so/did it. [Trask, 1993]
- c. Angela spills her coffee every morning. John does that too. [Spears, 1991]

In (1a), the verb *do* substitutes the forementioned VP *like films*. In (1b-c), *do* further combines with *so*, *it* and *that*, forming the phrases *do so*, *do it* and *do that*, to substitute the forementioned VP *proofread the typescript* in (1b) and *spills her coffee every morning* in (1c) respectively. Noteworthily, a "pro-verb" *do* substitutes for a full VP rather than for a single verb in the preceding context, as illustrated in the following example:

(2) A: Can you buy the book for me?

B: OK, I'll do (it)/*I'll do the book for you.

As shown in the examples above, it is the full VP buy the book for me that is substituted, not the single verb buy. Therefore, some linguists such as Trask (1993) suggested that the term "pro-VP" would be more recommended for this verbal anaphora function.

The Taiwan Mandarin *YONG* has such verbal anaphora function parallel to the English *do* as well, as illustrated in the following:

- (3) 我實在很懶得洗碗,就叫我老公去用。 [Google, 2012/8/11] wo shizai hen lan de xi wan, jiu jiao wo laogong qu yong I really very lazy DE wash dish, CEM Caus. I husband Purp. YONG 'I was too lazy to wash dishes, so I asked my husband to do it.'
- (4) A:你可以幫我買書嗎?
 A: ni keyi bang wo mai shu ma
 A: you can help I buy book QM
 'Can you buy the book for me?'

B1:好,我來用/*我來用書。

B1: hao, wo lai yong/*wo lai yong shu

B1: okay, I Purp. YONG/I Purp. YONG book 'OK, I'll do (it)/I'll do the books.'

As shown above, *YONG* replaces the forementioned VP 洗碗 *xi wan* 'wash dishes' and 買書 *mai shu* 'buy a book'. Similar to the case of *do*, in (4) *YONG* substitutes for the full VP *mai shu* 'buy a book', rather than for the single verb 買 *mai* 'buy'. In sum, the examples above show that *YONG* and *do* are similar in terms of their verbal anaphora function.

In addition to the verbal anaphora function, *do* is also termed as "pro-verb" in virtue of its another significant function: process referring. When *do* is used for process-referring function, it does not specify the actual event or action fulfilled in the clause. Instead, *do* here express "any unidentified or unspecified process" (Halliday and Hasan, 1977). Namely, it serves for the function of "conveying a broad and undifferentiated meaning" (Quirk et al., 1985). Besides, since *do* here is not used for verbal anaphora, there is no "replaced verb" in the context. That is, *do* here "substitutes for a series of actions or events, rather than referring to a specific preceding verb" (Biber et al, 1999). The occurrence of *do* "does not necessarily involve an anaphoric or cataphoric reference" (Halliday and Hasan, 1977). Consider the following example from Biber et al (1999):

- (5) A: Even Miss <teacher's name> hates him. − Now, well you see, she o~, we was having this discussion about education and she goes Are you cynical about education Terry? He goes no. She goes oh! She goes why? And he goes I don't know what cynical means.
 - B: <laughs>
 - A: I was saying ah no. And everyone in the class just cracked up. Sometimes you woth—er whe— you wonder whether he does it on purpose. He must do it on purpose, no one could be that thick.

Biber et al (1999) clarified that "In this conversation, the pro-verb expressions *does it* and *do it* refer to Terry's actions and speech, rather than substituting for a specific preceding verb".

Similarly, *YONG* has such process-referring function parallel to *do* as well. As shown in the following example, *YONG* here does not substitute a specific verb in context. Instead, it expresses an unspecified event in the sentence. The intended reading 'to cook' is obtained via contextual inference.

(6) 我今天就用了一鍋咖哩 準備明天來吃~~~ [PixNet Blog, 2013/4/12] wo jintian jiu yongle yiguo gali zhunbei mingtian lai chi I today CEM YONG-PF one-pot curry prepare tomorrow Purp. eat 'I cooked a pot of curry today for tomorrow.'

To summarize the discussion above, it is clear that the English *do* is termed as a "pro-verb" in terms of its two crucial functions: verbal anaphora and process referring. Considering the comparison between *do* and *YONG*, one crucial question is raised: if *do* is termed as a "pro-verb" by virtue of its verbal anaphora and process-referring function, can *YONG* also be termed as a "pro-verb" in the same way since, like English *do*, it also has these two functions?

2.2 Mandarin Verbs of Doing

Adopting a corpus-based approach, Wang (2004) explored the different usages of Mandarin verbs of doing 做 zuo, 弄 nong and 搞 gao. Wang's (2004) examples of these three verbs are given in the following:

- (7) a. 搞把戲/搞建設/搞清楚
 gao baxi/gao jianshe/gao qingchu
 GAO trick/GAO construction/GAO clear
 'to play tricks/to initiate construction/ to clarify something'
 - b. 弄稀飯/弄卷帶子/弄得清清楚楚
 nong xifan/nong juan daizi/nong de qingqingchuchu
 NONG rice porridge/NONG CL tape/NONG DE clear
 'to make rice porridge/to get a tape/to make it extremely clear'

c. 做老師/做功課/做茶壺/做決定/做得更好
zuo laoshi/zuo gongke/zuo chahu/zuo jueding/zuo de genghao
ZUO teacher/ZUO homework/ZUO pot/ZUO decision/ZUO DE better
to be a teacher/to do homework/to make pots/to make a decision/to do much
better

According to Wang (2004), though these three verbs are near synonyms, they are not always interchangeable. By analyzing their complement types, the semantic properties can be figured out: *zuo* emphasizes the action of engaging in or creating and mainly collocates with the objectival type arguments; *Nong* exhibits the sense of handling and favors as its argument existing, concrete objects; *Gao* specifies the action of initiating and is usually associated with objects nouns denoting unusual, unconventional, or even unfavorable movements. Among the three verbs, "nong acts more like a cohesion device or a pro-verb to substitute for verbs occurring in the previous text or for whatever verbs the speaker fails to retrieve" (Wang, 2004), as in patterns like *nong xifan* 'to make rice porridge' in (7b). Moreover, *gao* tends to carry negative semantic prosody, while *nong* and *zuo* are basically neutral.

In her study, Wang (2004) provides a general overview covering the three frequently used Mandarin verbs of doing with corpus-based data presentation. However, one crucial issue remains undiscussed in her study: since a verb of doing may have different readings in different contexts, then, by what mechanisms are these various contextually inferred interpretations facilitated? To tackle this issue, a theory-based approach is needed for a systematic and effective account.

2.3 Mandarin Frame-setting/evoking Verbs

(8)	a.	搶銀行	QIANG yinhang	'to rob a bank'
	b.	搶生意	QIANG shengyi	'to vie for business'
	c.	搶掛號	QIANG guahao	'to vie for the priority of registering'
(9)	a.	玩遊戲	WAN youxi	'to play a game'
	b.	玩股票	WAN gupiao	'to invest in the stock market'
	c.	玩女人	WAN nuren	'to womanize'
				- I DOE
(10)) a.	趕廟會	GAN miaohui	'to rush to take part in the temple-festival'
	b.	趕公車	GAN gongche	'to rush to catch the bus'
	c.	趕三點半	GAN san-dian-ban	to rush to get to the bank by 3:30'
	d.	趕報告	GAN baogao	'to rush to finish writing a paper'

Liu (2002) also noted that these verbs "all serve to set a frame, providing background assumptions and profiling a given manner that goes along with the actual event evoked by the noun phrase". In her case study of \Re *QIANG* (2002), *QIANG* evokes a semantic frame that highlights two essential concepts: COMPETITION and GAIN. The meaning of *QIANG* thus can be defined as "In the event of *QIANG*-NP (x), an activity (x) is carried out by means of COMPETITION for the purpose of GAINING a desirable target (y)". Consequently, the three uses of *QIANG* (i.e. 'to rob', 'to fight for scarce resource' and 'to gain priority for doing activity (x)', as shown in (8)) can be viewed as variants of the same core semantic frame (COMPETITION + GAIN).

¹ The notion "pro-verb" here in Liu (2002, 2005) and Yu (2006) roughly corresponds to those verbs with "process-referring" function in the current study.

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In another case study, Liu (2005) focus on the lexical semantics of pro-verb $\not\not\vdash GAN$ in the [GAN + NP] construction. Similar as QIANG, GAN does not specify the actual activity undertaken but relies on its object NP to render its contextual interpretation. The NP following GAN are generally inanimate and can be divided into four sub-groups: a scheduled special event, a vehicle running on a fixed schedule, a lexically specified (overt) time expression, and an artifact to be produced by a deadline, as illustrated in (10) respectively. Though different types of NP render different interpretations of the actual events involved, since they share the same surface form [GAN + NP] in common, they would share one core sense regarding the [GAN + NP] constellation. Adopting a constructional approach, the interpretation of [GAN + NP] construction thus reads like: "to achieve a STATE by a certain TIME through a speedy engagement in an ACTIVITY" (Liu, 2005).

In the sense of frame semantics, Liu (2005) indicates that instead of predicating events as other ordinary verbs do, *GAN* is used to "set a frame" for various activities to take place. She also noted that "*GAN* (and other frame-setting verbs) is unique in that the frame is lexically inferred rather than syntactically realized with an array of arguments ('frame elements')" (Liu, 2005). The semantic frame of *GAN* thus can be spelled out with the following properties (Liu, 2005):

- Presupposition: Normal pace of performing the activity is not enough.
- Manner: with an accelerating pace.
- Telicity: The event is directed towards a goal, the projected Target State.
- Agent-control: The activity has to be volitional and under the agent's control.

Since *GAN* is a pro-verb which only sets a frame but does not specify the actual activities involved, how and by what mechanism can contextual readings of these "ellipsed" activities be obtained? To solve this, Qualia Structure (Pustejovsky, 1995) is adopted by Liu (2005) to render the interpretations of the constructional predication by meaning coercion

based on the object NP's profiled Qualia role on the four dimensions: Constitutive, Formal, Telic and Agentive. Examples from Liu (2005) are shown in the following:

- (11) a. 趕公車 *GAN gongche* 'rush to catch <u>the bus</u>'
 Bus [Telic = running on a fixed schedule]
 - b. 趕報告 *GAN baogao* 'rush to finish <u>the paper</u>'
 Paper [Agentive = writing]

In (11a), it is the Telic role of 公車 gongche 'bus' coerced with GAN to give rise to the interpretation 'rush to catch the bus'. Similarly, in (11b), through the semantic coercion of the Agentive role of 報告 baogao 'paper', the interpretation 'rush to finish the paper' is thus attained. Furthermore, Qualia Structure is also profitable in differentiate potential ambiguity. Take 趕比賽 GAN bisai for example (Liu, 2005):

- (12) 趕比賽 GAN bisai 'GAN (ball) games'
 - a. 'rush to finish playing games' game [Agentive = palying]
 - b. 'rush to finish watching games' game [Telic = entertaining/watching]

In (12), *GAN bisai* may have different interpretations, 'to play a game' or 'to watch a game', owing to the different profiled Qualia roles of the object NP *bisai*. The profiled Agentive role would facilitate the 'playing' reading, while the profiled Telic role would lead to the 'watching' reading.

In sum, by adopting the three approaches: Frame Semantics, Construction Grammar and Qualia Structure, Liu (2005) has established a systematic and effective model for dealing with lexical semantics of Mandarin "pro-verbs". Following Liu's approaches, Yu (2006) conducted a research on lexical semantics of Mandarin frame-evoking verbs \mathcal{H} WAN, \mathcal{F} NONG, and \mathcal{F} GAO in [V + NP] construction. Yu's study (2006) also exhibits that a fruitful result can be expected by taking advantage of these persuasive systematic theoretical frameworks.

2.4 Summary

English *do* is termed as "pro-verb" in terms of its two particular functions: verbal anaphora and process referring. Since the novel use of *YONG* in Taiwan Mandarin parallels *do* in these two functions, can *YONG* be termed as "pro-verb" in the same vein, too? In Mandarin Chinese, similar to *YONG*, a group of verbs, including 做 *ZUO*, 弄 *NONG*, 搞 *GAO*, 玩 *WAN*, 搶 *QIANG*, 趕 *GAN* and so forth, is viewed as "pro-verb" due to their process-referring function (cf. Liu, 2002, 2005; Wang, 2004; Yu, 2006). From different perspectives, they are denominated with various terms. In terms of their syntactic and semantic properties shared with English "pro-verb" *do*, *ZUO*, *NONG* and *GAO* are considered as "verbs of doing" by Wang (2004). From the perspective of Frame Semantics, since these verbs only "set a frame, or denote a manner, rather than naming a specific activity" (Liu, 2005), they are thus termed as "frame-setting verbs" by Liu (2002, 2005), and as "frame-evoking verbs" by Yu (2006) respectively.

