CHAPTER ONE

INTRODUCTION

In the study of natural language semantics, the study of how and what semantic distinctions are encoded in words or lexical items is always the issue. By means of examining the interaction of word meaning and compositionality, the structural information of a sentence can then be systematically analyzed. Accordingly, the significance of the study of word meaning or lexical semantics is the core concern of most linguistic frameworks. (cf. Fillmore and Atkins 1992, Goldberg 1995, Pustejovsky 1995, Liu 2002, 2005, Lien 2006)

1.1 The Issue: Frame-Evoking Verbs in Mandarin Chinese

Lexical semantic studies of Mandarin verbs have drawn substantial attention in recent linguistic research. Verbal semantics has a lot to do with the argument structure of individual verbs and the semantic relation between the verb and its core argument. One of the problems is how to interpret the sequence of [V+NP]. In some cases, the meaning of the [V+NP] frame is derived from its whole construction rather than from its derivational parts—verbs or noun phrases. Take the Mandarin verb--*GAN* 趕 'rush'--for example (Liu 2005). As illustrated in (1) below, the semantic interpretation of *GAN* fails to account for the event encoded in the whole construction, [*GAN*+NP], and it only denotes an underspecified event which indicates a temporally framed activity. The genuine activity encoded in [*GAN*+NP] only can be inferred from the event-evoking nominal following *GAN*. Liu gives some examples (Liu 2005: 318~9):

(1) *GAN*+NP:

GAN yan3jiang3	趕 演講	‘to rush to take part in public speech’
GAN gong1che1	趕 公車	‘to rush to catch the bus’
GAN san1dian3ban4	趕 三點半	‘to rush to get to the bank by 3:30 pm’
GAN bao4gao4	趕 報告	‘to rush to finish writing a report’

All these different *GAN*-NPs refer to completely distinct activities or event types.

In addition, Liu (2002) indicates that *GAO* 搞 ‘do/make’ and *NONG* 弄 ‘do/make’ also display similar behavior. The significant function of these two verbs is that they behave like a pro-verb[1]. As to the nominal NP of [V+NP], it is the only source for the semantic information of an unspecified event. Such a verb plays an essential role in the frame. In addition to carrying its original meaning, the verb also cooperates with the subsequent noun phrases to express the meanings of the whole construction. Consequently, this thesis aims to explore and define the frame-evoking verbs in Mandarin Chinese.

1.2 Scope and Goal of the Thesis

Adopting Liu (2002, 2005)’s study, this thesis examines instances of *WAN* 玩 ‘play,’ *NONG* 弄 ‘do/make,’ and *GAO* 搞 ‘do/make’ in a fairly large corpus, and analyzes their associations with the object-NPs in [*WAN*+NP], [*NONG*+NP], and [*GAO*+NP], respectively. To account for the behavior of the verbs, Frame Semantics (Fillmore and Atkins 1992) are

[1] In this thesis, the grammatical function of pro-verbs mainly refers to the following two eminent grammarians’ masterpieces: one is Quirk *et al.* (1985) and the other Chao (1968). According to Quirk *et al.* (1985:75~7, 863~6), a pro-verb is a kind of “pro-forms…(that) are essentially devices for recapitulating or anticipating the content of a neighboring expression, often with the effect of reducing grammatical complexity.” In addition, “the item *do*, although it belongs to the classes of verb, has semantic functions similar to pro-forms, in conveying a broad and undifferentiated meaning: How do you *do* your laundry?” Moreover, the relation is “substitution” between pro-verb and antecedent whereby the pro-verb can be understood to have ‘replaced’ a repeated occurrence of the antecedent. As for the pro-verbs of Mandarin Chinese, based on Chao (1968:660~2), the verbs discussed in Liu (2002, 2005) and this thesis have similar functions of a pro-verb (i.e. DO) in English. Although Chao regarded *NONG* and *GAO* not as pro-verbs but ordinary verbs with a very general range of meanings, the two verbs are actually developing toward pro-verbs and the linguistic data shown in the following chapters are the solid evidence.

used to link *WAN*, *NONG*, and *GAO* and particular constituent information coded by the object-NPs in the construction. In view of the correspondence of the construction and the meaning, Construction Grammar (Goldberg 1995) is applied to account for their interrelationship. Moreover, Qualia Structure (Pustejovsky 1995) is utilized to resolve the ambiguity inherent in some identical constructions. This thesis will examine three frame-evoking verbs, *WAN*, *NONG*, and *GAO*, in Mandarin Chinese. The outline of this thesis is as follows: In Chapter 2 the theoretical frameworks will be introduced. Chapter 3 reviews some familiar studies. Chapters 4 through 6 analyze the linguistic data of the frame-based verbs—*WAN*, *NONG*, and *GAO*, respectively. Ultimately, the discussion and conclusion are presented in Chapter 7.

1.3 The Database

The linguistic data used in the thesis are mainly retrieved from the Academia Sinica Balanced Corpus (Sinica Corpus), which is one of the largest contemporary Mandarin corpora containing more than five million words tagged with parts of speech. Even though there are quite a few linguistic data pertaining to these three verbs, only those shown in [*WAN*+NP], [*NONG*+NP], and [*GAO*+NP] are the target lexical items.

CHAPTER TWO

THEORETICAL FRAMEWORKS

In this chapter, three remarkable theoretical frameworks are introduced in the following order. In 2.1, Frame Semantics (Fillmore and Atkins 1992) provides a frame-based approach to account for the semantics of [V+NP]. In addition, the example of commercial transaction verbs in English and a significant case study of Mandarin Chinese (Liu 2002) are introduced in the section. In 2.2, the constructional approach (Goldberg 1995) is introduced to account for the meaning of the actual event encoded in the [V+NP] construction of Mandarin Chinese. In the last section 2.3, Qualia Structure (Pustejovsky 1995) is utilized to solve the potential ambiguity drawing from the meaning encoded in [V+NP].

2.1 Frame Semantics

In regard to lexical semantic approaches, Fillmore and Atkins (1992) propose that the interpretation of a verb can be acquired only when the associated semantic frame is clearly defined. What a semantic frame denotes is actually a knowledge schemata defined as ‘a structure background of experiences, beliefs or practices, constituting a kind of conceptual prerequisite for understanding the meaning.’ (Fillmore and Atkins 1992: 76-7) Take the commercial transaction verb, SPEND, for example (Fillmore and Atkins 1992: 78-9): in “Harry spent twenty dollars on a new tie,” Harry is the subject (i.e. the Buyer), Money is the direct object, Goods (i.e. a new tie) is marked with the preposition ON, and the Seller is NULL. That is, the semantic and syntactic valence (Active Voice) of SPEND are encoded in the commercial transaction frame.

To apply the approach to Mandarin Chinese, let’s take the semantic frame of *QIANG* 搶 ‘rub’ for example. According to Liu (2002:148-9), ‘The semantic frame of *QIANG* highlights

two important components: COMPETITION and GAIN. The meaning of *QIANG* can be specified as follows: 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). The two frame components define the background schema for the verb *QIANG.'*

Both Frame Semantics and Construction Grammar can account for the meaning of the activity implicated in the sequence of [V+NP] in Mandarin Chinese, but, according to Jackendoff (1997), the constructional approach seems superior to the notion of lexical rules. Therefore, the constructional approach is also presented in the next section as one of the theoretical frameworks.

2.2 Construction Grammar

According to Goldberg (1995), the definition of Construction Grammar is that "C is a CONSTRUCTION iff$_{def}$ C is a form-meaning pair <F_i, S_i> 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." A significant example would be the Ditransitive (double-object) Construction of English (Goldberg 1995: 3~4, 2003: 220): the form of the construction is [Subj V Obj_1 Obj_2], and the meaning of the construction is [X CAUSES Y to RECEIVE Z] (intended or actual Transfer), such examples as 'Pat faxed Bill the letter,' 'She baked him a cake,' and 'He gave her a Coke.' In addition, the [V+NP] construction can illustrate the application of Mandarin Verbal Semantics. Cognitively, an opaque semantic interpretation of an under-specified event is just like the output of semi-productive lexical rules (the constructional approach vs. the productive lexical rules) which *must* be listed in long-term memory; that is, the semantic interpretation can not be retrieved from online words which *can* be listed in short-term memory. (cf. Jackendoff 1997, 2002) In [V+NP], the interpretation of the actual event encoded in the [V+NP] construction (or the lexical item)

must be fixed and located in the long-term memory of human beings. Such example as the interpretation of [*GAO fei1ji1*] 搞飛機 'to make troubles' is quite different from its derivational verb *GAO* 搞 'do/make' and NP *fei1ji1* 飛機 'airplanes.' Therefore, the construction or the LEXICAL ITEM [*GAO3 fei1ji1*] 搞飛機 'to make troubles' *must* be taken as a unit of lexical storage rather than two WORDS *fei1* 飛 'fly' and *ji1* 機 'machine' that *can* constructed *fei1ji1* 飛機 'airplanes' online. (cf. Jackendoff 2002)

The constructional approach sets out to account for all our knowledge of language. (cf. Goldberg 2003) On the base of the Constructional Grammar, the form-meaning pairings are taken to be the basic units of language. A phrasal pattern is considered a construction if the meaning of the construction is not strictly predictable from its derivational parts or from other constructions. On that ground, in Mandarin Chinese, a certain transitive verb, such as *GAO* 搞 'do/make' mentioned above, when combined with its following NP, should also be viewed as a construction. The constructional approach is utilized to account for the meaning encoded in the actual event of the [V+NP] pattern in Mandarin Chinese. Accordingly, the constructional approach is the core theory applied in the thesis to account for the meanings of the actual events coded in the constructions--[*WAN*+NP], [*NONG*+NP], and [*GAO*+NP].

2.3 Qualia Structure

According to Pustejovsky (1995: 76-7), "Qualia Structure specifies four essential aspects of a word's meaning (or *qualia*):

- CONSTITUTE: the relation between an object and its constituent parts;
- FORMAL: that which distinguishes it within a larger domain;
- TELIC: its purpose and function;
- AGENTIVE: factors involved in its origin or "bringing it about."

Take ‘novel’ for example. The qualia structure of ‘novel’ is interpreted as: [CONST=narrative], [FORMAL=book], [TELIC=reading], and [AGENT=writing]. On the other hand, that of ‘dictionary’ is quite similar to the interpretation of ‘novel,’ but the TELIC role of ‘dictionary’ is [TELIC=consulting]. Accordingly, these two words will not be confused in the same context.

An application of Qualia Structure to Mandarin Verbal Semantics is shown in *GAN* 趕 ‘rush’ (Liu 2005: 325): there are two interpretations for *GAN3 bi3sai4* 趕比賽 ‘GAN game.’ For example, in *GAN3le san1chang3 bi3sai4* 趕了三場比賽 ‘rush PFV three-CL games,’ one interpretation is ‘rushed to finish playing three games’ [AGENTIVE=playing] and the other ‘rushed to finish watching three games’ [TELIC=entertaining/watching]. The distinctive qualia roles of the nominal argument are distinguishable, so the ambiguity of the identical syntactic form is no more there.

In view of the consequence that a lexical item may be interpreted in diverse contexts, the ambiguity of the lexical item may draw from its correlated construction. Hence, this contemporary approach of Generative Lexicon is quite convincing in the field of verbal semantic studies of Mandarin Chinese. (cf. Huang *et al.* 1995, Liu 2002, 2005)

CHAPTER THREE

LITERATURE REVIEW

This chapter reviews some previous verbal semantic studies in Mandarin Chinese. These studies examine Mandarin verbs in the identical pattern--[V+NP], including a study on light verbs illustrated in section 3.1 and four case studies in sections 3.2 through 3.5.

In 3.1, Huang *et al*. (1995) argues that different light verbs do take specific deverbal nouns as their arguments. In addition, the semantic representations of the [LV+Deverbal Noun] construction can be inferred from the deverbal nouns, of which the meanings are derived from their original verbal semantics.

As for the other four case studies, they are reviewed in the following sections. 3.2 [*QIANG* 搶+NP] (Liu 2002) and 3.5 [*GAN* 趕+NP] (Liu 2005) are two significant frame-based semantic studies. As shown in these two case studies, the construction has implicative meaning that is not from its derivational constituents but from the construction itself. 3.3 [*SHUA* 耍+NP] (Manuscript by Liu, F. Fang-chun 2003) and 3.4 [*ZUO* 做/*NONG* 弄/*GAO* 搞 +NP] (Wang 2004) contain diverse linguistic data, and hence they can render some preliminary explanations for each lexical items. In general, in the following sections, each case study contains a summary and exposes the unsolved problem that waits for an answer.

3.1 Huang *et al*. (1995)

Huang *et al*. (1995) is a corpus-based study of nominalization and verbal semantics of two light verbs--*JINXING* and *ZUO*--in Mandarin Chinese. They examine the relation between the light verb and the noun phrase or the deverbal noun in the [V+NP] construction and take it to account for the phenomena of nominalization.

According to Huang *et al.* (1995), *JINXING* and *ZUO* are two Chinese verbs that appear

to license nominalization of the deverbal nouns. They interpret the data that the light verbs' function "seems to be purely grammatical." (Huang *et al.* 1995: 100) Take *JINXING* for example. In (2), the light verb functions just like the licenser of nominalization and is subsequent to a progressive marker--*ZAI* 在. The sentences, in (3), can be paraphrased in the other way without the light verb. (3a) and (3b) have the identical meaning, even though the light verb is erased in (3b).

(2) 警方正在 *進行* 調查。(Huang *et al.* 1995: 100)
Jing3fang1 zheng4-zai4 *JINXING* diao4cha2
Police DUR-ASP *L-verb* investigate
'The police are investigating.'

(3) a. 警方正在進行戶口調查。(Huang *et al.* 1995: 100-1)
Jing3fang1 zheng4-zai4 *JINXING* hu4kou3 diao4cha2
Police DUR-ASP *L-verb* household investigate
'The police are investigating household registrations.'

b. 警方正在調查戶口。
Jing3fang1 zheng4-zai4 diao4cha2 hu4kou3
Police DUR-ASP investigate household
'The police are investigating household registrations.'

However, the idea that the light verbs just grammatically correlated with their following deverbal nouns is not absolutely right. The major contradiction is in the construction: if the light verbs are only semantically bleached and grammaticalized to be the markers of grammatical functions, they are not supposed to combine with specific deverbal nominals. Nevertheless, according to the following data collected from the Sinica Corpus, the most frequent light verbs, *JINXING* and *ZUO*, take different type arguments. The data show in (4) and (5) that *ZUO* combines with a verb such as *jue2ding4* 決定 'decide,' which is the endpoint, and *JINXING* combines with a verb such as *cai1chu2* 拆除 'tear down,' which is

the process.

(4) a. *警方進行決定 (Huang *et al.* 1995: 102)
*jing3fang1 *JINXING* jue2ding4
Police L-verb decide

b. 警方做了決定
jing3fang1 *ZUO*le5 jue2ding4
Police L-verb-LE decide
'The police made the decision/ The police decided.'

(5) a. 警方進行違建(的)拆除 (Huang *et al.* 1995: 102)
jing3fang1 *JINXING* wei2jian4 (de) chai1chu2
police L-verb violate-construction (DE) tear-clear
'The police tear down the illegal structures.'

b. *警方做了違建(的)拆除
*jing3fang1 *ZUO*le5 wei2jian4 (de) chai1chu2
police L-verb-LE violate-construction (DE) tear-clear

In the paper, Huang *et al.* offer 'a formal representation of the lexical semantics of deverbal nouns which allows automatically lexical generation of deverbal nominals. It is suggested that lexical rules can inherit predicate-argument structures from the cognate verbs and form the lexical entries of the deverbal nominals automatically." (Huang *et al.* 1995: 108)

On that ground, the proposal accounts for the meaning of the deverbal nominals in the [V+NP] construction derived from its derivational verb, but it cannot account for one thing: where does the meaning of the actual event/activity derive from? Take *ZUO* for example: in (6), the semantic types of nominals in the [*ZUO*+NP] construction[2] are quite diverse. In addition, *ZUO* sometimes sets a frame for an underspecified event, and the semantic

[2] Even though the [*ZUO*+NP] construction is one of the [V+NP] constructions and its constructional interpretation sometimes is not just the combination of its derivational parts, as in (6), *ZUO* is a fully developed pro-verb (or light verb in this case) in Mandarin Chinese and may replace the function of certain verbs in various contexts. Therefore, it is not a proper idea to exemplify the [*ZUO*+NP] construction in this thesis.

information encoded in the opaque event still needs further investigations.

(6) *ZUO*+NP:

ZUO da4guan1	做 大官	‘to be an officer’
ZUO zao3can1	做 早餐	‘to prepare breakfast’
ZUO ku3gong1	做 苦工	‘to be a labor’
ZUO jia1ting2 fang3wen4	做 家庭訪問	‘to conduct a home interview’
ZUO bang3yang4	做 榜樣	‘to make a model’

In some specific cases, such as [*QIANG*+NP] and [*GAN*+NP] shown in following sections, the meaning of the actual event or activity is still opaque, since it is not just the combination of verbs and noun phrases.

3.2 Liu (2002): *QIANG* 搶+NP

In Liu (2002), a complete corpus-based selection of Mandarin verbal semantic studies is released. A case study presented in the work focuses on the [V+NP] frame--The Frame-Setting Verb--*QIANG* 搶 ‘vie for/rob.’ In the study, Liu examines the semantic frame of *QIANG* 搶, and proposes that the verb, *QIANG*, and other certain verbs, such as *GAO* ‘do/make’ and *NONG* ‘do/make,’ displaying a grammatical function like a pro-verb: *QIANG* fails to encode the semantic interpretation of an opaque event, but the nominals following *QIANG* can provide the detailed semantic information for the specific event encoded in [V+NP].

In addition, the different expressions are shown in different patterns: “for expressing the original ownership, *QIANG* takes a GOAL; on the other hand, *QIANG* takes a THEME to express the object or ‘target’ for expression.” As for the semantic frame of *QIANG*, it “highlights two important components: COMPETITION and GAIN, and the verbs indicate

three different types of activities, including ‘to rob,’ ‘to fight for scarce resource,’ and ‘to gain priority for doing activity (x).’” (Liu 2002: 148-9)

To conclude, the construction of [V+NP] always provides the information which cannot be directly extracted from the nominal argument. The case study of [*QIANG* +NP] shows that “the specific function of some certain verbs is like a pro-verb, which provides information about the manner, the means or the purpose of carrying out various ‘secondary’ activities.” (Liu 2002: 152) Liu’s analysis is an initial model for this thesis, since we can adapt it for decoding the real event encoded in the constructions.

3.3 Liu (2003): *SHUA* 耍+NP

Fang-chun Fanny Liu (Manuscript, 2003) focuses on the meaning extension and the creative use of *SHUA* in Mandarin Chinese. The [*SHUA* +NP] construction is the major concern in the study. With the shift of the degree of transitivity, the object-NP changes from a concrete semantic domain to an abstract one. It is suggested that “… [*SHUA*+attribute NP] carries negative semantic prosody and functions as evaluation in discourse….” (Fan-chun Fanny Liu Manuscript: 19) Even though the study is rich in various data collected from the Internet, the Sinica Corpus, and even BBS, the essential problems still remain unsolved and wait for more concrete answers: what do the examples, such as *SHUA* 耍 ‘display’ da4pai2 大牌 ‘big cards’/da4dao1 大刀 ‘huge knife’/zui3pi2zi5 嘴皮子 ‘mouth lips,’ actually mean? And what does the semantic information of the event encode?

3.4 Wang (2004): *ZUO* 做/*NONG* 弄/*GAO* 搞+NP

Wang (2004) aims to explore the different usages of Mandarin verbs of ‘doing:’ *ZUO*,

NONG, and *GAO*. In Wang's view, these verbs can be only interpreted as near-synonyms, and they cannot be completely replaced by each others. Wang's interpretations of the verbs are as follows: *ZUO* focuses on the action that encodes creating, *NONG* licenses the action of handling, and *GAO* encodes the action of initiating. Moreover, "*GAO* is mainly negative in most instances, especially in Taiwan Mandarin. *NONG* and *ZUO*, on the other hand, are basically neutral." (Wang 2004: 82) The other purpose of the study is to provide a guideline for teaching Mandarin verbs.

The table summarized by Wang explores a detailed categorization of these verbs, but the specific discussion of the [V+NP] construction still remains missing. Even though the general semantic prosody of *GAO* is considered to be 'Negative' (*NONG* and *ZUO* as 'Neutral'), in the study, there are other interpretations on account of the frame. Hence, the opaque event encoded in [V+NP] can be further discussed below. However, we would not discuss the [*ZUO*+NP] construction in this thesis; since *ZUO* is a fully developed pro-verb in Mandarin Chinese, even there still are opaque events encoded in the construction and the interpretation is not just the combination of *ZUO* and NP. On the contrary, we would discuss the other two pro-verb-like verbs in the thesis, *NONG* and *GAO*, because they are not fully developed pro-verbs but are developing toward pro-verbs.

3.5 Liu (2005): *GAN* 趕+NP

Liu (2005) again reminds us that the lexical items of [*GAN*+NP] contain 'salient information' which cannot be derived from its original characters—the verb, *GAN*, and the following noun phrases, respectively. Moreover, according to the study, the verb encodes an inanimate NP as its argument, and the argument contains several subcategories as shown in (7), including (a) scheduled special events, (b) vehicles running on a fixed schedule, (c) lexically specified (overt) time expressions, and (d) artifacts to be produced by a deadline. "In

general, the event inferred from the NP is a volitional activity requiring speed to reach a certain goal by a certain time." (Liu 2005: 318~9)

(7) a. 趕 集/考/廟會/演講
GAN ji2/kao3/miao4-hui4/yan3jiang3
GAN market/exam/temple-festival/speech
'to rush to take part in the market/ exam/ religious festival/ public speech'

b. 趕 公車/飛機
GAN gong1che1/fei1ji1
GAN bus/aircraft
'to rush to catch the bus/ airplane'

c. 趕 時間/進度/三點半
GAN shi2jian1/jin4du4/san1dian3ban4
GAN time/schedule/three-o'clock-half
'to rush to save time/to catch up with a schedule/to get to the bank by 3:30 pm'

d. 趕 報告/作業/課/衣服/貨
GAN bao4gao4/zuo4ye4/ke4/yi1fu2/huo4
GAN report/homework/clothes/goods
'to rush to finish writing a paper/ to rush to finish writing homework/ to rush to finish teaching classes/ to rush to finish making clothes/ to rush to finish manufacturing goods' (Liu 2005: 318~9)

The function of *GAN* is just like a "pro-verb" and the construction therefore encodes "three meaning components" that can be interpreted as: "to achieve a STATE by a certain TIME through a speedy engagement in an ACTIVITY." (Liu 2005: 319) In (7d), the example can match the frame completely. What the study conveys is that "the semantic information of the 'ellipsed' activity in the [*GAN*+Inanimate NP] pattern cannot be obtained directly from the lexicon…only when the pro-verb, *GAN*, is combined with a potentially event-evoking inanimate nominal, can all the detailed eventive information be automatically inferred." (Liu 2005: 321)

Lastly, in the pilot study of Mandarin verbal semantics, Liu also proposed two implications (Liu 2005: 327~8): First, both knowledge representation and natural language processing are founded on the base of lexical semantic studies. “The semantic information encoded on verbs is considerable essential for sentence understanding…verbs like *GAN* appear to set a frame, or denote a manner, rather than naming a specific activity.” Second, the verb of the construction always provides core information about event structure and participant roles; meanwhile, the pattern of the lexical item “may also coerce certain meaning components into the interpretation.”

To respond to the unsolved questions raised in the study of *GAN*, this thesis aims to explore the range and the kind of semantic information that is encoded in the background frame evoked by the target verbs and then define the frame-oriented verbs.

CHAPTER FOUR

ANALYSIS OF *WAN* 玩+NP

The verbal constellations with the verbs *WAN*, *NONG*, and *GAO* in the [V+NP] construction are the issue in the thesis. As a frame-evoking verb, each of them sets a frame and takes a nominal argument to render an idiosyncratic sense which is different from the meaning purely composed by the verbal predicate and the object-NP. Since the constructional denotation is not inferred from the components, the non-compositional approach of Construction Grammar is adopted to analyze the target pattern. Chapters 4 to Chapter 6 are the main analyses and clear illustrations of the three frames: [*WAN*+NP], [*NONG*+NP], and [*GAO*+NP].