Adopting a corpus-based approach, Wang (2004) surveys three commonly used verbs of doing with a detailed elaboration in their syntactic and semantic properties. Nevertheless, systematic and effective approaches are still needed to further analyze and adequately present lexical semantics of Mandarin "pro-verbs". Considering this, Liu (2002) has noted that "verbal semantics can only be adequately represented if constructionally coerced information is taken into consideration". As demonstrated in Liu (2002, 2005) and Yu (2006), the multiple complementary approaches combining Frame Semantics, Construction Grammar and Qualia Structure are fairly profitable in dealing with such issues. Therefore, by adopting Liu's approaches, the current study aims to explore lexical semantics of the novel use of *YONG* in Taiwan Mandarin.

Lexical Semantics of PR-V YONG in TM

Before going further into the analysis of lexical semantics of the novel use of YONG in Taiwan Mandarin, one crucial question should be solved first. As asked in the previous chapter, since the novel use of YONG in Taiwan Mandarin parallels English "pro-verb" do in the verbal anaphora and process-referring function, can the term "pro-verb" be applied to YONG in the same vein like do in English? As for the terminology of YONG, it should be noted that the verbal anaphora do and the process-referring do are both termed as "pro-verb" in some literature in light of different considerations on different perspectives. For the verbal anaphora function, do is termed as "pro-verb" since it syntactically and semantically refers back to a previously mentioned VP in context. As for process-referring function, do is also termed as "pro-verb" since it is used with its general and wide-ranged meaning to sketchily denote a underspecified process undertaken in certain manner. In other words, verbal anaphora do is termed as "pro-verb" in terms of its syntactic and semantic function, while process-referring do is termed so for its semantic content. The two functions of do are similar in that they are both semantically unspecified. However, the verbal anaphora do is used to "substitute" a previously mentioned VP, so it syntactically functions as a real "pro-form", but the process-referring do does not. Instead, it refers to an underspecified action and syntactically behaves like a main verb. Taking both syntactic and semantic perspectives into consideration, to adequately refer to YONG of these two functions, in the current study, the verbal anaphora YONG will be termed as "anaphoric pro-verb" hereafter (pro-V), and the process-referring YONG will be termed as "process-referring verb" (PR-V) respectively.

Consequently, since the two functions of *YONG* are distinguished and clarified, the research questions of the current study could be further specified as following: what kind of VPs can be substituted by anaphoric pro-verb *YONG*? What is unique about the process-referring verb *YONG* in terms of its lexical semantics? And finally, what kind of process does this *YONG* refer to? In the coming chapters, lexical semantics of pro-V and PR-V *YONG* will be discussed respectively. In this current chapter, adopting Frame Semantics, Construction Grammar and Qualia Structrue as the main theoretical frameworks, lexical semantics of the PR-V *YONG* will be discussed in the first instance.

3.1 Findings

In this section, the syntactic constraints and semantic properties of PR-V *YONG* will be discussed. Typically, Mandarin verbs can be affixed with the four aspectual markers 了 *le* (perfective marker),過 *guo* (experiential perfective marker),在 *zai* (progressive marker), and 著 *zhe* (stative imperfective marker) (cf. Smith, 1991). As mentioned previously, PR-V *YONG* is syntactically used as a verb. Hence, PR-V *YONG* can also be construed with aspectual markers. Consider the following examples:

- (1) a. 我今天就用了一鍋咖哩 準備明天來吃~~~ [PixNet Blog, 2013/4/12] wo jintian jiu yongle yiguo gali zhunbei mingtian lai chi I today CEM YONG-PF one-pot curry prepare tomorrow Purp. eat 'I cooked a pot of curry today for tomorrow.'
 - b. 有人去過 AT5 用過頭髮嗎??? [Google, 2013/3/13] you ren quguo AT5 yongguo toufa ma have people go-EPF AT5 YONG-EPF hair QM 'Has anyone ever been to AT5 Salon to cut/dye/perm hair?'
 - c. 這幾天都在用房間 好麻煩阿 [Google, 2012/11/5] zhejitian dou zai yong fangjian hao mafan a these-some-day all PRG YONG room very troublesome UFP '(I have been) cleaning up the room these days. It is so troublesome.'

d. 把地上的血擦一擦.....繼續用著我的報告..... [Wretch Blog, 2012/11/17] ba dishang de xie cayica ... jixu yongzhe wo de baogao Disp. floor-top RP blood wipe-one-wipe continue YONG-SI I RP paper '(I) wiped the bloodstain on the floor and continued writing my paper.'

On the other hand, the semantic properties of PR-V YONG can be discussed from two respects: the verbal event types as in (2-10), and the object NP types as in (11-17). First, in view of the verbal event types, PR-V YONG basically depicts dynamic actions. Processes of STATE situation type (cf. Smith, 1991) are not coded by pro-V YONG. In Mandarin Chinese, verbs of STATE type are commonly modified by degree adverbs (e.g. 有點羡慕 youdian xiannu a-little-envy 'be a little envious of', 很 / + 分 / 非 常 喜 歡 hen/shifen/feichang xihuan very-like 'like...very much' etc.). Hence, YONG cannot be modified by degree adverbs. This implies that 1) the *[有點/很/+分/非常用]*[youdian/hen/shifen/feichang yong] 'a little/very YONG' pattern is not allowed, and 2) mental activities will not be denoted by YONG. The most crucial feature of PR-V YONG is that it basically describes an event of both transitive and physical type. The notion "physical" here means that verbs of the following types are excluded:

- 1) perception-cognition-utterance verbs (PCU-V¹) (See (4)) e.g. 聽 *ting* 'hear', 發現 *faxian* 'discover', 相信 *xiangxin* 'believe', 知道 *zhidao* 'know', 告訴 *gaosu* 'tell', 解釋 *jieshi* 'exaplain' etc.
- 2) emotion verbs (See (5)) e.g. 愛 ai 'love', 羡慕 xianmu 'envy' etc.
- 3) copula verbs (See (6)) e.g. 當 dang 'be', 變成 biancheng 'become', 擔任 danren 'take the post of' etc.
- 4) verbs of possesion (See (7)) e.g. 有 you 'have'

¹ Givon (1993) defines PCU verbs as "The subject of verbs in this important group either perceives or cognizes a state or event, or utters a proposition concerning a state or event". Representative lemmas are *see*, *hear*, *feel*, *know*, *think*, *believe*, *say*, *explain*, *propose* and so forth.

Consider the following examples:

- A. transitive physical actions
- (2) a. 有人去過 Mod's hair 用頭髮過口²??? [Google, 2012/10/2] you ren quguo Mod's hair yong toufa guo ma have people go-EPF Mod's-hair-Salon YONG hair EPF QM 'Has anyone ever been to Mod's hair Salon to cut/dye/perm hair?'
 - b. 最近都在用報告 狠³累..... [PixNet Blog, 2012/10/2] *zuijin dou zai yong baogao hen lei* recently all PRG YONG paper very tired '(I am) busy writing my papers recently. (I am) so tired.'
- B. intransitive physical actions
- (3) a. 他開心地*用/**笑**著。

 ta kaixinde *yong/xiaozhe
 he happily YONG/laugh-SI
 'He did/laugh happily'

 E b. 他*用/跳得很高。

 ta *yong/tiao de hen gao
 he YONG/jump DE very high
 'He does/jumps very high.'
- C. transitive non-physical actions
- (4) perception-cognition-utterance verbs (PCU-V)
- verbs of perception
- a. 我*用/聽過這個故事。
 wo *yong/tingguo zhege gushi
 I YONG/hear-EPF this-CL story
 'I have done/heard about this story.'
- b. 哥倫布*用/**發現**了新大陸。
 gelunbu *yong/faxianle xindalu
 Columbus YONG/discover-PF
 the-New-World
 'Columbus did/discovered
 the New World'

² "口" is the uncareful typo of the Mandarin question marker "嗎" in the internet written context.

³ "狠" is the uncareful typo of the Mandarin degree adverb "很" in the internet blog.

- verbs of cognition
- c. 我不*用/相信他的話。
 wo bu *yong/xiangxin ta de hua
 I not YONG/believe he RP word
 'I do not do/believe his words.'
- d. 我不*用/知道畢氏定理。
 wo bu *yong/zhidao bishidingli
 I not YONG/know Pythagorean-Theorem
 'I do not do/know Pythagorean Theorem.'

- verbs of utterance
- e. 他*用/告訴我一個故事。

 ta *yong/gaosu wo yige gushi
 he YONG/tell I one-CL story
 'He did/told me a story.'
- f. 請你*用/解釋原因。
 qing ni *yong/jieshi yuanyin
 please you YONG/explain reason
 'Please do/explain the reason.'

- (5) emotion verbs
 - a. 我*用/**愛**巧克力。
 wo *yong/**ai** qiaokeli
 I YONG/**love** Chocolate
 'I do/love Chocolate.'
- b. 他溫柔地*用/安慰我。

 ta wenroude *yong/anwei wo
 he tenderly YONG/comfort I

 'He tenderly did/comforted me.'

(6) copula verbs

- a. 我要*用/**當**/變成大明星。
 wo yao *yong/**dang/biancheng** damingxing
 I want YONG/**be/become** super-star
 'I want to do/be/become a super star.'
- b. 他以前*用/**擔任**過大學校長。

 ta yiqian *yong/danrenguo daxue xiaozhang
 he before YONG/serve-as EPF university president
 'He used to serve as the president of the university.'
- (7) verbs of possession

我*用/有一枝筆。
wo *yong/you yizhi bi
I YONG/have one-CL pen
'I do/have a pen.'

As shown above, transitivity and physicality are the most crucial properties of *YONG*. In other words, activities depicted by PR-V *YONG* must be both transitive and physical simultaneously, as in (A) (i.e. 'to cut/dye/perm hair' in (2a) and 'to write papers' in (2b)). VPs that lack either one of the two properties cannot be replaced by *YONG*. Hence, intransitive physical actions (as in (B)) or transitive non-physical actions (as in (C)) will not be depicted by PR-V *YONG*.

Besides, PR-V *YONG* must denote actions initiated by the Agent subject. Activities which cannot be initiated by the Agent subject cannot be represented by *YONG*. As in the examples below, since 中樂透 *zhong letou* 'win the lottery' and 得癌症 *de yanzheng* 'get cancer' are essentially uncontrollable activities, they cannot be expressed by PR-V *YONG*.

(8) a. 我*用/中了樂透。

wo *yong/zhongle letou
I YONG/win-PF lottery
'I did/won the lottery.'

b. 我*用/得了癌症。

wo *yong/dele yanzheng
I YONG/get-PF cancer
'I did/got cancer.'

Moreover, certain verbs may have causative/inchoative alternation (e.g. 搖 yao 'to rock, wave'). Since PR-V YONG only denotes transitive activities, only causative use of these verbs could be substituted by YONG, as illustrated in the following:

(9) a. causative type

他輕輕地用著搖籃/扇子。
ta qingqingde yongzhe yaolan/shanzi
he gently YONG-SI cradle/fan
'He gently rocks the cradle/waves the fan.'

b. inchoative type

*搖籃/扇子輕輕地用著。

*yaolan/shanzi qingqingde yongzhe
cradle/fan gently YONG-SI

'The cradle gently rocks/The fan gently waves.'

As demonstrated previously, PR-V YONG basically depicts transitive and physical events. Intransitive or non-physical events cannot be represented by PR-V YONG. However, certain types of events which may involve transitivity and physicality are not allowed to be depicted by PR-V YONG. For instance, PR-V YONG does not denote events of transfer of possession (e.g. † mai 'sell', 偷 tou 'steal', 借 jie 'borrow'), as shown in the following:

- (10) a. 我請了一個房仲幫我*用/賣房子。
 wo qingle yige fangzhong bang wo *yong/mai fangzi
 I hire-PF one-CL property-agency help I YONG/sell house
 'I hired a property agency to do it/sell my house for me.'
 - b. 他*用/偷了我的書。

 ta *yong/toule wo de shu

 he YONG/steal-PF I RP book

 'He stole my book.'

Second, from the perspective of the object NP types, the object NP of PR-V *YONG* can be a Patient, a Theme, or an Incremental Theme, as illustrated in the following:

(11) Patient object NP

- a. 房東終於叫人來用冷氣力⁴ [Yahoo Blog, 2011/11/5] fangdong zhongyu jiao ren lai yong lengqi le landlord at-last call people Purp. YONG air-conditioner PF 'At last the landlord called someone to fix the air conditioner.'
- b. 一整個下午都在忙著用行李 [Yahoo Blog, 2011/12/11] yizhengge xiawu dou zai mangzhe yong xingli whole afternoon all PRG busy-SI YONG luggage 'I was busy packaging my luggage all the afternoon.'

 $^{^4}$ " 5 " is the uncareful typo of the Mandarin perfective aspect marker " 7 " in the internet written context.