4.1 Initial Observations of *WAN*

According to the linguistic data retrieved from the Sinica Corpus, the total number of the tokens of *WAN* is 888.[3] In the data, although there are some idiosyncratic uses of *WAN*, the majority of its uses are as a transitive verbal predicate that takes an object-NP[4] in the [*WAN*+NP] pattern as shown in 4.1.1. To examine the [*WAN*+NP] constellation, the use of a transitive predicate is our major concern in this chapter. Besides, the verb constellation includes the nominal arguments, so we would like to see what semantic roles will be bound in the constructional denotation, as in 4.1.2.

4.1.1 Constructions with *WAN* in the Sinica Corpus

[3] In the data, the total number of redundancies is 7, so the original total number of the tokens should be 895.
[4] The compound nouns or deverbal nouns of *WAN* are not the major concern in this thesis.

To reveal the detailed information of the constructions with *WAN*, all the instances of *WAN* as a transitive verb and its following object-NPs are together examined. In most cases, the verb *WAN* serves as a manner-denoting verb and takes a NP-theme in the [*WAN*+NP] pattern, as in *WAN2 wan2ju4* 玩玩具 'to play with toys,' *WAN2 shuang1da3* 玩雙打 'to play by means of doubles,' and *WAN2 pu1ke4pai2* 玩撲克牌 'to play poker.' In addition, the nominal argument may take a nominal classifier or an eventive classifier, as in *WAN2 yi1ge wan2ju4* 玩一個玩具 'to play with one toy,' and *WAN2 yi1chang3 can2ku4DE you2xi4* 玩一場殘酷的遊戲 'to play a round of cruel games.' Although the main predicate is *WAN*, the specific activities undertaken may not be the same. We may postulate that the nominal argument following *WAN* is the key element of the whole embedded scenario, implicating an unspecified activity with certain rules or means for carrying out the event. As Table 1 shows below, in the majority cases, *WAN* takes an object-NP to form the [*WAN*+NP] construction. In other cases, it can be followed by a verbal complement to form Verb-Complement compounds or V-R compounds[5]. This kind of the construction would be represented as [*WAN*+R+NP]; for example, *WAN2qi3 guan1bing1 zuo1 qiang2dao4DE you2xi4* 玩起官兵捉強盜的遊戲 'start to play the robber-wanted game' and *WAN2qi3 zuo1mi1chang2 le* 玩起捉迷藏了 'have started to play Hide and Seek.' Even though there are a number of idioms pertaining to the verbal predicate *WAN*, they are fossilized in certain contexts and equipped with specific denotations. Hence, we do not pay much attention on these fixed patterns here. For further reference, a number of the corpus examples of *WAN* are given in Appendix A.

Table 1: Constructions with *WAN*:

Examples of [*WAN*+NP]	Form	Meaning
WAN2 wan2ju4	玩玩具	'to play with toys'

[5] Following Chao (1968: 435~480), we agree that a verb takes a complement to form verb-complement (V-R) compounds, but sometimes it takes an object-NP first and then a separable complement of verb-complement compounds to construct the V-O-C template which is undertaken in cases of Table 2, as in 5.1.1.

WAN2 qiu2	玩球	‘to play with balls’
WAN2 pu1ke4pai2	玩撲克牌	‘to play poker’
WAN2 dian4nao3	玩電腦	‘to play with a computer’
WAN2 ni2ba1	玩泥巴	‘to play with mud’
WAN2 gang1qin2	玩鋼琴	‘to play the piano’
WAN2 you2xi4	玩遊戲	‘to play games’
WAN2 xue3qiao1	玩雪橇	‘to go skiing’
WAN2 mo2tuo1che1	玩摩托車	‘to go motorcycling’
WAN2 nu3ren2	玩女人	‘to womanize’
WAN2 wo3	玩我	‘to fool with me’
WAN2 zhe4ge wan2ju4	玩這個玩具	‘to play with this toy’
WAN2 yi1ge wan2ju4	玩一個玩具	‘to play with a toy’
WAN2 yi1chang3 can2ku4DE you2xi4	玩一場殘酷的遊戲	‘to play a round of cruel games’
WAN2 gu3piao4	玩股票	‘to invest in the stock market’
WAN2 sha1hua4	玩砂畫	‘to do a sand-painting’
WAN2 yin1yu4	玩音樂	‘to play music’
WAN2 hua1yang4	玩花樣	‘to play by various means’
WAN2 shou3duan4	玩手段	‘to play tricks’
WAN2 shi4ye4	玩事業	‘to play business’
WAN2 bao4mi3hua1	玩爆米花	‘to make popcorn’
WAN2 mo2xing2	玩模型	‘to construct models’
WAN2 duo3mao1mao1	玩躲貓貓	‘to play Hide and Seek’
WAN2 hen2duo1 di4fang1	玩很多地方	‘to tour around many places’
WAN2 shuang1da3	玩雙打	‘to play by means of doubles’
WAN2 di4fang1xing4	玩地方性	‘to play by means of localism’
WAN2 tuan2kang1huo2dong4	玩團康活動	‘to play group entertainment’
WAN2 she4jian4 bi3sai4	玩射箭比賽	‘to play shooting games’
WAN2 pin1yin1 you2xi4	玩拼音遊戲	‘to play spelling games’
WAN2 zuo4 mai3mai4DE you2xi4	玩做買賣的遊戲	‘to play dealing games’
WAN2 zhi2 sa1dai4	玩擲沙袋	‘to play throwing sandbags
WAN2 she2me hua1yang4	玩什麼花樣	‘to play with what kind of means’
WAN2 she2me ba3xi4	玩什麼把戲	‘to play with what kind of tricks’
Examples of [*WAN*+R+NP]	Form	Meaning
WAN2qi3 bang4qiu2	玩起棒球	‘start to play baseball’
WAN2qi3 guan1bing1 zuo1	玩起官兵捉強盜	‘start to play the robber-wanted

qiang2dao4DE you2xi4	的遊戲	game’
WAN2qi3 da4feng1chui1	玩起大風吹	‘start to play Big Wind Blow’
WAN2qi3 zuo1mi1chang2 le	玩起捉迷藏了	‘have started to play Hide and Seek’
WAN2qi3 mai3mai4DE you2xi4	玩起買賣遊戲	‘start to play dealing games’
Examples of Idioms	Form	Meaning
WAN2shi4bu4gong1	玩世不恭	‘to play around in the world’
WAN2wu4sang4zhi4	玩物喪志	‘to addict to something and lose one’s mind’

4.1.2 Associated Patterns of [*WAN*+NP] and the Semantic Roles of the Object-NPs

In the data of *WAN* as shown above in Table 1, there are quite a few tokens in the pattern of [*WAN*+NP]. As illustrated in example (8) below, the transitive verb, *WAN* 玩 ‘to play,’ predicates object-NPs with a semantic role--Theme. The object-NP-Theme is the most significant semantic features; for example, *WAN2 wan2ju4* 玩玩具 ‘to play with toys,’ and *WAN2 you2xi4* 玩遊戲 ‘to play games.’ Namely, [*WAN*+NP-Theme] (henceforth [*WAN*+NP-T]) is the most distinguished pattern, while the other patterns, [*WAN*+NP-Incremental Theme][6], [*WAN*+NP-Goal$_{[+LOC]}$], and [*WAN*+NP-Means] (henceforth [*WAN*+NP-IT], [*WAN*+NP-G], and [*WAN*+NP-M], respectively), are the minor ones[7], as in examples (9) through (11) below. Notwithstanding the semantic roles are distinct in the pattern, the meanings encoded are very obscure. In view of the consequence that *WAN* fails to license the eventive information pertaining to the activity undertaken, the object-NP, taking

[6] According to Dowty (1991: 567~571), ‘the proposal of Incremental Theme is that the aspect of telic predicates depends on their NP arguments…by the principle that the meaning of a telic predicate is a homomorphism from its (structured) Theme argument denotation into a (structured) domain of events, modulo its other arguments…For example, in a telic event described by *mow the lawn*, the agent is a man and the lawn is the Incremental Theme. The homomorphism claim means that, because of the meaning of *mow*, the state of parts of the lawn and their part-whole relationship is reflected in the parts of the event of mowing it and ITS part-whole relationship.’ Things entailed to ‘move or undergo a change of state’ are traditional Themes.

[7] In the data, following *WAN*, many tokens are tagged with Nf, such as *WAN liang3tian1* 玩兩天 ‘to play for two days’ and *WAN yi4zheng3tian1* 玩一整天 ‘to play all through the day.’ According to the Sinica Corpus, the Nf represents classifiers or quantifiers in Mandarin Chinese. Hence, these tokens can be neither regarded as an object-NP nor put in the [*WAN*+NP] pattern.

the semantic role—Theme, provides the semantic information for encoding the specific event of [*WAN*+NP-T]. In (8) below, these diverse semantic types of NP-Themes correlated with *WAN* indicate various unspecified events bound in [*WAN*+NP-T]; for example, the activity taken place in *WAN2 gu3piao4* 玩股票 'to invest in the stock market' is different from that in *WAN2 you4xi4* 玩遊戲 'to play games.' The opaque event encoded in the former cannot directly retrieved from its components, while the activity encoded in the later is salient. Therefore, in the following sections, the diverse NP-Themes will be grouped into different semantic categories for further discussions.

(8) [*WAN*+NP-T]:

WAN2 wan2ju4	玩玩具	'to play with toys'
WAN2 qiu2	玩球	'to play with balls'
WAN2 pu1ke4pai2	玩撲克牌	'to play poker'
WAN2 dian4nao3	玩電腦	'to play with a computer'
WAN2 ni2ba1	玩泥巴	'to play with mud'
WAN2 gang1qin2	玩鋼琴	'to play the piano'
WAN2 you2xi4	玩遊戲	'to play games'
WAN2 xue3qiao1	玩雪橇	'to go skiing'
WAN2 mo2tuo1che1	玩摩托車	'to go motorcycling'
WAN2 nu3ren2	玩女人	'to womanize'
WAN2 wo3	玩我	'to fool with me'
WAN2 zhe4ge wan2ju4	玩這個玩具	'to play with this toy'
WAN2 yi1ge wan2ju4	玩一個玩具	'to play with a toy'
WAN2 yi1chang3 can2ku4DE you2xi4	玩一場殘酷的遊戲	'to play a round of cruel games'
WAN2 gu3piao4	玩股票	'to invest in the stock market'

(9) [*WAN*+NP-IT]:

WAN2 sha1hua4	玩砂畫	'to do a sand-painting'
WAN2 shou3duan4	玩手段	'to play tricks'
WAN2 bao4mi3hua1	玩爆米花	'to make popcorn'
WAN2 mo2xing2	玩模型	'to construct models'
WAN2 duo3mao1mao1	玩躲貓貓	'to play Hide and Seek'

(10) [*WAN*+NP-M]:

WAN2 shuang1da3	玩雙打	'to play by means of doubles'
WAN2 di4fang1xing4	玩地方性	'to play by means of localism'

(11) [*WAN*+NP-G]:

WAN2 hen2duo1 di4fang1	玩很多地方	'to tour around many places'

As for the other interesting examples shown in (10) above, the interpretation of *WAN shuang1da3* 玩雙打 'to play by means of doubles' is not quite comprehensible by the pure combination of the meanings retrieved from the verbal predicate *WAN* 玩 'to play' and the nominal argument *shuang1da3* 雙打 'doubles.' That is, we need to decode the embedded constructional denotation. Therefore, the specific denotation of the opaque event encoded in the construction should be deciphered by the whole constellation rather than the derivational parts, viz. the verb and the NP of the [V+NP] pattern. Accordingly, four associated patterns with salient semantic roles are embedded in the [*WAN*+NP] construction need to be further explored in the following section 4.2.

4.1.3 Different Semantic Categories of the Object-NP-Theme in [*WAN*+NP-T]

On the base of 'family resemblances' proposed by Wittgenstein[8] (cf. Lakoff 1987, Taylor 1995, CKIP 1993), these diverse NP-Themes of [*WAN*+NP-T] can be grouped into 9 semantic categories from (12) through (19).