(12) Incremental Theme object NP

- a. A 廚藝不錯 用了一個蛋糕要自己吃, [PTT, 2012/5/24]

 A chuyi bucuo yongle yige dangao yao ziji chi
 A culinary-skill good YONG-PF one-CL cake want oneself eat
 'A is good at baking and baked a cake for him/herself to eat.'
- b. 我下午會回去用作業, [Plurk, 2012/5/24] wo xiawu hui huiqu yong zuoye
 I afternoon will come-back YONG homework
 'I will come back to write my homework in the afternoon.'

(13) Theme object NP

- a. 我最近超忙,都在用學校的事。 [Yam Blog, 2012/5/13] wo zuijin chao mang, dou zai yong xuexiao de shi
 I recently super busy all PRG YONG school RP matter
 'I am very busy doing school matters recently.'
- b. 今天一整天幾乎都在用教室佈置 [Wretch Blog, 2012/10/2] jintian yizhengtian jihu dou zai yong jiaoshibuzhi today all-day-long almost all PRG YONG classroom-decoration 'Today, (I was) doing classroom decoration all day long.'

Noteworthily, the Theme object NP can only be matters, affairs, tasks or works that the Agent subject is engaged in.

Besides, the NP object of the PR-V YONG cannot be an associative object (co-Agent). In other words, PR-V YONG does not depict a reciprocal event. As shown in (14), 你遇見他 ni yujian ta 'you meet him' can be semantically paraphrased into 他遇見你 ta yujian ni ('he meets you'). Both 你 ni 'you' and 他 ta 'he' are conceptually equal Agents in the reciprocal event. They are different in that 他 ta is syntactically downgraded as a more patient-like object, while 你 ni retains its more Agent-like, syntactic subject status.

(14) 我*用/遇見他了。
wo *yong/yujian ta le
I YONG meet he PF
'I met him.'

Moreover, this object NP cannot be a cognate object. In other words, the object NP cannot be an abstract product, activity or mental event metaphorically endowed with the properties of a physically-created patient (cf. Givon, 1993). Consider the following examples:

- (15) a. 他正在*用/唱歌。

 ta zheng zai *yong/chang ge
 he right PRG YONG/sing song
 'He is doing/singing a song.'
- b. 他正在*用/跳舞。

 ta zheng zai *yong/tiao wu

 he right PRG YONG/dance(V) dance(N)

 'He is doing/dancing a dance.'
- c. 他正在*用/上課。

 ta zheng zai *yong/shang ke

 he right PRG YONG/give lecture

 'He is doing/giving a lecture.'

In (15), the NP object 歌 ge 'song', 舞 wu 'dance' and 課 ke 'lecture' are actually activities which are metaphorically viewed as created products of the actions 唱 chang 'to sing' and 跳 tiao 'to dance' and 上 shang 'to give/to lecture' respectively. Thus, according to the definition of Givon (1993), they are cognate objects.

Noteworthily, the object NP must be a concrete entity and cannot be something abstract. A comparison between 搞 *GAO* and 用 *YONG* would help to illustrate this. Consider the following example:

(16) a. 他不能*用/搞政治 [Sinica Corpus]

ta bu neng *yong/gao zhengzhi

he not can YONG/GAO politics

'He cannot go into politics.'

b. 人人都覺得你*用/搞統一 [Sinica Corpus] renren dou juede ni *yong/gao tongyi everyone all feel you YONG/GAO unification 'Everyone feels that you push unification.'

搞 *GAO* is another commonly used PR-V in Mandarin Chinese. It can take an abstract NP (e.g. 政治 *zhengzhi* 'politics' in (16a), and 統一 *tongyi* 'unification' in (16b)) as its object. On the contrary, *YONG* cannot. Typically, an "abstract" entity cannot be individualized and identified. Namely, it cannot be plurally counted with Mandarin classifiers⁵. Therefore, patterns like *兩個政治 *liangge zhengzhi 'two-CL politics' or *三個統一 *sange tongyi 'three-CL unification' are not allowed in Mandarin Chinese.

Likewise, semantically, Mandarin deverbal nouns depicting activities (e.g. 搬運 banyun 'moving', 製造 zhizao 'producing' etc.) are typically not viewed as concrete entities. Hence, syntactically, they cannot be plurally counted with classifiers (e.g. *兩個/* 三片/*四杯搬運 *liangge/*sanpian/*sibei banyun 'two-CL/three pieces of/four cups of moving', *兩個/*三條/*四堆製造 liangge/santiao/sidui zhizao 'two-CL/three strings of/four piles of producing' etc.). Consequently, they cannot be used as the object NP of PR-V YONG (e.g. *用製造/搬運 *yong zhizao/banyun 'do producing/moving'). Nevertheless, certain activity nouns may be viewed as concrete entities (e.g. 設定 sheding 'setting', 核銷 hexiao 'budget cancelling' etc.). They thus can be plurally counted with classifiers (e.g. 雨項/三條設定 liangxiang/santiao sheding 'two items of/three articles of setting'; 兩份/四件核銷 liangfen/sijian hexiao two-portions of/four cases of budget cancellation cf. Google Search). As a result, they can be the object NP of PR-V YONG, as illustrated in the following example:

⁵ The term "classifier" here excludes the type of "verbal classifier" (e.g. 次/回/趟 *ci/hui/tang* 'time'), since verbal classifiers are essentially used for counting frequency of events, not for entity referring. They thus are naturally adequate to be construed with verbs. Besides, certain abstract entities may be metaphorically viewed as countable entities. They thus can be individualized and singularly counted with classifiers. However, these abstract entities can never be counted plurally with classifiers, as in the example —/*雨片真心 *yi/*liangpian zhenxin* 'one/two pieces of sincere' and —/*三番好意 *yi/*sanfan haoyi* 'one/three times of goodwill' etc..

- (17) a. 今天剛牽網路一整個下午都在用設定 [PTT, 2012/8/5] jintian gang qian wanglu yizhengge xiawu dou zai yong sheding today just install internet whole afternoon all PRG YONG set 'The internet was just installed today. (I) did the setting of the internet all the afternoon.'
 - b. 前幾天呀 都在用核銷 [Yam Blog, 2012/8/5] qian ji tian ya dou zai yong hexiao before some day UFP all PRG YONG budget-cancel 'I was busy doing budget cancellation a few days before.'

To summarize the findings above, the syntactic and semantic properties of PR-V *YONG* can be characterized as following:

- PR-V YONG does not depict events of STATE situation type.
- PR-V *YONG* must code events of both transitive and physical type.
- PR-V YONG cannot be paraphrased as verbs of the following types:
 - 1) perception-cognition-utterance verbs
 - 2) emotion verbs
 - 3) copula verbs
 - 4) verbs of possession
 - 5) verbs of possessional transfer
- The action coded by pro-V *YONG* must be Agent-control.
- PR-V YONG does not allow verbal causative/inchoative alternation.
- The object of PR-V *YONG* could be a Patient NP, a Theme NP, or an Incremental Theme NP.
- The object NP of PR-V *YONG* must be a concrete entity. Thus, deverbal nouns (activity nouns) are typically not preferred as *YONG*'s object.
- The object NP of the PR-V *YONG* cannot be an associative object (co-Agent). Namely, the PR-V *YONG* does not depict a reciprocal event.
- The object NP of the PR-V *YONG* cannot be a cognate object.

As demonstrated above, the actions denoted by PR-V YONG may: 1) enforce an intended influence or effect on its object NP, 2) cause change of state to the object NP, or 3) create the object NP. Namely, the Agent subject affects the object NP. Therefore, PCU, emotion, copula and possessional verbs cannot be paraphrased as PR-V YONG since they basically do not affect their object. Similarly, only concrete entities NP can be the object of PR-V YONG because abstract entities cannot be the target affected by the Agent subject. Thus, associative, cognate objects and deverbal nouns cannot be the object NP of PR-V YONG since they are not the one undertaking the effect or influence caused by the Agent subject.

Based on the findings demonstrated above, the theory-based analyses to the lexical semantics of PR-V *YONG* will be presented in the following sections.

WILLIAM TO THE REAL PROPERTY.

3.2 The Frame-based Analysis

Based on the observation of its syntactic and semantic properties, it can be indicated that *YONG* here functions as a process-referring verb in the sense that it "denote a manner, rather than naming a specific activity" (Liu, 2005). As a superordinate process-referring verb, *YONG* is "used to 'set a frame' for various activities to take place" (Liu, 2005). Nevertheless, as a "frame-setting" verb, *YONG* is unique in that its associated frame is "lexically inferred rather than syntactically realized with an array of arguments ('frame elements')" (Liu, 2005). Adopting Frame Semantics in the sense of Liu (2002, 2005), the semantic frame of PR-V *YONG* may be characterized with the following properties:

- Eventive: The process depicted by PR-V *YONG* must be of EVENT situation type and can never be of STATE type (cf. Smith, 1991).
- **Transitive**: The events coded by PR-V *YONG* must be transitive.
- **Physical**: The events coded by PR-V *YONG* must be physical.
- **Agent-control**: The activity has to be initiated by the Agent subject and under the Agent's control.
- **Affected**: By performing a physical transitive action, the Agent enforces the intended effect, influence on the object NP which is bound to be affected.

In the sense of parameters of transitivity proposed by Hopper and Thompson (1980), PR-V *YONG* focuses specially on the two associated, co-varied parameters: KINESIS and AFFECTEDNESS OF O. To incorporate and associate the transitivity theory and Frame Semantics, the two parameters, KINESIS and AFFECTEDNESS OF O, may be realized as two highlighted frame components, Physical Activity and Affected, respectively. Thus, the background of the events depicted by PR-V *YONG* can be represented with the following image schema:

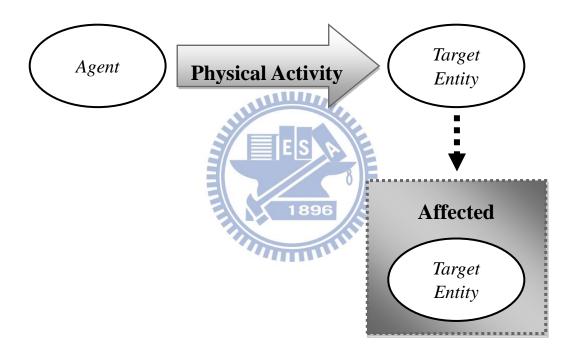


Fig. 2 The Image Schema of PR-V YONG

Furthermore, with the conceptual image schema, the meaning of PR-V *YONG* thus can be defined as the following:

By performing a PHYSICAL ACTIVITY (p), the AGENT (x) enforces effect or influence on the TARGET ENTITY (y) which is bound to be AFFECTED (q).

By profiling the core participants (i.e. the Agent and the Target Entity) and the crucial event features (i.e. the Physical Activity and the Target State), the lexical semantics of PR-V *YONG* can thus be obtained and concisely defined.

3.3 The Construction-based Analysis

The meanings of Mandarin process-referring verbs are contextually dependent. The actual event fulfilled is underspecified and the interpretation of the PR-V relies on its associated patterns in which it is used. Take the [YONG + NP] pattern for example, as shown previously, the contextual interpretation of YONG (e.g. 用早餐 yong zaocan 'prepare/cook breakfast', 用頭髮 yong toufa 'eut/dye/perm hair') is not strictly predictable from its internal components. The interpretation of yong zaocan and yong toufa is not merely the sum of the typical meanings coded by the internal components of this pattern. The pattern renders its own meaning to the interpretation of the whole expression. From the perspective of Construction Grammar, the [YONG + NP] pattern surely can be viewed as a form-meaning pairing, namely, a construction. Moreover, since PR-V YONG essentially codes transitive events and the "ellipsed" eventive information of the predicate is mainly supplied by the complement NP, to effectively identify the lexical semantics of YONG, it is profitable to explore PR-V YONG in the prototypical transitive pattern, the verb-object (VO) structure. Therefore, adopting Construction Grammar, the current study will focus on the partially-filled [YONG + NP] construction for discussion.

Based on the previous observation in the syntactic and semantic features of PR-V YONG, the [YONG + NP] construction can be defined as following:

(18) [YONG + NP] construction

- <u>Form</u>: [*YONG* + Patient/Incremental Theme/Theme NP]
- Meaning: By performing a PHYSICAL ACTIVITY (p), the AGENT (x) enforces effect or influence on the TARGET ENTITY (y) which is bound to be AFFECTED (q).
- Specification on NP slot: concrete entity NPs [- associative objects, cognate objects, activity nouns (deverbal nouns)]

Another advantage of adopting constructional approach is to effectively respond to the question: why PR-V *YONG* can be used to denote certain types of mental activities in certain context?