[8] Wittgenstein indicates a complicated network of similarities overlapping and criss-crossing, and then uses 'family resemblances' to describe the similarities between members of a family, including build, features, color of eyes, gait, temperament, etc. For example: Board-games, card-games, ball-games, Olympic Games, and so on are 'games,' but how should we explain to someone what a game is? Wittgenstein suggests that we should describe *games* to them, and we might add: 'This *and similar things* are called "games."' (Wittgenstein 1978: 31-3) (cf. Taylor 1995: 39-40)

(12) Games/ball games/gambling games/card games/acting games

WAN2 you2xi4/qiu2/lan2qiu2/du3lun2pan2/sai4ma3/bo2qing1ge1/pu1ke4pai2/ qiao2pai2/ zhi1zhu1ren2

玩 遊戲/球/籃球/賭輪盤/賽馬/柏青哥/撲克牌/橋牌/蜘蛛人

'to play games/balls/basketball/roulette/horse-racing/Pachingo/poker/Bridge/ Spiderman'

(13) Toys/entertaining materials

WAN2 wan2ju4/dian4dong4wan2ju4/dian4nao3/wu2xian4dian4/yin1xiang3/dao1/ qiang1/ zha4yao4/bian1pao4/ka3tong1

玩 玩具/電動玩具/電腦/無線電/音響/刀/槍/炸藥/鞭炮/卡通

'to play with toys/video games/computers/radio/stereo/knives/guns/dynamite/fire crackers/cartoons'

(14) Musical instruments

WAN2 di2zi/gang1qin2

玩 笛子/鋼琴

'to play the pipe/the piano'

(15) Sports utilities

WAN2 xu3qiao1/feng1lang4ban3/hua2ban3/feng1zheng1/tuo1yi4san3

玩 雪橇/風浪板/滑板/風箏/拖曳傘

'to go skiing/surfboarding/skateboarding/kiting/parasailing'

(16) Vehicles

WAN2 che1/mo2tuo1che1/ji2pu3che1/shui3shang4 mo2tuo1che1

玩 車/摩托車/吉普車/水上摩托車

'to go driving/motorcycling/jeeping/wave-running'

(17) Business activities

WAN2 gu3piao4/qi4ye4/shi4ye4

玩 股票/企業/事業

'to invest in stocks/companies/business'

(18) Political strategies

WAN2 zheng4zhi4(xiu4)/quan2li4 ping2heng2 you2xi4

玩 政治(秀)/權力平衡遊戲

'to play politics (show)/power-balancing games

(19) Humans

WAN2 nu3ren2/nan2ren2/wo3

玩 女人/男人/我

'to womanize/fool with men/me

In these semantic categories as shown above, *WAN* cooperates with the NP-Themes to render diverse activities or events for the [*WAN*+NP-T] construction. Moreover, these NP-Themes can be viewed as Metonyms used in place of the entity itself. Therefore, two questions will be taken into consideration: should these different senses of *WAN* in [*WAN*+NP-T] be postulated according to the lexical rule approach? And is there any other way to account for the diverse uses of *WAN*?

According to Jackendoff (1997), a constructional approach seems more economic than a lexical rule approach.[9] The former provides a solution that the verbal predicate takes the coerced interpretation, while the latter provides some extra senses for the lexical item. Hence, in view of the fact that [*WAN*+NP-T] can be taken as a construction, a constructional approach (Goldberg 1995) is utilized to interpret diverse semantic information encoded in the actual event or activity drawing from [*WAN*+NP-T].

4.1.4 Associated Patterns of [*WAN*+R+NP] and the Semantic Roles of the Object-NPs

As Table 1 shows above, there are a small number of examples belonging to the [*WAN*+R+NP] construction. That is, *WAN* combines with a complement but an object-NP to form a V-R compound and then takes a nominal argument. For the nominal arguments

[9] In Jackendoff (1997: 534), two approaches are compared with a number of examples. One of the examples is 'We slept the whole afternoon away.' In a lexical rule approach, *sleep away* is considered as a complex verb that licenses the object, while, in a constructional approach, *V NP away* is treated as a meaning-bearing construction that licenses both the verb and the object. Therefore, in Jackendoff's opinion, a constructional approach is more applausive.

following the V-R compound are non-physical games, they bear the Incremental Theme, as in (20) below. On the other hand, the baseball game as in (21) below is a physical nominal, so it would be taken as the Theme. Since the sense of the V-R compound is relatively clear, we can get its constructional meaning by means of the interpretation of the inceptive[10] state generated from the V-R compound. As for the detailed discussions of the constructional interpretations, they are illustrated in section 4.2.3.

(20) [*WAN*+R+NP-IT]:

WAN2qi3 guan1bing1 zuo1 qiang2dao4DE you2xi4	玩起官兵捉強盜的遊戲	'start to play the robber-wanted game'
WAN2qi3 da4feng1chui1	玩起大風吹	'start to play Big Wind Blow'
WAN2qi3 mai3mai4DE you2xi4	玩起買賣遊戲	'start to play dealing games'
WAN2qi3 zuo1mi1chang2 le	玩起捉迷藏了	'have started to play Hide and Seek'

(21) [*WAN*+R+NP-T]:

WAN2qi3 bang4qiu2	玩起棒球	'start to play baseball'

4.2 Constructional Analyses of [*WAN*+NP] and [*WAN*+R+NP]

According to Goldberg (1995:1), 'the constructions themselves carry meaning, independently of the words in the sentence.' It is suggested that, taking [V+NP] for example, the meaning of the construction is not drawn from its derivational parts—V or NP, rather than from the [V+NP] construction itself. In other words, as demonstrated in section 4.2.1, the [*WAN*+NP] construction encoded diverse activities obviously can not be interpreted only by means of its constitute parts. Therefore, the interrelation between *WAN* and object-NPs in [*WAN*+NP] will be examined for a proper constructional interpretation. In addition, although

[10] See Smith (1991:33~6, 243~6) for detailed discussion of inceptives. In short, "Inceptives focus the entry into an event, and thus span the early portion of the causal chain."

the interpretation of [*WAN*+NP-T] renders a significant sense of [*WAN*+NP], the interpretation of [*WAN*+NP-T] and the senses of three minor sub-constructions are taken as constructional polysemy of [*WAN*+NP], as in section 4.2.2. As to the constructional interpretations of [*WAN*+R+NP], they will be demonstrated in section 4.2.3.

In section 4.2.4, we demonstrate that *WAN* behaves like a pro-verb of which the behavior is quite different from other verbs only predicating a salient event (cf. Smith 1991, Liu 2002, 2005). *WAN*, just like other frame-setting verbs such as *QIANG* 搶 'vie for/rob' and *GANG* 趕 'rush,' sets a frame, [*WAN*+NP], and predicates potential frame-oriented object-NPs in [*WAN*+NP]. Moreover, in section 4.2.5, some potential ambiguity pertaining to [*WAN*+NP] can be distinguished by means of Qualia Structure, and then the proper interpretations of [*WAN*+NP] would be demonstrated.

To interpret the unspcified events bound in [*WAN*+NP] and [*WAN*+R+NP], the constructional interpretation would be elaborately depicted by the modified diagram following Fried and Östamn (2004).

4.2.1 Constructional Interpretation of [*WAN*+NP]

Following Fried and Östamn (2004), a feasible depiction of [*WAN*+NP] is illustrated in Figure 1 below. As shown in (12-19) above, these semantic categories of NP-Themes share the same sub-construction of [*WAN*+NP]. In the data, *WAN* 'to play' (cf. Liu 2005) is mainly referring to 'a playful or non-professional manner.' In addition, according to the linguistic data (see Table 1 above or Appendix A), the interrelation between *WAN* and the object-NP endows diverse active processes or events encoded in [*WAN*+NP]. Also, the object-NP is a Metonym which is just like a surrogate of the background knowledge (henceforth BK) or rules enclosed in the lexical item itself. Therefore, as shown in the second box of the diagram, the interpretation of the construction can be like: 'x (#x with BK (#l) of the object-NP)

engaged in an Event [associated with an object-NP (#i)] (in a playful or non-professional Manner[11] (#j)).' Furthermore, the interpretation of the [*WAN*+NP] construction obviously requires at least five meaning components: an Event taken place by means of the volitional Agent (#x), a variable (i.e. [object-NP] (#i)) associated with an Event, BK (#l) of the object-NP, and a playful or non-professional Manner (#j) rendered by *WAN*. As for the other implicit beneficial sub-event (#k), since it is underspecified, it is parenthesized as a hidden feature in the construction. Consequently, the constructional interpretation of [*WAN*+NP] can be illustrated as Figure 1.

Figure 1: Constructional Interpretation[12] of [*WAN*+NP]

<table>
<tr><td colspan="11">WAN+Direct Object-NP</td></tr>
<tr><td>syn</td><td colspan="10">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="10">frame: an active process=[x (volitional-Agent with BK_{il} of the object-NP_{il}) engaged in an Event [associated with an object-$NP_{i(l)}$] (in a playful or nonprofessional $Manner_j$ [a beneficial sub-$Event_k$])]
FE #x [Doer], FE #i [$_{([+Q])}$], (FE #j [Manner], FE #k [Event], FE #l [BK])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td rowspan="2">rel</td><td rowspan="2">θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td rowspan="2">rel</td><td rowspan="2">θ [ ]
DA +
gf obj</td><td rowspan="2">(#j/ #k/ #l</td><td rowspan="2">rel</td><td rowspan="2">θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr></tr>
<tr><td></td><td>syn</td><td>n +</td><td></td><td>syn</td><td>n +</td><td></td><td>syn</td><td>n -</td><td></td></tr>
<tr><td colspan="11">lxm *wan*</td></tr>
</table>

[11] According to the data, in the interpretation of the [*WAN*+NP] construction, x is a variable of volitional Agent, and the object-NP is also a variable that associates with an Event. The playful or nonprofessional Manner originally derived from the verbal predicate--*WAN*--is a semantic component and can be taken as an incorporated Manner. Namely, the semantic component (i.e. the playful Manner) and *WAN* can be lexicalized in the pattern, and the meaning-in-form relation is 'lexicalization': *WAN* 'play' means 'to playfully do something.' (cf. Talmy 2000)

[12] Grammatically relevant information is depicted in the boxes of attribute-value pairs, as in Figure 1, which are organized into sets, known as 'attribute-value matrices' (AVMs), and the acronyms or initialisms as shown in Figure 1 represent various features of the constructional diagram: syn: syntax; cat: category; v: verb; max: the maximality feature; lex: lexical item/phrase; sem: semantics; FE: frame elements; val: valence; rel: relationship attribute; DA: distinguished argument; gf: grammatical function; syn: syntactic type; lxm: lexeme. In addition, in the FE #i (i.e. the semantic role of the nominal argument) the parenthesized Qualia Structure ([+Q]) specifies four essential aspects of a word's meaning (or qualia), viz. CONSTITUTIVE ([+Q-C]), FORMAL ([+Q-F]), TELIC ([+Q-T]), and AGENTIVE ([+Q-A]). In other words, these four variables are used to identify the qualia roles of the nominal argument, so the constructional interpretation would be salient. The detailed discussion is illustrated in section 4.2.5. Besides, since the bounded "TELIC" role is capitalized, the other "telic" process used to indicate the embedded event won't be confused with the former in this thesis.

In Figure 1 above, for *WAN* is verb, its category shows 'v.' In addition, the valences that *WAN* needs are two, and it bears a nominal argument in the [*WAN*+NP] construction. That is why the maximality feature is minus in the box. Also, *WAN* is a lexical item and should be in active voice in the construction. As to the other acronyms of the variables, they are exemplified in the footnote 12 on the bottom of page 26.

4.2.2 Constructional Polysemy of [*WAN*+NP]

In [*WAN*+NP], there are four sub-constructions marked with idiosyncratic semantic roles of the object-NPs, viz. [*WAN*+NP-T], [*WAN*+NP-IT], [*WAN*+NP-M], and [*WAN*+NP-G], as in (8-11) above. Since the semantic roles are distinguished, they may render idiosyncratic denotations for each sub-construction *per se*. Therefore, the constructional polysemous interpretations would be re-exemplified as follows.

Even though [*WAN*+NP-T] takes the lion's share in the [*WAN*+NP] construction, it is just one of the constructional polysemy of [*WAN*+NP]. In Figure 2 below, most semantic components are derived from the constructional interpretation of [*WAN*+NP] as demonstrated in Figure 1 above. According to the examples shown in (22) below, the interpretation of [*WAN*+NP-T] is mainly pertaining to an active process. In addition, the Agent, x, with BK of the object-NP engaged in an Event should be volitional, and the object-NP-T is interrelated with the Event. As for the playful or non-professional Manner, it is defined by the verb *WAN* 'play.' Consequently, the semantic frame of the [*WAN*+NP-T] construction is the combination of five major semantic components, including a volitional Agent, the NP-Theme, BK, a playful or non-professional Manner, and an Event.

(22) a. *WAN2 wan2ju4* 玩玩具 'WAN toy' (a durative process)
ACTIVITY [x plays with toys]

b. *WAN2 nu3ren2* 玩女人 'WAN woman$_{([+Q\text{-}F=toy])}$' (a durative process)
ACTIVITY [x womanizes (in a playful Manner)] (=[x plays with women])

c. *WAN2 yi1ge wan2ju4* 玩一個玩具 'WAN CL toy' (a durative process)
ACTIVITY [x plays with one toy]

d. *WAN2 yi1chang3 can2ku4DE you2xi4* 玩一場殘酷的遊戲
'WAN CL cruel game' (a telic process)
ACCOMPLISHMENT [x plays a round of cruel games]

Figure 2: Constructional Interpretation of [*WAN*+NP-T]

<table>
<tr><td colspan="10">WAN+Direct Object-NP-T</td></tr>
<tr><td>syn</td><td colspan="9">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="9">frame: an active process=[x (volitional-Agent with BK$_{il}$ of the object-NP-T$_{il}$) engaged in an Event [to play with an object-NP-T$_{i(l)}$] (in a playful or nonprofessional Manner$_j$ [a beneficial sub-Event$_k$])]
FE #x [Doer], FE #i-T [Theme$_{([+Q\text{-}F])}$], (FE #j [Manner], FE #k [Event], FE #l [BK])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ theme
DA +
gf obj</td><td rowspan="2">(#j/#k/#l</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="10">lxm *wan*</td></tr>
</table>

To check the form-meaning mapping of the [*WAN*+NP-T] construction, the examples of (22) are examined as follows. In (22) as shown above, the meaning of (22a) is quite clear that the constructional interpretation can be the combination of each syntactic component. On the other hand, in (22b), the literal meaning of *WAN2 nu3ren2* 玩女人 is 'to play women,' but its real activity can be interpreted as 'to womanize (in a playful manner).' In other words, the derivational parts of the example, *WAN* 玩 'play' and *nu3ren2* 女人 'woman,' cannot provide a proper reading. However, when the nominal argument undertakes a qualia role—FORMAL, it is viewed as a toy. Namely, the woman is a toy in this case. Hence, the combination of these two derivational parts can exactly render the constructional interpretation of the opaque activity encoded in *WAN2 nu3ren2* 玩女人 'to womanize.'

As for (22c) and (22d), there is a classifier in each example, but only the latter implies that it is a telic process. The reason why the former does not render a telic implication is all about the background knowledge of the nominal argument and the classifier, and the context-induced meaning of the underspecified construction. In (22c), such classifier as *yi1ge* 一個 'a/one' is interpreted as a reading of quantification of the nominal argument, and, as we know, *yi1ge wan2ju4* 一個玩具 'one toy' does not imply that there is an end point of an event embedded in (22c). In addition, the context-induced meaning will specify the constructional denotation to be an ACTIVITY. On the contrary, *yi1chang3* 一場 'a round,' as in (22d), has an implicit temporal scale bound in the eventive classifier. In our background knowledge, a round of games will end in a limit period of time; that is, there is an end point of the event as illustrated in (22d). Consequently, the constructional depiction of [*WAN*+NP-T] provides an exact form-meaning mapping and shows the semantic features interacting with the vague event the construction undertaken.

The second sub-construction of [*WAN*+NP] is illustrated as in Figure 3 below. The semantic role marked on the object-NPs is the Incremental Theme. That is, the construction can be represented as [*WAN*+NP-IT]. In addition, even though the Incremental Theme is probably created or made by people, it is sometimes a game in which an agent must seek out someone hidden from them and vice versa, as in (23b).

(23) a. *WAN2 bao4mi3hua* 玩爆米花 'WAN popcorn$_{[+Q\text{-}A=making]}$' (a durative process)
ACTIVITY [x makes popcorn (in a playful Manner)]

b. *WAN2 duo3mao1mao1* 玩躲貓貓 'to play Hide and Seek' (a durative process)
ACTIVITY [x plays Hide and Seek]

Comparing these two examples in (23), the playful manner is hidden in (23a) but lexicalized in (23b), since the object-NP or specifically an eventive nominal argument in (23b)

is a game ‘played’ by the agent. Furthermore, the reading of (23a) might be ambiguous, because the object-NP could be a mass noun which is just like a toy for the agent or an episode (with a qualia role—[AGENTIVE=making]) that the agent makes popcorn (i.e. an Incremental Theme) in this case. The ambiguity is always the problem to the constructional interpretation, so we will elaborately explore it in section 4.2.5.

Figure 3: Constructional Interpretation of [*WAN*+NP-IT]

<table>
<tr><td colspan="11">WAN+Direct Object-NP-IT</td></tr>
<tr><td>syn</td><td colspan="10">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="10">frame: an active process=[x (volitional-Agent with BK_{il} of the object-NP-IT_{il}) engaged in an Event [resulted in the creation of an object-NP-$IT_{i(l)}$] (in a playful or nonprofessional $Manner_j$ [a beneficial sub-$Event_k$])]
FE #x [Doer], FE #i-IT [Incremental $Theme_{([+Q-A])}$],
(FE #j [Manner], FE #k [Event], FE #l [BK])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ incremental theme
DA +
gf obj</td><td rowspan="2">(#j/
#k/
#l</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="11">lxm *wan*</td></tr>
</table>

Sometimes we don’t say what we play with but we say what means we play by; in Figure 4 below, the means is actually encoded by an obscure event of playing a game or playing with something. That is, the means represents the whole scenario of the game.

(24) a. *WAN2 shuang1da3* 玩雙打 ‘WAN doubles’ (a durative process)
ACTIVITY [x plays (a game) by means of doubles]

b. *WAN2 di4fang1xing4* 玩地方性 ‘WAN localism’ (a durative process)
ACTIVITY [x plays (a game) by means of localism]

Figure 4: Constructional Interpretation of [*WAN*+NP-M]

<table>
<tr><td colspan="11">WAN+Direct Object-NP-M</td></tr>
<tr><td>syn</td><td colspan="10">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="10">frame: an active process=[x (volitional-Agent with BK_{il} of the object-NP-M_{il}) $plays_j$ ($something_i$) by means of an object-NP-$M_{i(l)}$ ([a beneficial sub-$Event_k$])]
FE #x [Doer], FE #i-M [Means], FE #j [Manner], (FE #k [Event], FE #l [BK])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ means
DA +
gf obj</td><td rowspan="2">#j/(#k/ #l</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="11">lxm *wan*</td></tr>
</table>

The interpretations of (24a-b) (as shown above) are incomprehensible by their syntactic form, since the object-NPs are a means or a part of the rule/BK bound in a game rather than a game. Hence, the constructional interpretation is a better reading for us. In other words, any opaque event can be decoded and then its unspecified semantic denotation would be coerced into a proper sense by the frame of [*WAN*+NP-M].

The last minor sub-construction is shown in Figure 5 below. Since the object-NP is a locative goal, we may think whether or not the specific city or place can be put in the slot of object-NPs. It may not be colloquial, because we do not say 'to play "a proper noun"' in this case unless it is a game. For example, *WAN2 Mei2chu2sai4* 玩梅竹賽[13] 'to play Meichu games.'

(25) a. *WAN2 hen3duo1di4fang1* 玩很多地方 'WAN many places' (a durative process)
ACTIVITY [x tours around many places (in a playful Manner)]

b. ? *WAN2 Tai2pei3* 玩台北 'WAN Taipei'

c. *Da1 jie2yun4/Kai1 gong1che WAN2 Tai2pei3* 搭捷運/開公車玩台北
'to tour around Taipei (in a playful Manner) by MRT/bus'

[13] The sentence and (25c) are retrieved from Google, the most popular searching engine around the world.

Figure 5: Constructional Interpretation of [*WAN*+NP-G]

<table>
<tr><td colspan="11">WAN+Direct Object-NP-G</td></tr>
<tr><td>syn</td><td colspan="10">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="10">frame: an active process=[x (volitional-Agent) tour around an object-NP-G$_i$ (in a playful or nonprofessional Manner$_j$ [a beneficial sub-Event$_k$])]
FE #x [Doer], FE #i-G [Goal$_{[+LOC]}$], (FE #j [Manner], FE #k [Event])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ goal$_{[+LOC]}$
DA +
gf obj</td><td rowspan="2">(#j/#k</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="11">lxm *wan*</td></tr>
</table>

In (25) as shown above, although only (25a) is acceptable and (25b) is not colloquial, we may say something derived from (25b) like (25c) in this case. To put it differently, in (25c) we also say something more about how we tour around the specific city rather than just mention to tour around the city. A possible reason to explain why (25b) is ungrammatical is just like what we mentioned above: the background knowledge (i.e. BK) should be acquired by the agent and possessed in the object-NPs of the constructions pertaining to *WAN*. Take Figures 2 through 4 for example, each construction all implies that the nominal arguments are possessed with BK, such rules/BK of games or means of playing games as shown above in examples (22-24), and the agent should be acquainted with the rules/BK before playing the games or the toys. In contrast, people may do not know much about Taipei, so they should say how to tour around Taipei first, as in (25c) above.

After analyzing these four interesting sub-constellations interrelating with [*WAN*+NP], we would like to review the constructional diagram of [*WAN*+NP] and re-depict it as in the following Figure 6. Though the build-in BK of object-NPs is one of the most distinguished semantic features bound in the construction, it is possessed by the object-NP-Theme (FE #i-T), the object-NP-Incremental Theme (FE #i-IT), and the object-NP-Means (FE #i-M); hence, it does not interact with the object-NP-Locative Goal (FE #i-G).

Figure 6: Modified Constructional Interpretation of [*WAN*+NP]

<table>
<tr><td colspan="10">WAN+Direct Object-NP</td></tr>
<tr><td>syn</td><td colspan="9">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="9">frame: an active process=[x (volitional-Agent with BK_{il} of the object-NP_{il}) engaged in an Event [[to $play_j$ with]$_{i\text{-}T(l)}$, [resulted in the creation of]$_{i\text{-}IT(l)}$, [to $play_j$ (something)$_{i\text{-}M}$ by means of]$_{i\text{-}M(l)}$, or [to tour around]$_{i\text{-}G}$ an object-$NP_{i(l)}$] (in a playful or nonprofessional $Manner_j$ [a beneficial sub-$Event_k$])]
FE #x [Doer], FE #i-T [$Theme_{([+Q\text{-}F])}$], FE #i-IT [Incremental $Theme_{([+Q\text{-}A])}$], FE #i-M [Means], FE #i-G [$Goal_{[+LOC]}$], (FE #j [Manner], FE #k [Event], FE #l-T/IT/M [BK])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ [ ]
DA +
gf obj</td><td rowspan="2">(#j/#k/
#l-T/IT/M</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="10">lxm *wan*</td></tr>
</table>

4.2.3 Constructional Interpretation of [*WAN*+R+NP]

According to the data shown above in (20) and (21), the complement of the V-R compound in [*WAN*+R+NP] is *QI3* 起 'up' (a directional RVC[14]), and it is also taken as an inceptive or an Achievement presenting the beginning of the event undertaken, as in Figure 7 below. That is, the illustration of the frame can be set as [*WAN*+*QI*+NP]. Besides, the eventive nominal arguments are marked with the Incremental Theme, as in (26) below. On the contrary, a physical object-NP bears the Theme, such example as shown below in (27). Accordingly, there seems to be a clear cut between these two semantic categories: the nonphysical episode object-NPs bear Incremental Theme, while the physical object-NP bears Theme.