According to Hopper and Thompson (1980), the degree of transitivity in grammar and discourse can be evaluated in terms of ten associated, co-varied parameters. Among the ten parameters, KINESIS and AFFECTEDNESS OF O are of the most importance to lexical semantics of *YONG*, since *YONG* essentially implies the Agent subject's physical activity and the expected effect or influence on the object NP. While KINESIS is highly associated with physicality, AFFECTEDNESS OF O is more concerning the intended effect or influence on the object NP. The two parameters, KINESIS and AFFECTEDNESS OF O, and their realization in degree of transitivity in grammar and discourse are illustrated in the following table:

	High transitivity	Low transitivity	
KINESIS	action	non-action (state)	
	e.g. I hugged Sally.	e.g. I loved Sally.	
AFFECTEDNESS OF O	O totally affected	O not or partially affected	
	e.g. I drank up the milk.	e.g. I drank some of the milk	

Tab. 2 Realization of transitivity parameters KINESIS and AFFECTEDNESS of O in grammar and discourse (adapted from Hopper and Thompson, 1980)

Generally speaking, PR-V YONG does not depict mental activities since mental activities are essentially low in transitivity in the sense of Hopper and Thompson (1980). In other words, they are low in the two transitive parameters: KINESIS and AFFECTEDNESS OF O. Nevertheless, a construction coerces its own meaning to its internal components and renders the contextual interpretation to the whole expression. By constructional meaning coercion, these mental activities may be endowed with higher degree of transitivity. They thus can be depicted by PR-V YONG in certain contexts. In other words, the strength of KINESIS or AFFECTEDNESS OF O of these mental activities may be promoted. They thus fit in with the requirement for being depicted by YONG (i.e. physicality of the activity and enforcement of Agent's effect on the object NP). For instance, emotion verbs 頃 fan 'bother' and 輔 xia 'frighten' are basically used to depict mental activities. They thus can not be paraphrased by PR-V YONG. Consider the following examples:

(19) BA construction

a. 他*用/嚇了我。

ta *yong/xiale wo

he YONG/frighten-PF I

'He did/frightened me.'

1896

他把我用/嚇哭了。

ta ba wo yong/xia ku le

he Disp. I YONG/frighten cry PF

'He did/frightened me till I cried.'

(20) DE complement

- a. 他一直在*用/煩我。

 ta yizhi zai *yong/fan wo

 he always PRG YONG/bother I

 'He always does/bothers me.'
- b. 他用/煩得我快瘋了。

 ta yong/fan de wo kuai fengle

 he YONG/bother DE I almost crazy-PF

 'His annoyance is getting me crazy.'
- (21) TOEFL 把我用得很焦慮 [Wretch Blog, 2012/5/13]

 TOEFL ba wo yong de hen jiaolu

 TOEFL Disp. I YONG DE very anxious

 'TOEFL is driving me anxious.'

In (19-20), it is the BA construction and DE complement that coerced the resultative state (or action) (i.e. \mathbb{R} ku 'cry' in (19b) and \mathbf{R} feng 'crazy' in (20b)) on the object NP. Therefore, the strength of affectedness on the object NP is promoted, and then the mental activities coded by motion verbs xia and fan thus can be depicted by PR-V YONG. In (21), though TOEFL is not a volitional Agent taking certain physical activity to cause the object to an anxious resultative state, by constructional coercion from BA construction and DE complement, the affectedness of the object is maximally promoted and the whole expression is metaphorically endowed with volitionality of the subject and kinesis of the process. Thus, PR-V YONG can be used to depict such a process.

In sum, in the previous section, the event types that can be depicted by PR-V YONG, has been elaborately discussed. It is figured out that transitivity (i.e. KINESIS and AFFECTEDNESS OF O in the sense of Hopper and Thompson (1980)) is of the most importance to PR-V YONG. Nevertheless, as noted in Hopper and Thompson (1980), degree of transitivity in discourse varies from context to context. The degree of transitivity is not only relevant to lexical semantics of the verb itself but also relevant to the surrounding context (i.e. the construction) where this verb is used. As a result, only if the factor of constructional coercion is taken into consideration, the question of whether a mental activity can be depicted by PR-V YONG or not can be adequately accounted for.

3.4 The Qualia Structure Analysis

As a superordinate PR-V, YONG does not predicate a specific event but set a frame for various verbs to take place in. Then, one question would be raised: How and by what mechanism can these "ellipsed" events "reappear" for the appropriate reading? In view of

this, Qualia Struture provides a compositional means for meaning coercion based on the characterization of the Qualia roles of the verb's complement. According to Pustejovsky (1995), the four essential roles of a word are listed in the following:

- CONSTITUTIVE: the relation between an object and its constituents, or proper parts.
- FORMAL: factors which distinguish the object within a larger domain.
- TELIC: purpose and function of the object.
- AGENTIVE: factors involved in the origin or "bring about" of an object.

In the [YONG + NP] construction, the Qualia role of the object NP evokes the appropriate reading of YONG in context. Generally speaking, object NPs of different semantic roles would prefer to profile different Qualia roles, and thus different readings of YONG can be obtained. In the current study, it is found that Patient object NPs tend to profile the Telic role, and Incremental Theme NPs tend to profile the Agentive role. Consider the following examples:

- (22) Patient Q-role: Telic
 - a. 有人去過 Mod's hair 用頭髮過口??? [Google, 2012/10/2] you ren quguo Mod's hair yong toufa guo ma 'Has anyone ever been to Mod's hair Salon to cut/dye/perm hair?' **頭髮 toufa** 'hair' [Telic = to beautify]
 - b. 房東終於叫人來用冷氣为 [Yahoo Blog, 2011/11/5] fangdong zhongyu jiao ren lai yong lengqi le 'At last the landlord called someone to fix the air conditioner.' 冷氣 lengqi 'air conditioner' [Telic = to fix]

(23) Incremental Theme – Q-role: Agentive

- a. 喂我肚子餓了,幫我用早餐 [Google, 2012/10/2] wei wo duzi ele bang wo yong zaocan 'Hey! I am hungry. Cook breakfast for me!' **早餐 zaocan** 'breakfast' [Agentive = to cook]
- b. 最近很忙...一回家就要忙著用報告 [Google, 2012/12/24] zuijin hen mang ... yi hui jia jiu yao mangzhe yong baogao 'I'm very busy recently. Once I come home, I will have to write my paper busily.' 報告 baogao 'paper' [Agentive = to write]

According to Pustejovsky (1995), the Telic role refers to the "purpose that an agent has in performing an act" and the "built-in function or aim which specifies certain activities". In (22), the purpose of 用頭髮 yong toufa and 用冷氣 yong lenqi are [to beautify hair] and [to fix the air conditioner] respectively. Thus, it is the profiled Telic role of toufa 'hair' and lengqi 'air conditioner' that evokes the readings 'to cut/dye/perm' and 'to fix' respectively. In (23), the activities 用早餐 yong zaocan and 用報告 yong baogao are to "bring about" 早餐 zaocan 'breakfast' and 報告 baogao 'paper' by means of cooking and writing respectively. Thus, it is the profiled Agentive role that activates the readings 'to cook breakfast' and 'to write paper' for yong zaocan and yong baogao respectively.

Another advantage of adopting Qualia Structure approach is that it can be used to solve the potential ambiguity in the interpretation of certain [YONG + NP] patterns. Consider the following example:

- (24) 媽咪用了一碗麵給寶貝吃 [Yahoo Blog, 2012/9/12] mami yongle yiwan mian gei baobei chi mommy YONG-PF one-CL noodle give baby eat 'Mommy cooked/served a bowl of noodle for the baby to eat.'
 - a. **mian** 'noodle' <u>Incremental Theme</u> [Agentive = to cook]
 - b. **麵 mian** 'noodle' <u>Patient</u> [Telic = to serve]

(25) 他最近在忙著用他的書。

ta zuijin zai mangzhe yong ta de shu he recently PRG busy-SI YONG he RP book 'He is busy writing/packaging his book recently.'

- a. *** shu** 'book' <u>Incremental Theme</u> [Agentive = to write]
- b. **書 shu** 'book' Patient [Telic = to package]

In (24), 用了一碗麵 yongle yiwan mian may have two readings: 煮了一碗麵 zhule yiwan mian 'cook a bowl of noodle' or 端了一碗麵 duanle yiwan mian 'serve a bowl of noodle'. These two readings of the same expression are facilitated by two different Qualia roles of the object NP (i.e. Agentive role for (a) 'cook' reading and Telic role for (b) 'serve' reading). Similarly, in (25), the two interpretations of 用他的書 yong ta de shu, namely, 寫他的書 xie ta de shu 'write his book' and 收他的書 shou ta de shu 'package his book', are evokes by two different roles of the object NP respectively (i.e. Agentive role for (a) 'write' reading and Telic role for (b) 'package' reading). The examples above indicate that the ambiguous interpretations of YONG for the same expression are evoked by different profiled Qualia roles of the object NP. Consequently, Qualia Structure helps to effectively differentiate and account for the possible ambiguous readings of one expression in a systematic way.

In sum, Qualia Structure is useful to account for contextual interpretations of *YONG* by semantic coercion of the complement NP's profiled Qualia role. The potential ambiguity of *YONG* in the [*YONG* + NP] construction can also be differentiated and accounted for adequately. By incorporating Construction Grammar and Qualia Structure, the actual event encoded by PR-V *YONG* in context thus can be obtained through constructional inference and meaning coercion from Qualia role of the complement object NP.

4.5 Summary

Adopting Frame Semantics, Construction Grammar and Qualia Structure, along with elaboration of the syntactic constraints and the semantic properties of PR-V *YONG*, the current chapter attempts to provide a theoretical analysis on the verbal semantics of PR-V *YONG*. PR-V *YONG* typically depicts transitive and physical actions. In this action, the Agent subject enforces intended effect or influence on the object NP.

As a "frame-setting" verb, rather than denoting a specific activity, YONG evokes a frame for various verbs to take place in. The semantic frame set by YONG can be characterized by five meaning components: Eventive, Transitive, Physical, Agent-control and Affected. With the highlighted frame components, Physical Activity and Affected, PR-V YONG can be defined with an image schema representing its event structure. In the current study, since the "ellipsed" eventive information of the predication is mainly supplied by its complement NP, to effectively identify the lexical semantics of PR-V YONG, the partially-filled pattern, [YONG + NP] construction, is focused for the discussion. Besides, the constructional approach also provides a theory-based account for the question why certain types of mental activities can be depicted by PR-V YONG. By constructional meaning coercion of BA construction and DE complement, the degree of transitivity of certain emotion verbs can be promoted. Mental activities involving these verbs thus can be depicted by YONG. Finally, Qualia Structure provides a mechanism by which the contextual interpretation of YONG in the [YONG + NP] construction can be obtained via semantic coercion of the profiled Qualia role of the complement NP. Moreover, Qualia Structure is also advantageous in accounting for and differentiating the potential ambiguity of certain [YONG + NP] patterns. In sum, by incorporating Frame Semantics, Construction Grammar and Qualia Structure, lexical semantics of PR-V YONG can be adequately accounted for and presented effectively in a systematic way.

Lexical Semantics of Pro-V YONG in TM

In addition to the process-referring use, *YONG* in Taiwan Mandarin also has the verbal anaphora function. In this chapter, lexical semantics of pro-V *YONG* will be discussed with elaboration of its syntactic constraints and semantic properties.

4.1 Findings

As mentioned previously, pro-V YONG is used to substitute an antecedent VP. Therefore, it behaves more like an auxiliary than a verb. The aspectual marker test shows that syntactically, pro-V YONG is less verb-like, since it cannot be construed with the stative imperfect marker $\not\equiv zhe$, as shown in the following:

- (1) a. A: 你整理房間了嗎?
 - A: ni zhengli fangjian le ma
 - A: you clean-up room PF QM
 - 'Did you clean up the room?'
 - b. A: 你修理電腦過嗎?
 - A: ni xiuli diannao guo ma
 - A: you fix computer EPF QM
 - 'Had you ever fixed a computer?'
 - c. A: 誰在煮晚餐?
 - A: shei zai zhu wancan
 - A: who PRG cook dinner 'Who is cooking dinner?'
 - d. A: 是誰敲著門?
 - A: shi shei qiaozhe men
 - A: be who knock-SI door
 - 'Who is knocking on the door?'

- B: 我用了。
- B: wo yong**le**
 - B: I YONG-PF
 - 'I did it.'
- B: 我用過。
- B: wo yong**guo**
- B: I YONG-EPF
 - 'I had ever done it.'
- B: 他在用。
- B: ta zai yong
- B: he **PRG** YONG
 - 'He is doing it.'
- B: *他用著。
- B: *ta yong**zhe**
- B: he YONG-**SI**
 - 'He does it.'