(26) a. *WAN2qi3 da4feng1chui1* 玩起大風吹 'WAN-RVC Big Wind Blow'
ACHIEVEMENT [x starts to play Big Wind Blow]

[14] See Smith (1991:369~72) for detailed discussion. In short, RVC is the acronym of the Resultative Verb Complement.

b. *WAN2qi3 zuo1mi1chang2 le* 玩起捉迷藏了 'WAN-RVC Hide and Seek'
ACHIEVEMENT [x has started to play Hide and Seek]

(27) *WAN2qi3 bang4qiu2* 玩起棒球 'WAN-RVC baseball'
ACHIEVEMENT [x starts to play baseball]

Figure 7: Constructional Interpretation of [*WAN*+R+NP]

<table>
<tr><td colspan="13">WAN+R+Object-NP</td></tr>
<tr><td>syn</td><td colspan="12">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="12">frame: an active process=[x (volitional-Agent with BK_{il} of the object-NP_{il}) $starts_h$ (I)
[resulting in a $State_h$] to $play_j$ an object-$NP_{i(l)}$ ([a beneficial sub-$Event_k$])]
FE #x [Doer], FE #h [Inceptive],FE #i-T [Theme], FE #i-IT [Incremental Theme],
FE #j [Manner], (FE #k [Event], FE #l [BK])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#h</td><td>rel</td><td>θ null
DA –
gf com</td><td rowspan="2">#i</td><td>rel</td><td>θ [ ]
DA +
gf obj</td><td rowspan="2">#j/
(#k/
#l</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n -</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="13">lxm *wan*</td></tr>
</table>

Since the V-R compound provides a starting point for the event and then a durative process, the whole embedded event can be taken as an achievement that changes the situation from a state to an activity. Moreover, the V-R compound is salient in the construction, so the playful or nonprofessional Manner is actually lexicalized within the verbal predicate *per se*. It is reasonable. When we go back to Figure 4 and (24) above, we would find that, in the [*WAN*+NP-M] construction, the object-NP indicates the Means of a game and the semantic feature--Manner--is lexicalized with *WAN* from which the Manner is originally retrieved. Therefore, as shown in Figures 4 and 7, the frame element, Manner, just co-indexes with the verbal predicate--*WAN*.

4.2.4 Setting the Frame: *WAN* As a Frame-Evoking Verb

According to the linguistic data and the interpretation of the [*WAN*+NP] construction, the significant behavior of *WAN* (can be taken as a "super-lexical" morpheme[15]) is quite different from the behavior of other verbs, which only predicate events. As a frame-oriented verb, *WAN* sets a frame for diverse events. In addition, *WAN* provides a playful manner to cooperate with following object-NPs for rendering the specific sense of the encoded event. Therefore, it is postulated that *WAN* is a pro-verb[16]. For example, in the conversation--"*Ni3 hui4 DA3 qiao2pai2ma?*" 你會打橋牌嗎？ 'Can you play Bridge?' "*Wo3 bu2hui4 WAN2*" 我不會玩。 'I cannot play Bridge,' the latter obviously uses *WAN* to replace *DA*, which also means 'play' and can be a collocation with card games, including Majiang, poker, and Bridge. That is, *WAN* substitutes for *DA* to collocate with these kinds of card games just like a pro-verb, and the event is undertaken in a playful or nonprofessional manner in the frame. Therefore, *WAN* is different from other basic-level verbal predicates which just determine the situation type.

On the base of frame semantics, Fillmore and Atkins (1992: 76-7) indicate that 'a word's meaning can be understand only with reference to a structured background of experience, beliefs, or practices, constituting a kind of conceptual prerequisite for understanding the meaning.' Accordingly, the semantic frame set by *WAN* may profile these ten semantic components listed as follows:

i. Active process: the situation type of the event encoded is a dynamic process.
ii. Agent-control: the event must be controlled by the volitional agent and the background knowledge can be acquired by the agent.
iii. Background knowledge (aka BK): the agent probably possesses BK of the object-NP.
iv. Object-NP-Theme: a major variable possesses BK that should be acquired by the agent first, and it may encode the qualia role [FORMAL].
v. Object-NP-Incremental Theme: a minor variable possesses BK probably created by the agent, and it may encode the qualia role [AGENTIVE].
vi. Object-NP-Means: another minor variable possesses BK and probably is one part of the

[15] See Smith (1991:75~9) for detailed discussion of Super-lexical Morphemes.
[16] See footnote 1 for discussion of Pro-verbs.

BK.

vii. Object-NP-Locative Goal: the other minor variable is not necessarily possessing BK.
viii. Playful Manner: a semantic feature of the frame obviously derived from the verbal predicate--*WAN*--is always kept in the semantic frame.
ix. Sub-Event: an implicit feature could be realized in the interpretation of the frame.
x. Inceptive: a semantic feature rendered by RVC is used to provoke the opaque event.

As a frame-evoking verb, *WAN* may take an object-NP which encodes a semantic role, such as the major semantic role--Theme. In other words, the object-NP-Themes are potentially bound in [*WAN*+NP]. Moreover, in [*WAN*+NP-T] *WAN* mainly renders a playful or non-professional manner, and object-NP-Themes interrelate with *WAN* to formulate diverse events for the [*WAN*+NP-T] template. Eventually, by means of examining the real events encoded in the [*WAN*+NP-T] construction, the proper readings of the construction can be naturally inferred. As for the last semantic component, the V-R compound encodes the beginning of the event; that is, the Inceptive represents the starting of an activity.

4.2.5 Qualia Structure and Constructional Interpretations

In section 2.3 above, the Qualia Structure (cf. Pustejovsky 1995:76-7), specifying four essential aspects of an object-NP's meaning, is introduced to distinguish the potential ambiguity pertaining to the object-NP in the [*WAN*+NP] construction. Again, here are these qualia listed as follows:

- CONSTITUTIVE: the relation between an object and its constituent parts;
- FORMAL: that which distinguishes it within a larger domain;
- TELIC: its purpose and function;
- AGENTIVE: factors involved in its origin or "bringing it about."

In this section, these qualia are applied to solve the problem pertaining to constructional

ambiguity. Taking *WAN2 che1* 玩車 'to play with a car' for example, the opaque activities encoded in the [*WAN*+NP] construction may be interpreted as shown in (28):

(28) Three interpretations of [*WAN2 che1* 玩車 'to play with a car'] with Qualia Representations:

a. [*WAN2 che1* 玩車]=[*WAN2 na4liang4 wan2ju4che1* 玩那輛玩具車 'to play with that toy car']
Car [FORMAL=toy]:
ACTIVITY [to play with a toy]

b. [*WAN2 che1* 玩車]=[*WAN2 sai4che1* 玩賽車 'to attend car racing']
Car [TELIC=racing]:
ACTIVITY [to attend car racing (in a non-professional Manner)]

c. [*WAN2 che1* 玩車]= [*WAN2 zu3zhuang1 che1zi5* 玩組裝車子 'to assemble a car']
Car [AGENTIVE=assembling]
ACTIVITY [to assemble a car (in a playful Manner)]

In (28a), the FORMAL role of 'car' is distinguished by its resemblance--a 'toy.' In (28b), the TELIC role of 'car' interrelates with purpose and function of the car—a car 'racing' activity. In (28c), the AGENTIVE role of 'car' refers to the factor how the car is produced—'assembling.' Eventually, even though constructional ambiguity of (28) initially seems quite difficult to be distinguished, the approach of Qualia Structure can provide distinct interpretations in different roles to solve the problem encoded in the opaque event of the [*WAN*+NP] construction.

4.3 Summary

To exemplify the from-meaning mapping of the [V+NP] construction in Mandarin Chinese, here we represent an example that the verbal predicate *WAN* takes a nominal object

to form the frame: [*WAN*+NP]. According to the linguistic data as shown above in Table 1, the senses of the [*WAN*+NP] frame are so diverse that we cannot obtain the proper meanings just from the combinations of the verbal predicate *WAN* and bunches of nominal arguments following the main verb. Adopting the constructional approach, we decode the constructional denotation pertaining to the vague event bound in the [*WAN*+NP] construction. That is, a proper reading of the frame is actually embedded in the construction rather than its derivational parts.

In addition, since the object-NPs bear idiosyncratic semantic roles in the construction, we should decipher these semantic roles to specify their certain semantic denotation in the frame. Hence, in (8-11) we set four different but related sub-frames to fulfill the polysemous construction: [*WAN*+NP-T], [*WAN*+NP-IT], [*WAN*+NP-M], and [*WAN*+NP-$G_{[+LOC]}$]. Moreover, for the data show the linguistic fact that *WAN* may take a complement to form a V-R compound and then a nominal argument, we set the other frame, [*WAN*+R+NP], to interpret the senses of this kind of events undertaken. The interpretation of the latter is quite salient, because in the construction the V-R compound coerces the event to change its state into a durative process and renders a proper reading for the construction. Accordingly, maybe *WAN* is not a full fledged pro-verb in some cases, but it behaves like a pro-verb which is a 'super-lexical' morpheme and modulates the situation type of the event bound in the frame.

Furthermore, the semantic frames of the constructions embed various semantic components to specify the frame meanings of each construct interrelating with *WAN*. In other words, these semantic features are the meaning components for setting the frame and rendering proper constructional denotations. In the semantic frames, most semantic features are realized as frame elements or FEs, and some semantic features are lexicalized within the verbal predicate itself. The most distinctive meaning components are active process, volitional agent, playful or nonprofessional manner, and beneficial sub-event. As to the other components, they are semantic roles of object-NPs, viz. Theme, Incremental Theme, Means,

and Locative Goal. Other bound semantic features are BK and Inceptive: the former is interacting with the object-NPs except the object-NP-G, and the latter is bond in RVC showing the beginning of an activity or representing an achievement.

The whole picture of form-meaning mappings of the constructions set by *WAN* and the checklists of semantic features are illustrated in Figure 8 below. It renders an overview of the constructions with *WAN*. Lastly, there may be some ambiguity provoked by the construction itself, so we would utilize Qualia Structure to decipher the nominal argument and then render a proper reading for the opaque event undertaken. Consequently, the specific meaning of the construction would be comprehensible.

Figure 8: Form-Meaning Mappings of Constructions with *WAN*

Form: [*WAN*+NP]								
Meaning: an active process=[x (volitional-Agent with BK_{il} of the object-NP_{il}) engaged in an Event [[to $play_j$ with]$_{i\text{-}T(l)}$, [resulted in the creation of]$_{i\text{-}IT(l)}$, [to $play_j$ (something)]$_{i\text{-}M}$ by means of]$_{i\text{-}M(l)}$, or [to tour around]$_{i\text{-}G}$ an object-$NP_{i(l)}$] (in a playful or nonprofessional $Manner_j$ [a beneficial sub-$Event_k$])] FE #x [Doer], FE #i-T [$Theme_{([+Q\text{-}F])}$], FE #i-IT [Incremental $Theme_{([+Q\text{-}A])}$], FE #i-M [Means], FE #i-G [$Goal_{[+LOC]}$], (FE #j [Manner], FE #k [Event], FE #l-T/IT/M [BK])								
sub-frames/variables	FE #x	FE #i-T	FE #i-IT	FE #i-M	FE #i-G	FE #j	FE #k	FE #l
[*WAN*+NP-T]	∨	∨	--	--	--	∨	∨	∨
[*WAN*+NP-IT]	∨	--	∨	--	--	∨	∨	∨
[*WAN*+NP-M]	∨	--	--	∨	--	∨	∨	∨
[*WAN*+NP-$G_{[+loc]}$]	∨	--	--	--	∨	∨	∨	--
Form: [*WAN*+R+NP]								
Meaning: an active process=[x (volitional-Agent with BK_{il} of the object-NP_{il}) $starts_h$ (I) [resulting in a $State_h$] to $play_j$ an object-$NP_{i(l)}$ ([a beneficial sub-$Event_k$])] FE #x [Doer], FE #h [Inceptive],FE #i-T [Theme], FE #i-IT [Incremental Theme], FE #j [Manner], (FE #k [Event], FE #l [BK])								
sub-frames/variables	FE #x	FE #h	FE #i-IT	FE #i-T	FE #j	FE #k	FE #l	
WAN+R+NP-IT	∨	∨	∨	--	∨	∨	∨	
WAN+R+NP-T	∨	∨	--	∨	∨	∨	∨	

CHAPTER FIVE

ANALYSIS OF *NONG* 弄+NP

5.1 Initial Observations of *NONG*

The very beginning discoveries of the linguistic data of *NONG*, such as its grammatical usage and major related constructions, are shown in section 5.1.1. On that account, the associated patterns with *NONG* and the semantic roles of the object-NPs will be represented in sections 5.1.2 and 5.1.3, respectively.