Pro-V *YONG* is similar to PR-V *YONG* in that they share lots of semantic properties. Since pro-V *YONG* is used to substitute an antecedent VP, then, one question may be raised: what kind of VP can be substituted by pro-V *YONG*? This question can be tackled from two respects: the verbal event types as in (2-9), and the object NP types of the VP as in (11-14). First, from the perspective of verbal event types, since VPs are headed by verbs and verbs reports events, this question can be refined as what kind of events can be represented by pro-V *YONG*? Generally speaking, *YONG* depicts dynamic, active actions. *YONG* does not code processes of STATE situation type. Hence, *YONG* can not be modified by degree adverbs. The pattern *[有點/很/+分/非常用]*[youdian/hen/shifen/feichang yong] 'a little/very *YONG*' is thus not allowed. This further implies that verbs coding mental activities are ruled out. The most important feature of pro-V *YONG* is that it basically depicts a both transitive and physical event, as illustrated in the following examples:

A. transitive physical actions

1896

(2) a. A:誰可以幫我搬桌子?

B:我來用。

A: shei keyi bang wo **ban** zhuozi B: wo lai yong

B. Wo tat young

A: who can help I **move** the table

B: I Purp. YONG

'Who can move the table for me?'

'I'll do it/I'll move the table for you.'

b. A:今天誰要煮晚餐?

B:我來用。

A: jintian shei yao zhu wancan

B: wo lai yong

A: today who will **cook** dinner

B: I Purp. YONG

'Who will cook dinner today?'

'I'll do/cook it.'

B. intransitive physical actions

(3) a. A:誰在偷笑?

B: *他用的。

A: shei zai touxiao

B: *ta yong de

A: who PRG titter

B: he YONG RP

'Who is tittering?'

'He did it/He tittered.'

b. A:誰在走廊上奔跑?

A: shei zai zoulangshang benpao

A: Who on passageway-top **run**

'Who is running on the passageway?'

B: *他用的。

B: *ta yong de

B: he YONG RP

'He did it/He ran on the passageway.'

C. transitive non-physical activities

(4) PCU-verbs

verbs of perception

a. A:你聽過這個故事嗎?

A: ni **ting**guo zhege gushi ma

A: you **hear**-EPF this-CL story QM

'Have you ever heard about this story?'

B: *我用過。

B: *wo yongguo

B: I YONG-EPF

'I have done/heard about it.'

b. A:誰發現了新大陸?

A: shei faxianle xindalu

A: who **discover**-PF the-New-World

'Who discovered the New World?'

B: *哥倫布用的。

B: *gelunbu yong de

B: Columbus YONG RP

'Columbus did/discovered it.'

verbs of cognition

c. A:你相信他嗎?

A: ni xiangxin ta ma

A: you believe he QM

'Do you believe him?'

B: *不,我不用。

B: *bu, wo bu yong

B: no, I not YONG

'No, I do not do it/I do not believe him.'

d. A:你知道畢式定理嗎?

A: ni zhidao bishidingli ma

A: you **know** Pythagorean-Theorem QM

'Do you know Pythagorean Theorem?'

B: *不, 我不用。

B: *bu, wo bu yong

B: no, I not YONG

'No, I do not do it/I do not know.'

verbs of utterance

e. A:你可以**告訴**我嗎?

A: ni keyi **gaosu** wo ma

A: you can tell I QM

'Can you tell me?'

B: *我不想用。

B: *wo bu xiang yong

B: I not want YONG

'I don't want do it/I don't want to tell you'

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f. A:請你解釋這件事。

A: qing ni **jieshi** zhejianshi

A: please you **explain** this-CL-matter

'Please explain this matter.'

B: *我不想用。

B: *wo bu xiang yong

B: I not want YONG

'I don't want to do it/

I don't want to explain.'

(5) verbs of emotion

a. A:你愛過我嗎?

A: ni aiguo wo ma

A: you love-EPF I QM

'Have you ever loved me?'

B: *我用過。

B: *wo yongguo

B: I YONG-EPF

'I had ever done it/I had ever loved you.'

b. A:你羡慕他嗎?

A: ni **xianmu** ta ma

A: you envy he QM

'Do you envy him?'

B: *不,我不用。

B: *bu, wo bu yong

B: no, I not YONG

'No, I do not do it/I do not envy him.'

(6) copula verbs

a. A:我也可以當/變成大明星嗎?

A: wo ye keyi dang/biancheng

damingxing ma

A: I also can **be/become** super-star QM

'Can I be/become a super star?'

B: *不, 你不可以用。

B: *bu, ni bu keyi yong

B: no, you not can YONG

'No, you cannot do it/

No, you cannot be/become a super star.'

b. A:你可以擔任主席嗎?

A: ni keyi danren zhuxi ma

A: you can serve-as chairperson

'Can you serve as the chairperson?'

B: *我可以用。

B: *wo keyi yong

B: I can YONG

'I can do it/I can serve as the chairperson.'

(7) verbs of possession

A:你有這本書嗎?

A: ni you zhebenshu ma

A: you have this-CL-book QM

'Do you have this book?'

B: *我沒用。

B: *wo mei yong

B: I not YONG

'I do not do/I do not have this book.'

Further more, the actions coded by pro-V *YONG* must be initiated by the Agent subject. Activities which cannot be initiated by the Agent subject cannot be represented by *YONG*. As shown in the following example, since 中樂透 *zhong letou* 'win the lottery' and 得癌症 *de yanzheng* 'get cancer' are essentially uncontrollable activities, they thus cannot be expressed by *YONG*.

(8) a. A:誰中了樂透?

B: *他用了。

A: shei zhongle letou

B: *ta yongle

A: who **win-**PF lottery

B: he YONG PF

'Who won the lottery?'

'He did it/He won the lottery.'

b. A:誰得了癌症?

B: *他用了。

A: shei dele yanzheng

B: *ta yongle

A: who get-PF cancer

B: he YONG PF

'Who got cancer?'

'He did it/He got cancer.'

As demonstrated previously, pro-V YONG is similar to PR-V YONG in the event types it depicts. They both depict transitive, physical and Agent-control events. However, they are different in that PR-V YONG adds stricter constraints on the types of the events it describes. For instance, PR-V YONG cannot be used to represent events of possessional transfer (e.g. † mai 'sell', 愉 tou 'steal', 惜 jie 'borrow'), but pro-V YONG can, as shown in the following examples:

(9) a. pro-V YONG

我最近要賣房子,就請了一個房仲幫我用。

wo zuijin yao mai fangzi, jiu qingle yige fangzhong bang wo yong

I recently want sell house, CEM hire-PF one-CL property-agency help I YONG

'I want to sell my house recently, so I hired a property agency to do it/sell my house for me.'

b. pro-V YONG

我的書被偷了,不知道是誰用的。

wo de shu bei toule, bu zhidao shi shei yong de

I RP book PAS steal-PF, not know be who YONG RP

'My book is stolen. (I do) not know who did it/stole my book.'

Second, from the perspective of the object NP types in the substituted VP, it could be a Patient NP, a Theme NP, or an Incremental Theme NP, as illustrated in the following:

(10) Patient object NP

a. A:誰可以幫我剪頭髮?

A: shei keyi bang wo jian toufa

A: who can help I cut hair

'Who can cut my hair for me?

B:我來用。

B: wo lai yong

B: I Purp. YONG

'I will do it/I will cut hair for you.'

b. A:誰在敲門?

A: shei zai qiao men

A: who PRG knock door

'Who is knocking on the door?'

B:他用的。

B: ta yong de

B: he YONG PR

'He did it/He knocked on the door.'

(11) Incremental Theme object NP

a. A:誰可以幫我繼毛衣?

A: shei keyi bang wo zhi maoyi

A: who can help I knit sweater

'Who can knit a sweater for me?'

B:我來用。

B: wo lai yong

B: I Purp. YONG

'I will do it/I will knit a sweater for you.'

b. A:誰烤了這些**餅乾**?

A: shei kaole zhexie binggan

A: who bake these cookie

'Who baked these cookies?'

B:他用的。

B: ta yong de

B: he YONG PR

'He did it/He baked these cookies.'

(12) Theme object NP

a. A:誰可以幫我數鈔票?

A: shei keyi bang wo shu chaopiao

A: who can help I count bill

'Who can count the bills for me?'

B:我來用。

B: wo lai yong

B: I Purp. YONG

'I will do it/I will count the bills for you.'

b. A:誰偷了我的書?

A: shei toule wo de shu

A: who steal-PF I-RP-book

'Who stole my book?'

B:他用的。

B: ta yong de

B: he YONG PR

'He did it/He stole my book.'

Besides, the object NP in the substituted VP cannot be an associative object (co-Agent). Namely, the pro-V *YONG* cannot depict a reciprocal event, as shown in (13). Moreover, this object NP cannot be a cognate object, as in (14).

(13) A:你遇見他了嗎?

A: ni yujian ta le ma

A: you meet he PF QM

'Did you meet him?'

B: *我沒用。

B: *wo mei yong

B: I not YONG

'I did not do it/I did not meet him.'

(14) A:誰在唱歌/跳舞/上課?

A: shei zai chang ge/tiao wu/shang ke

A: who PRG sing song/dance(V) dance(N)/give lecture

'Who is singing a song/dancing a dance/giving a lecture?'

B: *他用的。

B: *ta yong de

B: he YONG RP

'He is doing it = singing a song/dancing a dance/giving a lecture.'

4.2 Analysis

To summarize the findings above, the syntactic and semantic properties of pro-V *YONG* can be characterized as following:

- Pro-V *YONG* does not depict events of STATE situation type.
- The event coded in the VP substituted by *YONG* must be both transitive and physical.
- Pro-V *YONG* does not substitute VPs headed by:
 - 1) perception-cognition-utterance verbs
 - 2) emotion verbs
 - 3) copula verbs
 - 4) verbs of possesion
- The action coded in the substituted VP must be Agent-control.
- The object in the substituted VP could be a Patient NP, a Theme NP, or an Incremental Theme NP.
- The object NP in the substituted VP cannot be an associative object (co-Agent). Namely, the pro-V *YONG* does not depict a reciprocal event.
- The object NP in the substituted VP cannot be a cognate object.

As demonstrated in the observation above, the action coded by pro-V YONG seems to imply the Agent subject's intended affectedness on the object NP. That is to say, the head verb of the VP substituted by YONG may: 1) enforce an influence or effect on its object NP, 2) cause change of state to the object NP, or 3) create the object NP. Therefore, PCU, emotion, copula and possessional verbs cannot be the head verb of the substituted VP since they basically do not directly affects their object. Similarly, associative and cognate objects cannot be the object NP in the substituted VP due to the fact that they are not the one undertaking the effect or influence caused by the Agent subject.

As forementioned, verbs of mental activities cannot be the head verb of the substituted VP. However, by constructional meaning coercion, VPs predicated by these verbs may be endowed with higher degree of transitivity (cf. Hopper and Thompson, 1980) and thus can be substituted by *YONG*. Namely, the strength of KINESIS or AFFECTEDNESS OF O of these VPs may be promoted, these VPs thus fit in with the requirement for being substituted by *YONG*. For instance, VPs predicated by emotion verbs *₹ re* 'rouse' and *⋠ xia* 'frighten' cannot be substituted by *YONG*, as shown in the following:

(15) A:是誰惹/嚇了小明?

A: shi shei re/xiale Xiaoming

A: be who rouse/frighten-PF Xiaoming 'Who roused/frightened Xiaoming?'

B: *他用的

B: *ta yong de

B: he YONG PR

'he did it/roused/frightened Xiaoming.'

Nevertheless, by constructional meaning coercion from the resultative verb compound, *DE* complement and disposal *BA* construction, the strength of AFFECTEDNESS OF O is promoted, and the object NP in the substituted VP is endowed with Agent subject's influence and effect. Therefore, these VPs can be substituted by pro-V *YONG*, as illustrated in the following examples:

(16) a. resultative verb compound

A:是誰惹火了小明?

A: shi shei rehuole Xiaoming

A: be who infuriate-PF Xiaoming

'Who infuriated Xiaoming?'

B:他用的。

B: ta yong de

B: he YONG PR

'He did it/infuriated Xiaoming.'

b. BA construction

A:是誰把小明嚇哭了?

B:他用的。

A: shi shei ba Xiaoming xia ku le

B: ta yong de

A: be who Disp. Xiaoming frighten cry PF

B: he YONG PR

'Who frightened Xiaoming to cry?'

'He did it/frightened Xiaoming to cry.'

c. DE complement

A:是誰嚇得小明魂不守舍?

A: shi shei xia de Xiaoming hunbushoushe

A: be who frighten DE Xiaoming out-of-one's-wit

'Who frightenend Xiaoming out of his wit?'

B:他用的。

B: ta yong de

B: he YONG PR

'He did it/frightened Xiaoming to cry.'

In sum, the event depicted by pro-V *YONG* could be represented with the possible scenario in the following:

By performing a PHSYCAL ACTIVITY (p), the AGENT (x) enforces effect or influence on the TARGET ENTITY (y) which is bound to be AFFECTED (q).