5.1.1 Constructions with *NONG* in the Sinica Corpus

The linguistic data of *NONG* 弄, retrieved from the Sinica Corpus, include two grammatical uses: One is a transitive verbal predicate which immediately takes an object-NP or takes a complement (i.e. RVC) to form a Verb-Complement (V-R) compound, and the other a nominal use. As Table 2 shows below, various constructions can be rendered by *NONG*. Namely, on one hand, it prominently takes an object-NP to feature the constructional template--[*NONG*+NP] where *NONG* is immediately followed by a constituent NP. For example, *NONG4 xi1fan4* 弄稀飯 'to cook rice soup' and *NONG4 qian2* 弄錢 'to make money.' On the other hand, *NONG* may take RVC to form Verb-Complement compounds (henceforth V-R compounds) and then the compound takes a constituent NP to fashion the other constructional template--[*NONG*+R+NP], as in *meng3dong3-de hai2zi NONG4 bu4 qing1chu3 zhe4xie1* 懵懂的孩子**弄不清楚**這些 'naïve kids cannot get through with these (affairs)' and *NONG4 qing1chu3 ta1men zhi1jian1-DE guan1xi1* 弄**清楚**他們之間的關係 'to get through with their relationship.' As for the other constructions with *NONG*, such as the

object-NP (following *NONG* or following the V-R compound), which may be topicalized with/without BA 把 expression, and some idiomatic uses of *NONG*, which are fossilized in certain contexts (such examples as shown in Table 2), they are not the rubric of the thesis. In the following sections of this chapter, we will finely explore idiosyncratic properties and correspondent features bound in forms and meanings exemplified in the major constructions of *NONG*: [*NONG*+NP] and [*NONG*+R+NP]. For we can just put limited examples in Table 2, many other examples pertaining to *NONG* are exhibited in Appendix B.

Table 2: Constructions with *NONG*

Examples of [*NONG*+NP]	Form	Meaning
NONG4 xi2fan4	弄稀飯	'to cook rice soup'
NONG4 sauce	弄 sauce	'to make sauce'
NONG4 qian2	弄錢	'to make money'
NONG4 yi1ge dan4	弄一個蛋	'to cook one egg'
NONG4 na4ge xi1fan4	弄那個稀飯	'to cook that rice soup'
NONG4 ma3tong3	弄馬桶	'to get toilets repaired'
NONG4 se2	弄蛇	'to play with snakes'
NONG4 ba3 qiang1	弄把槍	'to get a gun'
NONG4 ge xiao3can1pan2	弄個小餐盤	'to get a small serving plate'
NONG4-le yi1pan2DE lian2wu4	弄了一盤的蓮霧	'have served a plate of bell fruit'
NONG4 xie1 qian2 lai2	弄些錢來	'to make some money and get them back to here'
NONG4 xie1 jiu3cai4 shang4lai2	弄些酒菜上來	'to cook some dishes and serve them with some wine up to here'
NONG4 xie1 chi1DE lai2	弄些吃的來	'to cook something edible and serve them up to here'
NONG4 jiao3zi yao4gei3 er2zi chi1	弄餃子要給兒子吃	'to cook dumplings and serve them for the son to eat'
NONG4 fan4 gei3 ta1 chi1	弄飯給他吃	'to cook rice and serve it for him to eat'
NONG4 xie1 nan2ren2 hui2lai2	弄些男人回來	'to get back some men'
NONG4 ta1 bu2 xia4lai2	弄他不下來	'cannot get him down'
NONG4 ji3xiang1 ke3le4 lai2	弄幾箱可樂來	'to get back a few cases of cola'
NONG4 juan3 dai4zi lai2	弄卷帶子來瞧瞧	'to get back a video tape to take a look'

qiao2qiao2		
NONG4 dian3 she2mo zuo4 huo3cai2	弄點什麼做火柴	‘to get bits of something to make matchsticks’
Xiao3dui4 lu4ying2 ni3men yao4 ze3me NONG4	小隊露營你們要怎麼弄	‘The small squad camping—how would you like to manage?’
Examples of [*NONG*+R+NP]	Form	Meaning
NONG4 bu4qing1chu3 zhe4xie1	弄不清楚這些	‘cannot get through with these’
NONG4 bu4qing1 ta1men-de xi2xing4	弄不清它們的習性	‘cannot get through with their habits’
NONG4 qing1chu3 ta1men zhi1jian1-de guan1xi1	弄清楚他們之間的關係	‘to get through with their relationship’
NONG4 shou2-le ma1ma1 ‘xiang3ting1’-de hua4	弄熟了媽媽「想聽」的話	‘have got through with the words mom “likes to listen to”’
NONG4 qing1chu3 ta1 jiu4jing4 shi4 she2me	弄清楚牠究竟是什麼	‘to get through with what hell it is’
Mei2 NONG4 qing1chu3 zhuang4kuang4 jiu4 da4si4 kai1pao4	沒弄清楚狀況就大肆開炮	‘didn’t get through with the situation to be sharply scolding’
Mu4biao NONG4 qing1chu3	目標弄清楚	‘the target that is to get through with’
BA3 zi4ji3-de chang2duan3chu4 NONG4 qing1chu3	把自己的長短處弄清楚	‘to make one’s own merits and defects be figured out’
Examples of Idioms	Form	Meaning
Wu3ya2nong4zhua3	舞牙弄爪	‘wildly showing off’
Shi2hua1nong4cao3	蒔花弄草	‘planting flowers and grasses’

5.1.2 Associated Patterns of [*NONG*+NP] and the Semantic Roles of the Object-NPs

According to Table 2 above, in [*NONG*+NP] the immediate constituent NP following *NONG* can be interpreted as two kinds of direct objects carrying two different semantic roles--Incremental Theme and Theme, and it may also take a separable complement or RVC of Verb-Complement compounds to specify a sub-event. Hence, there would be four patterns or sub-constructions correlating with [*NONG*+NP] as shown in the following examples

(29-32). As examples (29) through (32) illustrated below, these four idiosyncratic patterns, [*NONG*+NP-Incremental Theme], [*NONG*+NP-Theme], [*NONG*+NP-Incremental Theme+C], and [*NONG*+NP-Theme+C] (henceforth represented as [*NONG*+NP-IT], [*NONG*+NP-T], [*NONG*+NP-IT+C], and [*NONG*+NP-T+C], respectively), take various object-NPs, and their semantic interpretations are not just the combination of the meanings retrieved from *NONG*, the object-NPs, and the complement. In other words, these sub-constructions would specify new constructional senses for each construct of the sub-constructions pertaining to [*NONG*+NP].

(29) [*NONG*+NP-IT]:

NONG4 xi2fan4	弄稀飯	'to cook rice soup'
NONG4 sauce	弄 sauce	'to make sauce'
NONG4 qian2	弄錢	'to make money'
NONG4 yi1ge dan4	弄一個蛋	'to cook one egg'
NONG4-le yi1pan2-de lian2wu4	弄了一盤的蓮霧	'have served a plate of bell fruit'

(30) [*NONG*+NP-T]:

NONG4 ma3tong3	弄馬桶	'to get toilets repaired'
NONG4 se2	弄蛇	'to play with snakes'

(31) [*NONG*+NP-IT+C]:

NONG4 xie1 qian2 lai2	弄些錢來	'to make some money and get them back to here'
NONG4 xie1 jiu3cai4 shang4lai2	弄些酒菜上來	'to cook some dishes and serve them with some win up to here'
NONG4 xie1 chi1DE lai2	弄些吃的來	'to cook something edible and serve them up to here'

(32) [*NONG*+NP-T+C]:

NONG4 xie1 nan2ren2 hui2lai2	弄些男人回來	'to get back some men'
NONG4 ta1 bu2 xia4lai2	弄他不下來	'cannot get him down'
NONG4 ji3xiang1 ke3le4 lai2	弄幾箱可樂來	'to get back a few cases of cola'

According to examples (29-32), the meanings are quite diverse and hidden in the events interrelating to the constructions themselves, such as [*NONG*+NP-T]. In addition, since *NONG* fails to specify the episode information pertaining to an activity undertaken, an object-NP, bearing Incremental Theme and Theme, provides the semantic information for licensing a specific event packaged in [*NONG*+NP-IT], [*NONG*+NP-T], [*NONG*+NP-IT+C], and [*NONG*+NP-T+C], respectively. As shown above in (29) and (30), diverse semantic types of object-NP-IT and object-NP-T, correlating with *NONG*, indicate various opaque events bound in [*NONG*+NP-IT] and [*NONG*+NP-T]. For example, the activity taken place in *NONG4 sauce* 弄 sauce 'to make sauce' is different from that in *NONG4 se2* 弄蛇 'to play with snakes,' as in (29) and (30). The opaque event encoded in the former cannot be immediately retrieved from the individual lexical items, and the unspecified activity bound in the later is not salient, either. In order to further decode the diverse underspecified meanings, the constructional interpretations of [*NONG*+NP-IT], [*NONG*+NP-T], [*NONG*+NP-IT+C], and [*NONG*+NP-T+C] therefore will be elaborately explored in section 5.2.2.

5.1.3 Associated Patterns of [*NONG*+R+NP] and the Semantic Role of the Object-NPs

In [*NONG*+R+NP], the semantic role of the object-NP following the *NONG-R* compound should be Theme, as in (33) below, and it interrelates with the V-R compound to render the correlated parallel pattern, [*NONG*+R+NP-Theme] (henceforth [*NONG*+R+NP-T]), to [*NONG*+R+NP]. The examples of [*NONG*+R+NP-T] are listed in (33). Besides, comparing with the diverse opaque events wrapped in the [*NONG*+NP] construction, the semantic information provided by the V-R compound is relatively salient; namely, the accomplishment specified by [*NONG*+R+NP-T] is transparent. For example, the meaning of *NONG bu4qing1chu3 zhe4xie* 弄不清楚這些 'cannot get through with these' is plain and

perceptible. Later in section 5.2.3, we will discuss the constructional interpretation of [*NONG*+R+NP-T].

(33) [*NONG*+R+NP-T]:

NONG bu4qing1chu3 zhe4xie1	弄不清楚這些	'cannot get through with these'
NONG bu4 qing1 ta1men DE xi1xing4	弄不清它們的習性	'cannot get through with their habits'
NONG qing1chu3 ta1men zhi1jian1 DE guan1xi	弄清楚他們之間的關係	'to get through with their relationship'
NONG shou2LE ma1ma1 'xiang3ting1' DE hua4	弄熟了媽媽「想聽」的話	'have got through with the words mom "likes to listen to"'

5.2 Constructional Analyses of [*NONG*+NP] and [*NONG*+R+NP]

Just as we put in Chapter 4, the meaning of each construct of such construction as [*WAN*+NP] is not the combination of the meanings drawn from the transitive predicate and its following constituent NP. Rather, each lexical item is actually licensed by [V+NP], such template as [*NONG*+NP] in this chapter, and then the specified semantic interpretation is rendered by the construction, as in section 5.2.1.

To interpret the unspecified events bound in [*NONG*+NP] and [*NONG*+R+NP], the constructional interpretation would be elaborately depicted by the modified diagram following Fried and Östamn (2004). In particular, four sub-constructions are interpretably constructional polysemy of [*NONG*+NP]. Thus, each of them would be demonstrated by a proper semantic frame, as in section 5.2.2. Meanwhile, a constructional interpretation of [*NONG*+R+NP] is also set by a certain diagram, as in section 5.2.3. Eventually, we can postulate a frame with *NONG* to argue that *NONG* is a frame-evoking verb in section 5.2.4. As for the potential ambiguity exemplified by some constructs of [*NONG*+NP], we would recruit Qualia Structure to distinguish these swinging interpretations in section 5.2.5.

5.2.1 Constructional Interpretation of [*NONG*+NP]

Following Fried and Östman (2004), a feasible depiction of [*NONG*+NP] is illustrated in Figure 9 below.

Figure 9: Constructional Interpretation of [*NONG*+NP]

<table>
<tr><td colspan="10">NONG+Direct Object NP</td></tr>
<tr><td>syn</td><td colspan="9">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="9">frame: an active process=[x (volitional-Agent) does something (in an informal Manner$_k$) [associated with an object-NP$_{i(j)}$ (resulting in a State$_j$ [measured by the object-NP$_{ij}$])]]
FE #x [Doer], FE #i [$_{([+Q])}$], (FE #j [ ], FE #k [Manner])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ [ ]
DA +
gf obj</td><td rowspan="2">(#j/ #k</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="10">lxm *nong*</td></tr>
</table>

As the diagram shows, in the syntactic domain, the transitive verb, *NONG*, is a lexical item and takes a direct object-NP in an active voice to fulfill the maximum valence requirement of the construction. In the second box, the frame elements (i.e. FEs) of an event rendered by [*NONG*+NP] are a volitional agent (x), a variable #i (viz. the semantic role), and the other implicit variable #j. The variable #i is specified by the object-NP, and the variable #j represents an implied state determined by the object-NP, too. Videlicet, a certain interpretation of the construction would result in an implied state which is specified by the object-NP. In view of the consequence that there are so many sub-constructions pertaining to [*NONG*+NP], we provide fine-grained semantic interpretations to the constructional polysemy of [*NONG*+NP] as in section 5.2.2.