By profiling the core participants (i.e. the Agent and the Target Entity) and the crucial event features (i.e. Physical Activity and Affected), the semantics of the pro-V *YONG* can thus be obtained and concisely defined.

4.3 Summary

In this chapter, the semantic properties of the pro-V YONG are represented with elaboration of its syntactic constraints. It is figured out that pro-V YONG basically depicts events of high degree of transitivity and physicality. In the substituted VP, the Agent subject enforces effect or influence on the object NP. Verbs of mental activity are basically low in transitivity and thus cannot be the head verb of the substituted VP. However, by constructional meaning coercion, VPs predicated by these verbs may be endowed with higher degree of transitivity. They thus can be substituted by pro-V YONG. Finally, the current chapter rendered a tentative definition for pro-V YONG by providing the possible scenario in which the event depicted by YONG may take place.

In chapter 3 and 4, it is shown that PR-V and pro-V *YONG* share lots of properties. They are semantically similar to each other. Then, in the end of this chapter, a number of questions may be raised: what is the relation between them? Since syntactically PR-V *YONG* is a verb and pro-V *YONG* is a verbal pro-form, pro-V *YONG* appears to be more "grammatical" than PR-V *YONG* for its auxiliary-like function. Is pro-V *YONG* derived from PR-V *YONG* by grammaticalization? To deal with these questions, issues concerning the development of these two novel uses of *YONG* in Taiwan Mandarin will be discussed in the next chapter.



Constructinalization of the Novel Use of YONG in TM

In the previous chapters, the lexical semantics of the novel use of *YONG* has been elaborately introduced. Since it is a "novel" use of *YONG*, a number of questions would be raised: Why, how and by what mechanism does this *YONG* come into being in Taiwan Mandarin? Is this novel use a result of grammatical change? If it is, what kind of change it may be? With the constructional approach, this chapter will investigate the probable source, development, as well as the potential mechanism by which the novel use of *YONG* came into being in Taiwan Mandarin.

5.1 PR-V and pro-V YONG in Taiwan Southern Min

The emergence of the novel use of *YONG* in Taiwan Mandarin (TM) is another important issue in the current study. This emerging use of *YONG* may be the result of language contact between Taiwan Mandarin and Taiwan Southern Min. In Taiwan Southern Min (TSM), a variety of Chinese widely spoken in Taiwan, a function of *YONG* similar to the novel use of *YONG* in TM can be found. *YONG* in TSM can be used as a pro-V or a PR-V. The two functions of *YONG* in TSM share similar syntactic constraints and semantic properties with their counterparts in TM, as illustrated in the following examples¹:

* syntactic constraints and semantic properties of PR-V YONG in TSM

¹ Most of the TSM instances here are made-up examples based on the author's competence of TSM. Five informants, aged from 53 to 68, which are native speakers of southern Taiwan dialectal variations of TSM are consulted for these made-up examples. Two instances are cited from Taiwan Southern Min Dictionary of Common Words, which is created by Ministry of Education, Taiwan. Besides, due to regional variation, some speakers of northern Taiwan TSM prefer to use another word **all** tshong instead of **H** iong for PR-V and pro-V use.

- A. PR-V YONG does not depict events of STATE situation type.
- (1) *[有點/真誠/非常用²] *[tsittiama/tsintsiann/huisiong iong] 'a little/very YONG'
- B. PR-V *YONG* must code events of both transitive and physical type.
- (2) transitive physical activity

伊得幫我用頭鬃。
i teh pang gua iong tautsang
he PRG help I YONG hair
'He is cutting/dyeing/crimping hair for me'

(3) intransitive physical actions

伊*用/跳甲足懸。
i *iong/thiau kah tsiok kuan
he YONG/jump DE very high
'He does/jumps very high.'

- (4) transitive non-physical actions
- perception-cognition-utterance verbs
 - a. verbs of perception

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我不*用/相信他个話。

verbs of cognition

我*用/聽過這塊故事。
gua *iong/thiannkue tsite koosu
I YONG/hear-EPF this-CL story
'I had ever done/heard about this story.'

gua m *iong/siongsin i e ue
I not YONG/believe he RP word
'I do not do/believe his words.'

c. verbs of utterance

請你*用/解說原因。

tshiann li *iong/kaisueh guanin
please you YONG/explain reason
'Please do/explain the reason.'

² The examples of Taiwan Southern Min is presented in two transcription systems adopted by Taiwan Southern Min Dictionary of Common Words, which is created by Ministry of Education, Taiwan. The two transcription systems are the Taiwanese Romanization, a commonly used spelling system of Taiwan Southern Min, and Taiwanese Han-character system, a widely used writing system of Taiwan Southern Min in Chinese characters.

- verbs of emotion
- d. 我*用/**愛**臺灣。
 gua *iong/**ai** taiuan
 I YONG/**love** Taiwan
 'I do/love Taiwan.'
- verbs of possession
- f. 我*用/有一枝筆。
 gua *iong/u tsitki pit
 I YONG/have one-CL pen
 'I do/have a pen.'

- copula verbs
- e. 我卜*用/變做大明星。
 gua beh *iong/piantso tuabingtshenn
 I want YONG/become super-star
 'I want to do/become a super star.'

- C. PR-V YONG does not denote actions of possessional transfer
- (5) 你哪會使*用/搶人的物件? [TSM Dictionary of Common Words] li na esai *iong/tshiunn lang e mihkiann you how can YONG/snatch people RP thing 'How can you snatch other people's thing?'

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- D. The action coded by pro-V *YONG* must be Agent-control.
- (6) 這禮拜天氣轉寒,有真濟人*用/著病。 [TSM Dictionary of Common Words] tsit lepai thinnkhi tng kuann, u tsin tse lang *iong/tioh penn this week weather change cold there-be very many people YONG/get disease 'Many people are sick because of the cold weather this week.'
- E. The object of PR-V *YONG* could be a Patient NP, a Theme NP, or an Incremental Theme NP.
- (7) Patient object NP

冰箱害去矣,我卜叫人來用**冰箱**。

pingsiunn hai khi a, gua beh kio lang lai iong pingsiunn

refrigerator out-of-work PF, I want call people Purp. YONG refrigerator

'The refrigerator is not working. I will call someone to fix it.'

(8) Theme object NP

我得用公司个代誌。
gua teh iong kongsi e taitsi
I PRG YONG company RP matter
'I am doing company matters.'

(9) Incremental Theme object NP

阮母得幫我用暗頓。
guan bu teh pang gua iong amtng
my mother PRG help I YONG dinner
'My mother is cooking dinner for me.'

F. The object NP of PR-V *YONG* must be a concrete entity. It cannot be an abstract entity, a deverbal noun (activity noun), an associative object (co-Agent), or a cognate object.

(10) abstract entity

(11) deverbal noun (activity noun)

*伊得用外交/教育。

*i teh iong gua kau/kau iok
he PRG YONG diplomacy/education
'He is doing diplomacy/education.'

*伊得用清洗/製造。

*i teh iong tshing se/tse tso
he PRG YONG washing/produciton
'He is doing washing/production.'

伊得*用/唱歌/跳舞/上課。

(12) associative object (co-Agent)

我有*用/拄著伊。
gua u*iong/tutioh i
I RM YONG/meet he
'I have done/met him.'

(13) cognate object

lecture.'

i teh *iong/tshiunn kua/thiau bu/siong kho
he PRG YONG/sing song/dance(V)
dance(N) /give lecture
'He is doing/singing/dancing/giving a

syntactic constraints and semantic properties of pro-V YONG in TSM

A. Pro-V *YONG* does not depict events of STATE situation type.

(14) *[有點/真誠/非常用] *[tsittiama/tsintsiann/huisiong iong] 'a little/very YONG'

B. The event coded in the VP substituted by YONG must be both transitive and physical.

(15) prototypical transitive physical activity

A:誰會當幫我搬桌仔?

A: siann etang pang gua puann toh-a

A: who can help I move the table

'Who can move the table for me?'

B:我來用。

B: gua lai iong

B: I Purp. YONG

'I'll do it/I'll move it for you.'

(16) intransitive physical actions

A:啥人佇走廊頂得走?

A: siann ti tsaulongting teh tsau

A: who on passageway-top PRG run

'Who is running on the passageway?'

B: *伊用个。

B: *i iong e

B: he YONG RP

'He did it/He ran on the passageway.'

(17) transitive non-physical actions

perception-cognition-utterance verbs

verbs of perception a.

A:你敢聽過這塊故事?

A: li kam thiannkue tsite koosu

A: you QM hear-EPF this-CL story

'Have you ever heard about this story?'

B: *我用過。

B: *gua iongkue

B: I YONG-EPF

'I had done it/heard about it.'

b. verbs of cognition

A:你敢相信伊?

A: li kam siongsin i

A: you QM believe he

'Do you believe him?'

B: *不, 我不用。

B: *m, gua m iong

B: no, I not YONG

'No, I do not do it/believe him.'

verbs of utterance c.

A:請你解說這件代誌。

A: tshiann li kaisueh tsitkiann-taitsi

A: please you **explain** this-CL-matter

'Please explain this matter.'

B: *我無愛用。

B: *gua bo ai iong

B: I not want YONG

'I don't want to do it/explain it.'

• verbs of emotion

d. A:你愛過我無?

A: *li aikue gua bo*A: you **love**-EPF I not

'Have you ever loved me?'

B: *我用過。

B: *gua iongkue

B: I YONG-EPF

'I had done it/I had loved you.'

copula verbs

e. A:我敢會當變做大明星?

A: gua kam etang piantso tuabingtshenn

A: I QM can **become** super-star

'Can I become a super star?'

B: *不, 你袂當用。

B: *m, li betang iong

B: no, you not-can YONG

'No, you cannot do it/

No, you cannot become a super star.'

• verbs of possession

f. A:你有這本冊無?

A: li u tsitpuntseh bo

A: you have this-CL-book not

'Do you have this book?

B: *我無用

B: *gua bo iong

B: I not YONG

I do not do/I do not have this book.

C. Pro-V can substitute verbs of possessional transfer

(18) A:誰**偷提**我的冊?

A: siann thautheh gua e tseh

A: who steal I RP book

'Who stole my book?'

B:伊用的。

B: i iong e

B: he YONG RP

'He did it/He stole your book.'

D. The action coded in the substituted VP must be Agent-control.

(19) A:伊敢有**致著**癌症?

A: i kam u titioh gamtsing

A: he QM RM get cancer

'Did he get cancer?'

B: *伊無用。

B: *i bo iong

B: he not YONG

'He did not do it/He did not get cancer.'

- E. The object in the substituted VP could be a Patient NP, a Theme NP, or an Incremental Theme NP.
- (20) Patient object NP

A: 啥人得挵門? B:伊用个。 B: i iong e

A: who PRG knock **door** B: he YONG RP

'Who is knocking on the door?' 'He does it/He is knocking on the door.'

(21) Incremental Theme object NP

A:下暗誰卜煮**暗頓**?

A: eam siann beh tsu amtng

A: this-evening who want cook dinner

B: 我來用。

B: 我來用。

B: Purp. YONG

'Who will cook dinner this evening?' 'I will do it/I will cook dinner.'

(22) Theme object NP

A:你敢會當幫我揣一本冊? B:好,我來用。

A: li kam etang pang gua **tshue** tsit pun tsheh B: ho, gua lai iong

A: you QM can help I look-for one-CL **book** B: OK I Purp. YONG

'Can you look for a book for me?' OK, I will do it/

F. The object NP in the substituted VP cannot be an associative object (co-Agent) or a cognate object.

I will look for the book for you.'

(23) associative object (co-Agent)

A:你有拄著伊無? B:*我無用。

A: li u tutioh i bo B: *gua bo iong

A: you RM meet **he** not B: I not YONG

'Did you meet him?' 'I did not do it/I did not meet him.'

(24) cognate object

A:誰得唱歌/跳舞/上課?

A: siann teh tshiunn kua/thiau bu/siong kho

A: who PRG sing song/dance(V) dance(N)/give lecture

'Who is singing/dancing/giving a lecture?'

B: *伊用个。

B: *i iong e

B: he YONG RP

'He is doing it = singing a song/dancing a dance/giving a lecture'

In sum, the syntactic constraints and semantic properties of the pro-V and PR-V *YONG* in TM and TSM can be represented in the table below:

	pro-V		PR-V	
syntactic constraints/semantic properties	TM	TSM	TM	TSM
STATE situation type	_	_	_	_
physical actions	+	+	+	+
transitive actions	+	+	+	+
actions of PCU-V	_	_	_	_
actions of copula V	W.	_	_	_
actions of possession V	10-1	_	_	_
actions of possessional transfer V	4	+	_	_
Agent-control	(+ ⁸)	+	+	+
Patient object NP	896+	+	+	+
Theme object NP	+11	+	+	+
Incremental Theme object NP	+	+	+	+
associative object NP	_	_	_	_
cognate object NP	_	_	_	_
abstract entity as object NP			_	_
deverbal noun as object NP			_	_

Tab. 3 syntactic constraints and semantic properties of the pro-V and PR-V YONG in TM and TSM

As demonstrated above, the pro-V and PR-V *YONG* in TSM parallel their counterparts in TM in terms of their syntactic constraints and semantic properties. It is clear that these two usages in TSM got transferred into TM by language contact. As a contact-induced language change, one crucial question would be raised: by what mechanism did this novel use of *YONG* come into being in TM? In the coming sections, tentative hypotheses to account for this issue will be proposed and discussed.

5.2 Contact-induced Grammaticalization

Contact-induced grammaticalization may be a possible mechanism by which the TSM pro-V and PR-V *YONG* got transferred into TM. It is defined in Heine and Kuteva (2003) as following:

Contact-induced grammaticalization is a grammaticalization process that is due to the influence of one language on another. There are two main types of contact-induced grammaticalization depending on whether or not there exists already a model for the process in the model language to be replicated. If no such model exists we will refer to the process as ordinary grammaticalization; if there is a model that is transferred to the replica language we will refer to it as replica grammaticalization.

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According to Heine and Kuteva (2003), in the process of contact-induced grammaticalization, speakers of the target language develop a grammatical category which is equivalent to that of the source language by using material available in their own target language. Applying this model to the issue concerned in the current study, the potential situation may be that the speakers of TM develop the categories which are equivalent to the pro-V *YONG* and PR-V *YONG* in TSM by using the existing function of Instrument main verb *YONG*³ (I-V *YONG*) in TM. If the pro-V and PR-V *YONG* in TM are derived from I-V *YONG* in TM, a crucial question should be answer first: Is this derivation a process of grammaticalization?

To examine whether this derivation is a process of grammaticalization or not, two criteria proposed by Brinton and Traugott (2005) could be profitably utilized: decategorization, and metaphorization and metonymization. First, Hopper (1991) defined decategorization as a process by which forms "lose or neutralize the morphological markers and syntactic privileges characteristic of the full categories Noun and Verb, and...assume

³ The term "Instrument main verb YONG" here refers to the prototypical function of YONG in the following examples: 我們老師在用我們的錢 women laoshi zai yong women de qian 'Our teacher is using our money'.

attributes characteristic of secondary categories such as Adjective, Participle, Preposition, etc.". Following this notion, Brinton and Traugott (2005) further claim that "Decategorization is a defining characteristic of grammaticalization since it [is] the mechanism by which lexical items become functional". Based on this criterion, the degree of grammaticality of the three functions of *YONG*, I-V, pro-V and PR-V, can be identified by examining whether they can be construed with Mandarin verbal aspectual markers. Typically, Mandarin verbs can be affixed with the four aspectual markers ? *Ie* (perfective marker), 過 *guo* (experiential perfective marker), 在 *zai* (progressive marker), and 著 *zhe* (stative imperfective marker) (cf. Smith, 1991). As a main verb, I-V *YONG* can be construed with all the four aspectual markers, as shown in the following examples:

- (25) a. 今天,我用了很多錢。 [Google, 2012/7/20] jintian wo yongle henduo qian today I use-**PF** very-much money 'I use a lot of money today.'
 - b. 我用過不少面膜, [Google, 2012/7/20] wo yong**guo** bushao mianmo
 I use-**EPF** many mask
 "I had used many masks."
 - c. 你還在用免洗筷子嗎? [Google, 2013/6/22] ni hai zai yong mianxikuaizi ma you still **PRG** use disposable-chopsticks 'Are you still using disposable chopsticks?'
 - d. 他們拿著筆記本電腦,用著蘋果手機、 [Google, 2013/3/13] tamen nazhe bijibendiannao, yongzhe pingguo shouji they take-SI laptop use-SI Apple smart-phone 'They takes laptops, uses Apple smart phones.'

As mentioned in chapter 3 and 4, PR-V *YONG* can be affixed with all the four aspectual markers but pro-V *YONG* cannot. Pro-V *YONG* can only be construed with le, guo, zai, but not with zhe. A comparison among I-V, PR-V and pro-V *YONG* indicates that I-V and PR-V *YONG* are equally verb-like in their grammatical status while pro-V *YONG* is less verb-like and thus more "grammatical". Hence, the degree of grammaticality of the three functions of *YONG* would be: pro-V *YONG* >> PR-V \rightleftharpoons I-V. So far, four hypothetical processes of the development of the novel uses of *YONG* in TM can be proposed:

(26) a.
$$I-V > PR-V$$

c.
$$I-V > PR-V > pro-V$$

b.
$$I-V > pro-V$$

d.
$$I-V > pro-V > PR-V$$

As to (26a), considering the equally verb-like grammatical statuses of these two functions of *YONG*, if the PR-V *YONG* is derived from I-V *YONG*, this process will not be a process of grammaticalization. That is to say, this is a contact-induced process, but without further grammaticalization. As for (26b), if the pro-V *YONG* is derived from I-V *YONG*, this derivation will be a process of grammaticalization. However, this process would be unlikely to take place since I-V is not directly related to pro-V *YONG* semantically. According to Brinton and Traugott (2005), grammaticalization involves metaphoric or metonymic semantic change in the process. The output target of grammaticalization is the result of semantic change from the source input. This implies that the input source and the output target in the process of grammaticalization must be associated with semantic extension. From the observation in the data, the semantic linking between I-V *YONG* and pro-V *YONG* is hardly to identify. Thus, due to the lack of semantic association between these two functions of *YONG*, process (26b) would be almost impossible to happen.

Besides, taking semantic relation into consideration, it can be figured out from the data that PR-V *YONG* shares more semantic similarities with pro-V *YONG* than I-V *YONG* does. Thus, process (26c) seems more plausible than process (26b) in that the path _PR-V > pro-V_ is a process based on semantic change and toward the more grammatical direction. However, the process _PR-V > pro-V_ is a process of grammaticalization which had already completed in TSM. Namely, _PR-V > pro-V_ is not an internal development in the system of the target language TM. Therefore, (26c) is not exactly a process of "contact-induced grammaticalization" as defined in the literature. Rather, it is a "contact-induced" constructionalization, without a clear trace of grammaticalization within the target language. Finally, since unidirectionality is widely acknowledged as a crucial property of grammaticalization (cf. Haspelmath, 1999, 2004; Hopper and Traugott, 2003; Heine and Kuteva, 2005 etc.), the possibility of process (26d) could be excluded due to the fact that the path _pro-V > PR-V is essentially a process of "degrammaticalization" (i.e. from more to less grammatical, or from grammatical to lexical), which is then known to be against the general principle of unidirectinality of grammaticalization.

Taking all the hypothetical processes into consideration and examining them with criteria of (contact-induced) grammaticalization, it is clear that the emergence of the novel usage of *YONG* as pro-V and PR-V in TM is contact-induced, but not the result of contact-induced grammaticalization as defined in the literature. Nevertheless, it is also true that these novel functions in TM are transferred from TSM. Then, one question should be further asked: by what mechanism did these novel functions of *YONG* come into being in TM? To answer this question, another possible hypothesis will be proposed in the next section: relexification.

5.3 Relexification

In terms of grammatical convergence, the interlingual identification of the two functions of *YONG* (i.e. pro-V and PR-V *YONG*) in TM and TSM may be viewed as a process of "polysemy copying" (Heine & Kuteva, 2003), "apparent grammaticalization" (Bruyn, 2009), or "relexification" (Lefebvre, 2009), since it is essentially a kind of "relabelling" of an existing form with new functions, leading to a new form-meaning pairing. According to Lefebvre (2009), relexification is a process "assigning a lexical entry of a language L₁ a new label drawn from a language L₂". This process can be presented as the following procedure: Given a lexical entry in L₁ such as (27a), assign this lexical entry a second phonological representation drawn from another language L₂, yielding (27b). The original phonological representation is eventually abandoned. The resulting lexical entry in (27c) thus has the semantic and syntactic properties of the original lexical entry in L₁ and a phonological representation derived from the form in L₂.

(27)

a.

$$\begin{pmatrix}
\text{/phonology/}_{i} \\
\text{[semantic]}_{i} \\
\text{[syntactic]}_{i}
\end{pmatrix}$$

$$\begin{pmatrix}
\text{/phonology/}_{i} \\
\text{[semantic]}_{i} \\
\text{[syntactic]}_{i}
\end{pmatrix}$$

$$\begin{pmatrix}
\text{/phonology/}_{j} \\
\text{[semantic]}_{i} \\
\text{[syntactic]}_{i}
\end{pmatrix}$$

$$\begin{pmatrix}
\text{/phonology/}_{j} \\
\text{[semantic]}_{i} \\
\text{[syntactic]}_{i}
\end{pmatrix}$$

For instance, according to Lefebvre (2009), lots of Haitian words are results of relexification. Haitian is a Caribbean creole language spoken in Haiti, Central America, with French as its superstratum language, and Fongbe, a Gbe language from West Africa, as its most important substratum language among various languages. Words which result from relexification thus have the syntactic and semantic properties from Fongbe, and the phonological form derived from French. Examples from Lefebvre (2009) are listed as following:

	HAITIAN	FRENCH	FONGBE
Noun	dife	(du)feu	myən
	'fire'	'fire'	'fire'
	'brand'		'brand'
Verb	ansasinen	assassiner	hu
	'to murder'	'to murder'	'to murder'
	'to mutilate'		'to mutilate'
	gade	regarder	kan
	'to concern'	'to concern'	'to concern'
		'to look'	

Tab. 4 Haitian words resulting from relexification of French form with Fongbe meaning

Adopting the notion of "relexification" in Lefebvre (1998), Lien (2010) has noted that in the situation of language contact, the lexical entry from the target language may be endowed with the syntactic and semantic properties of the counterpart entry from the source language. The lexical entry from the target language may share partial syntactic and semantic similarities with the entry from the source language. Taking TM as the target language and TSM as the source language, Lien (2010) figured out that by relexification, certain syntactic and semantic properties of one TSM entry can be transferred into and expressed by the TM phonological form. For example, the $\Leftrightarrow GEI$ constructions in TM are endowed with syntactic and semantic properties of KA (\sharp) construction and HOO (\Re) construction in TSM by relexification.

Accordingly, the emergence of pro-V and PR-V *YONG* in TM can be viewed as a result of relexification. By relexification, the syntactic and semantic properties of the two functions of *YONG* in TSM are transferred onto the existing form *yong* of TM. Thus, the TM *YONG* obtains its pro-V and PR-V functions. Applying the model of relexification, the process by which the TSM pro-V and PR-V functions are transferred into TM can be presented as the following schema:

TSM
$$\begin{pmatrix}
/i\bar{o}ng/_{TSM} & & & & \\
[pro-V]_{TSM} & & & & \\
[PR-V]_{TSM} & & & & \\
[PR-V]_{TSM} & & & \\
\end{bmatrix}$$
TM
$$\begin{pmatrix}
/y\hat{o}ng/_{TM} & & \\
[pro-V]_{TSM} & & \\
[PR-V]_{TSM} & & \\
\end{bmatrix}$$

Fig. 3 Image schema of Relexification of pro-V and PR-V YONG from TSM to TM

As shown in this schema, the newly emerging pro-V and PR-V *YONG* in TM are built by copying the TSM pro-V and PR-V *YONG* into TM. Therefore, the current *YONG* of these two functions in TM has the phonological form of TM *YONG* and the syntactic and semantic properties of the corresponding functions of TSM *YONG*. Noteworthily, unlike the cases of the genesis of Caribbean creoles (cf. Lefebvre, 2009), in this process, there is no overt phonological change involved in the alignment of the TSM *YONG* and the TM *YONG*. *YONG* in TM is an existing form and there is no need for phonological adoption in the process of relexification of *YONG*.

5.4 Constructionalization

As demonstrated in the previous sections, the emergence of pro-V and PR-V YONG in TM is a result of contact-induced language change. Language changes, no matter of the grammaticalization or relexification type, are essentially processes of "form-meaning repairing". The interrelation between form and meaning is always reminiscent of Construction Grammar since a "construction" is intrinsically a "form-meaning pairing". Construction Grammar has been widely applied to synchronic syntactic and semantic analysis of language variations. In recent years, lots of linguists have attempted to utilize construction grammar in researches of diachronic language change. They aim to bring the theories of construction grammar, grammaticalization and lexicalization together in a unified theory of constructional change, and hence lead to the so-called Diachronic

Construction Grammar. Researches in this area includes Traugott's (2008) investigation on the grammaticalization of English NP of NP patterns in perspective of Radical Construction Grammar, Fried's (2008) study on the grammaticalization of Participial Adjective in Czech, Trousdale's (2008) on the lexicalization of English possessive construction, and so forth. In this view, "constructional change involves changes either of form (phonology, morphology, syntax) or meaning (semantics, pragmatics, discourse) or both" (Trousdale, 2008) since "change in grammatical organization can be adequately articulated only as a gradual conventionalization of patterns of understanding, in which morphosemantic structure, syntactic function, communicative function, and lexical meaning form an integrated whole." (Fried, 2008).

Based on Diachronic Construction Grammar, Bergs and Diewald (2008) proposed the concept of "constructionalization", which was roughly defined as "the formation of new units (constructions) out of hitherto independent material". Traugott (2011) further illuminated this concept and characterized constructionalization as "reconfiguring of form-meaning pairings". In this perspective, constructionalization can be viewed as form-meaning re-association. In this vein, grammaticalization is considered as grammatical constructionalization, and lexicalization as lexical constructionalization respectively.

Bybee (2003) has characterized grammaticalization as "the creation of new constructions out of a particular instance of an existing construction" (cf. Bybee, 2006). However, she also noticed that "new constructions can arise without hallmark of grammaticization, namely, the creation of a new grammatical morpheme" (Bybee, 2006). For instance, the *What is X doing Y* construction with its specific implication of incongruity and disapproval (e.g. *What are you doing with that knife?* = 'why do you have that knife?') is a significant case of what she termed "new constructions without grammaticization" (Bybee, 2006).

As to the case concerned in the current study, the emergence of pro-V and PR-V *YONG* in TM may be the result of relexification. As illustrated in the preceding section, in this process, an existing form (i.e. *yong* in TM) in the target language is remapped with novel meanings (i.e. the function of pro-V and PR-V) from the source language, and thus a new construction (form-meaning pairings) *YONG* with its novel functions is created. In other words, this process is intrinsically constructionalization. However, no evidence supports that this contact-induced language change involves change in degree of grammaticality toward either direction: neither from lexical to grammatical nor from less to more grammatical. In other words, this process does not involve grammaticalization as defined in the literature. Therefore, in the current study, it is suggested that the emergence of the novel use of *YONG* as a pro-V or PR-V in TM demonstrates a process of constructionalization without grammaticalization. This process can be represented as the following schema:

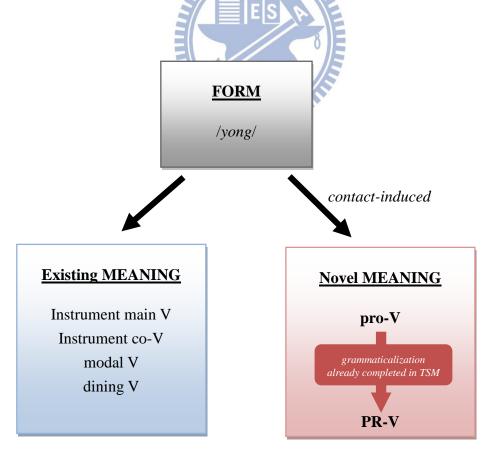


Fig. 4 Schema of Constructionalization of the Novel Uses of YONG in Taiwan Mandarin

5.5 YONG and NONG as near synonyms

Another interesting issues concerns the near synonyms 用 YONG and 弄 NONG in TM. In writing this thesis, some informants of TM, especially those who are from older generations over 50 years old or those who are not familiar to TSM, might think that the novel function of YONG in TM is quite synonymous to another commonly used verb 弄 NONG in Mandarin Chinese — that is, speakers from older generations use NONG instead of YONG. The PR-V and the pro-V YONG do not exist in their lexicon. For these elderly speakers, YONG and NONG seem to be interchangeable in almost all contexts. In other words, they appear to be "absolute synonyms". However, as noted by Lyons (1981), "It is generally recognized that complete synonymy of lexemes is relatively rare in natural languages and that absolute synonymy, as it is here defined, is almost non-existent". The difference between YONG and NONG still can be found in certain context, as shown in the following example:

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(28) 我並不想讓自己又忙又累,*用/弄出一身病, [Google, 2012/5/11] wo bing bu xiang rang ziji you mang you lei, *yong/nongchu yishen bing I completely not want Caus. self also busy also tired YONG/NONG out one-CL disease 'I do not want to let myself become busy and tired, and end up with a body full of sicknesses.'

As indicated by Cruse (1986), "There is no obvious motivation for the existence of absolute synonyms in a language, and one would expect either that one of the items would fall into obsolescence, or that a difference in semantic function would develop". It can be expected

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⁴ According to Lyons (1981), two lexemes can be defined as "absolute synonyms" "if only if they have the same distribution and are completely synonymous in all their meanings and in all their contexts of occurrence". Similarly, Cruse (2011) defines "absolute synonyms" as "...words which are mutually substitutable in all contexts without change of normality That is to say, for two lexical items X and Y, if they are to be recognized as absolute synonyms, in any context in which X is fully normal, Y is, too; in any context in which X is slightly odd, Y is also slightly odd, and in any context in which X is totally anomalous, the same is true of Y."

that the emergence of the novel function of *YONG* would give rise to the competition between *YONG* and *NONG* in their token and type frequency in use. Given that this is an on-going process and the novel use of *YONG* is used more and more frequently, the obsolescence of either one of the entries, or the development of the differences in their function would be expected in the future. Thus, this potential evolvement would be a worthwile issue to pay attention to in the future.

5.6 Summary

This chapter discusses the possible origin and development of the novel usage of *YONG* as pro-V and PR-V in TM. It is clear that the emergence of the novel uses of *YONG* in TM is a grammatical change induced by language contact with TSM. This change is not a process of contact-induced grammaticalization as defined in literatures, but would more possibly to be a process of relexification. In this process, an existing form *yong* in TM is added with novel meanings of pro-V and PR-V from TSM. In other words, this process involves form-meaning re-association. Therefore, in terms of Diachronic Construction Grammar, it is proposed in the current study that the creation of a new construction (i.e. form-meaning pairings) *YONG* in TM with its new functions can be viewed as constructionalization without grammaticalization. Finally, the near synonyms *YONG* and *NONG* of the PR-V and pro-V functions are in competition in frequency of use. The development of the near synonym pair in the future would be another interesting issue worthy for paying attention on.

6.1 Conclusion

This thesis aims to investigate the lexical semantics and the development of the emerging novel usage of *YONG* in Taiwan Mandarin. The novel usage of *YONG* can be further classified into two functions in terms of its syntactic behavior. With its general and wide-raged meaning, *YONG* can be used as either an anaphoric pro-verb or a process-referring verb. As a pro-V, *YONG* refers back to a forementioned VP in the previous context. As a PR-V, rather than specifying the event undertaken, *YONG* denotes the manner by which the actual event is fulfilled in the predication. Though syntactically different, pro-V and PR-V *YONG* shares lots of semantic similarities. They both depict transitive and physical events in which the Agent subject enforces intended effect or influence on the object NP.

As for the PR-V function, three complementary approaches are adopted to study the verbal semantics of YONG. First, since YONG "sets frames" for various activities to take place in, Frame Semantics are thus utilized to represent the possible scenario in which various activities denoted by YONG take place. Second, for the VP headed by PR-V YONG, the "ellipsed" eventive information of the predicate is mainly supplied by the complement NP. Thus, to effectively identify the lexical semantics of YONG, the [YONG + NP] pattern is focused on for discussion. Moreover, since the meaning of the [YONG + NP] pattern is not predictable from its internal component, this pattern thus can be viewed as a form-meaning pairing, namely, a construction. Construction Grammar is thus useful to

identify the meaning of *YONG* with its associated patterns. Third, Qualia Structure is exploited to identify the contextual interpretation of *YONG* by semantic coercion from the associated Qualia roles of the complement object NP. Besides, Qualia Structure is also profitable in differentiating and accounting for the potential ambiguity of the *YONG* predication. In sum, this thesis again indicates that by incorporating the three complementary approaches, namely, Frame Semantics, Construction Grammar and Qualia Structure, the lexical semantics of Mandarin process-referring verbs can be adequately represented and accounted for.

The emergence and development of the novel usage of *YONG* is another important issue in this thesis. The current study indicates that the pro-V and PR-V *YONG* in Taiwan Mandarin results from the language contact with Taiwan Southern Min. This change is not a process of contact-induced grammaticalization as defined in literatures, but is more likely to be a process of relexification. From the perspective of form-meaning reassociation, the emergence of the novel functions of *YONG* in TM could be viewed as the creation of a new construction (form-meaning paring) by adding new meanings to an existing form. Therefore, this thesis proposes that the emergence of the novel usage of *YONG* in TM is a process of constructionalization without grammaticalization. Finally, by probing into the case study of the emergence of the novel usage of *YONG* in Taiwan Mandarin, this thesis reflects characteristics and on-going novel changes of Taiwan languages. Theoretically, this study attempts to link researches of verbal lexical semantics and grammatical change with an integrated theoretical framework, namely, the constructional approach. Consequently, a unified explanation to the interrelation between these two linguistic areas can be established in a systematic and effective way.

6.2 Further Research

Following Liu (2002, 2005) and Yu (2006), this thesis again shows that the multiple complementary approaches combining Frame Semantics, Construction Grammar and Qualia Structure, are profitable for exploring lexical semantics of Mandarin process-referring verbs. Given that there are still process-referring verbs (e.g. 跑 pao in 跑 新聞/宣傳/生意 pao xinwen/xuanchuan/shengyi 'to run for news/propaganda/business'; 間 nao in 鬧牌氣/水災/元宵 nao piqi/shuizai/yuanxiao 'to grouch/to suffer from flood/to enjoy the Lantern Festival'; 打 da in 打廣告/麻將/外食 da guanggao/majiang/waishi 'to advertise/to play mahjong/to eat out' etc.) remaining unexplored in a theory-based way, it can be expected that applying these approaches to researches of these verbs will be helpful to systematically and effectively represent and account for their lexical semantics.

Besides, the potential future development of the near synonyms *YONG* and *NONG* in Taiwan Mandarin is another interesting issue worthy for paying attention on. Since they are in competition in frequency of use and it is almost impossible for absolute synonyms to exist in natural languages, will either *YONG* or *NONG* fall into obsolescence? Will syntactic and semantic differences between them develop? Which situation would happen in the future? Further researches on this issue would help to reveal the real development of language change.

Moreover, as exhibited in this thesis, Construction Grammar is not only useful in exploring synchronic verbal lexical semantics, but also helpful in explaining diachronic language change. Another potential advantage of Construction Grammar may be to effectively relate and categorize individual constructions in a hierarchic system with several levels of schematicity. Based on her study on grammaticalization of the English [NP of NP] construction (i.e. [NP1 [of NP2]] > [[NP1 of] NP2], e.g. [a lot/bit of]), Traugott (2007) has proposed a potential multi-layered taxonomic system in which correlated constructions can be classified into different groups on different levels, as shown below:

- (1) a. Macro-constructions: high-level schemas, the highest level relevant for the discussion at hand, e.g., ditransitive construction, partitive construction, degree modifier constructions,
 - b. Meso-constructions: sets of similarly-behaving constructions, e.g., the set *a bit/lot* (*of*), as distinct from the set (*a*) *kind/sort of*, etc.,
 - c. Micro-constructions: individual construction-types, e.g., a lot of vs. a bit of,
 - d. Constructs: empirically attested tokens of micro-constructions.

Applying this model to Mandarin process-referring verbs, a number of questions may be raised. Suppose that all Mandarin PR-Vs could be viewed as under the highest Macro-level PR-V construction, since the individual Micro-level [YONG + NP] and [NONG + NP] construction behave similarly, can they belong to one Meso-construction? Moreover, can those semi-fixed, more lexicalized and idiosyncratic [PR-V + NP] patterns (e.g. 玩女人 wan nuren 'to womanize'; 趕三點半 gan sandianban 'to rush to get to the bank by 3:30 pm' etc.) be regarded as the lowest level constructs? So far, answers to these questions remain unclear. It is believed that more researches on these issues will be needed in the future to identify the whole picture of lexical semantics of Mandarin process-referring verbs.

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Website Resources

Sinica Corpus (中央研究院平衡語料庫)

http://asbc.iis.sinica.edu.tw/

Taiwan Southern Min Dictionary of Common Words (教育部臺灣閩南語常用詞辭典)
http://twblg.dict.edu.tw/holodict_new/index.html

Google Search

http://www.google.com/

PixNet Blog (痞客邦)

http://www.pixnet.net/

Plurk (噗浪)

http://www.plurk.com/top/



PTT (Professional Technology Temple 批踢踢實業坊) http://www.ptt.cc/index.html

Wretch Blog (無名小站)

http://www.wretch.cc/blog/

Yahoo Blog (奇摩部落格)

http://tw.blog.yahoo.com/

Yam Blog (蕃薯藤 天空部落)

http://blog.yam.com/