5.2.2 Constructional Polysemy of [NONG+NP]

In [*NONG*+NP], four sub-constructions are represented with the semantic roles of the object-NP--Incremental Theme and Theme, viz., [*NONG*+NP-IT], and [*NONG*+NP-T], and then, following the object-NP, with the split complement of the Verb-Complement compound attached--[*NONG*+NP-IT+C], and [*NONG*+NP-T+C]. For that reason, they can be distinguished by four different constructional interpretations.

In Figure 10 below, the constructional interpretation of [*NONG*+NP-IT] would be specified in case that the FE #i is an "Artifact," which bears an NP-Incremental Theme. For example, (34) (below) illustrates the constructional interpretations of the constructs of [*NONG*+NP-IT]. As to the implied state parenthesized with the FE #j, it would keep in a durative activity,[17] as in (34a), for the object-NP is a mass term[18] without any determiners. In contrast, it may stop at an end point, as in (34b), since the object-NP is taking a determiner or, specifically, a Mandarin quantifier/classifier.

(34) a. *NONG4 xi1fan4* 弄稀飯 'NONG rice-soup$_{[+Q\text{-}A=cooking]}$' (a durative process)
ACTIVITY [x cooks rice-soup (in an informal Manner)]

b. *NONG4 yi1ge dan4* 弄一個蛋 'NONG one CL egg$_{[+Q\text{-}A=cooking]}$' (a telic process)
ACCOMPLISHMENT [x cooked one egg (in an informal Manner)]

[17] According to the following neat explanation (by Verkuyl) adopted from Dowty (1991: 567~571) that "bare plurals and mass-term arguments can make a sentence with a telic predicate behave as if it were 'durative' or 'imperfective' in aspect," we can use it to distinguish which object-NP should take either a telic predicate or an atelic aspect. However, in contrast with (34b), the nominal arguments with classifiers in (22c) and (22d) of section 4.2.2 (pp.28-9) have idiosyncratic implications that *yi1ge wan2ju4* 一個玩具 'one toy' does not render a telic reading but *yi1chang3 you2xi4* 一場遊戲 'a round of games' does imply an end point in the event. The fine-grained denotations of (22c-d) are provoked by the context-induced meaning and the embedded background knowledge of the nominal arguments.

[18] Also see Smith (1991:48) for discussion that many constellations change situation type according to their argument NPs. That is, an uncountable NP argument can infer that they are Activities. In contrast, Accomplishments may include countable NP arguments.

Figure 10: Constructional Interpretation of [*NONG*+NP-IT]

<table>
<tr><td colspan="11">NONG+Direct Object NP-IT</td></tr>
<tr><td>syn</td><td colspan="10">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="10">frame: an active process=[x (volitional-Agent) does something (in an informal Manner$_k$) [to obtain an object-NP-IT$_{i(j)}$ (resulting in a State$_{ij}$ [measured by the object-NP-IT$_{ij}$])]]
FE #x [Doer], FE #i-IT [Artifact$_{([+Q-A])}$], (FE #j [ ], FE #k [Manner])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ incremental theme
DA +
gf obj</td><td rowspan="2">(#j/
#k</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="11">lxm *nong*</td></tr>
</table>

The interpretation of the opaque event encoded in (34a) is obviously durative, and, since the object-NP-IT is a bare noun, it coerces the construct into behaving as an activity with imperfective or atelic aspect in this case. In contrast with (34a), the telic event pertaining to (34b) will be accomplished when “one egg” is done, because the object-NP-IT of the construction is exemplified by a definite quantity of eggs. To distinguish the vague denotations of the nominal argument by the qualia role—[AGENTIVE], we can easily read the meanings of the object-NP-ITs, so we could tackle down the potential ambiguity activated by the construction *per se.*

The second sub-construction is depicted as Figure 11 below. The interpretation is different from that of the first sub-construction--[*NONG*+NP-IT]. The key point is that the object-NP-T is already there in our world but the object-NP-IT is a creature of the event. In other words, the object-NP-IT does not exist unless it is created by the agent hidden behind the obscure event covered by [*NONG*+NP-IT]. Rather than making an object-NP-IT, the interpretation of the opaque event bound in [*NONG*+NP-T] is to associate with the object-NP-T. Example (35) (below) demonstrates the interpretations of the specified constructs.

Figure 11: Constructional Interpretation of [*NONG*+NP-T]

<table>
<tr><td colspan="11">NONG+Direct Object NP-T</td></tr>
<tr><td>syn</td><td colspan="10">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="10">frame: an active process=[x (volitional-Agent) does something (in an informal Manner$_k$] [with an object-NP-T$_{i(j)}$ (resulting in a State$_{ij}$ [measured by the object-NP-T$_{ij}$])]]
FE #x [Doer], FE #i [Thing$_{([+Q\text{-}T])}$], (FE #j [ ], FE #k [Manner])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ theme
DA +
gf obj</td><td rowspan="2">(#j/ #k</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="11">lxm *nong*</td></tr>
</table>

(35) a. *NONG4 se2* 弄蛇 ‘NONG snake’ (a durative process)
ACTIVITY [x plays with snakes]

b. *NONG4 ma3tong3* 弄馬桶 ‘NONG toilet$_{([+Q\text{-}T=repairing])}$’ (a durative process)
ACTIVITY [x gets toilets repaired (in an informal Manner)]

In (35a) and (35b), the obscure events, taking bare nouns--snakes and toilets, are a durative process, since there is not any quantifier or classifier blocked between the verb *NONG* and the NP-constituent. In other words, the classifier would coerce a continuous activity into an accomplishment in this case. Besides, (35a) can be taken as an example that overlaps with [*WAN*+NP], because its interpretation is identical with that of *WAN2 se2* 玩蛇 ‘to play with snakes.’ Furthermore, as a qualia role, [TELIC] is used to help acquire a proper reading of the nominal argument in (35b).

To explore the constructions bearing complements, we would check the data as shown above in (31) and (32). According to the data, the most significant verb complement or RVC (combined with *NONG* to render a Verb-Complement Compound) exemplified in the constructions [*NONG*+NP-IT+C] and [*NONG*+NP-T+C] is *LAI* 來 ‘come.’ Namely, the

constructional interpretations depicted in Figures 12 and 13 below include a resultative state which is salient in contrast with those illustrated in Figures 10 and 11 (above) with the unspecified FE#j, an under-specified state. In particular, the other unclear variable--the sub-event (i.e. a beneficial event)--implied by the complement following the object-NP, as in Figures 12 and 13, is also bound into the specific interpretation of the templates. That is, the FE #j and the parenthesized FE #k are interrelated with these constructions, as in Figures 12 and 13. Consequently, the constructional interpretations of [*NONG*+NP-IT+C] and [*NONG*+NP-T+C] are unique contrasts to those of [*NONG*+NP-IT] and [*NONG*+NP-T] that lack RVC following the object-NP to intuitionally profile an indistinct sub-event.

Figure 12: Constructional Interpretation of [*NONG*+NP-IT+C]

<table>
<tr><td colspan="13">NONG+Direct Object NP-IT+Complement</td></tr>
<tr><td>syn</td><td colspan="12">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="12">frame: an active process=[x (volitional-Agent) does something (in an informal Manner$_k$) [to obtain an object-NP-IT$_i$ resulting in a State$_{j(l)}$ (RVC) ([a beneficial sub-Event$_{jl}$])]]
FE #x [Doer], FE #i [Artifact$_{([+Q-A])}$], FE #j [Result], (FE #k[Manner], FE #l [Benefit])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ
incremen-
tal theme
DA +
gf obj</td><td rowspan="2">#j</td><td>rel</td><td>θ null
DA –
gf com</td><td rowspan="2">(#k/
#l</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="13">lxm *nong*</td></tr>
</table>

(36) a. *NONG4 xie1 chi1DE lai2* 弄些吃的來

‘NONG some edible$_{[+Q-A=cooking]}$ RVC[19]’ (a telic process)

ACCOMPLISHMENT [x cooks something edible and serves them up to here (in an informal Manner)]

[19] Adopting from Smith (1991: 353), RVC is the acronym of the ‘resultative verb complement.’

b. *NONG4 xie1 qian2 lai2* 弄些錢來

'NONG some money$_{[+Q\text{-}A=making]}$ RVC' (a telic process)

ACCOMPLISHMENT [x makes money and gets them back to here (in an informal Manner)]

The beneficial sub-event in (36a-b) above is profiled by the RVC following the object-NP, for the sub-event is an implication encoded in the construction and it is not so transparent that we cannot immediately retrieve the semantic information from the constituents of the example. Actually, in these two cases, the identical telic process shows the iconicity of Mandarin that the order of the events should follow our spatio-temporal cognition in the real world; namely, we should cook something edible first and then serve them up to here for people. However, the irrealis verbal expression encodes the second event *per se*, or let's put it this way that the second event is not realized yet until the first event is accomplished in the future. Besides, the qualia role for the object-NP-Incremental Theme is [AGENTIVE], so the denotation of the construction is distinguished.

Figure 13 (below) illustrates a small number of features distinguished from that of Figure 12 above. First, the object-NP bears Theme as its semantic role in Figure 13 while Incremental Theme Figure 12. Accordingly, second, the semantic interpretation of *NONG* means 'to do something with' in the template, as in Figure 13, for, with RVC, the construction coerces the agent to do something with the object-NP and benefit from it.

(37) a. *NONG4 ji3xiang1 ke3le4 lai2* 弄幾箱可樂來

'NONG few CL cola$_{[+Q\text{-}T=drinking]}$ RVC' (a telic process)

ACCOMPLISHMENT [x gets back a few cases of cola (in an informal Manner for someone to drink)]

b. *NONG4 xie1 nan2ren2 hui2lai2* 弄些男人回來

'NONG few man$_{[+Q\text{-}T=having\ fun]}$ RVC' (a telic process)

ACCOMPLISHMENT [x gets back some men (in an informal Manner for someone to have fun)]

c. *NONG4 ta1 bu2 xia4lai2* 弄他不下來[20] 'NONG he NEG RVC' (a telic process)
ACCOMPLISHMENT [x cannot get him down (in an informal Manner for sakes)]

d. *bu4neng2 BA3 ta1 NONG4 xia4lai2* 不能把他弄下來 'cannot get him down'

Figure 13: Constructional Interpretation of [*NONG*+NP-T+C]

<table>
<tr><td colspan="13">NONG+Direct Object NP-T+Complement</td></tr>
<tr><td>syn</td><td colspan="12">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="12">frame: an active process=[x (volitional-Agent) does something (in an informal Manner$_k$) [with an object-NP-T$_i$ resulting in a State$_{j(l)}$ (RVC) ([a beneficial sub-Event$_{jl}$])]]
FE #x [Doer], FE #i [Thing$_{([+Q-T])}$], FE #j [Result], (FE #k [Manner], FE #l [Event])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ theme
DA +
gf obj</td><td rowspan="2">#j</td><td>rel</td><td>θ null
DA –
gf com</td><td rowspan="2">(#k/
#l</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="13">lxm *nong*</td></tr>
</table>

The object-NP in (37a) above seems available for the agent, for it bears an NP-Theme but an NP-Incremental Theme which should be made by people. In addition, with the qualia role—[TELIC], we would not be confused with the interpretations of the construction, even though there is a male animate nominal argument embedded with Theme, as in (37b). As for (37c), it is a unique example. First of all, some object-NPs, such examples as in (37a-b) above, are almost the things, but in (37c) the man is a marginal example for the semantic frame; namely, the FE #i is represented by a definite person in (37c). Second, a more fine-grained template for (37c) may be the pivotal construction that the pronoun bearing the "accusative" case given by the first transitive predicate, *NONG*, is also the subject of the following predicate: *LAI* 來 'come.' Third, (37c) can be paraphrased as (37d) that belongs to the *BA* construction. Here the man is topicalized by the *BA* construction, in which the definite person is the direct object of *BA* 把. Finally, comparing (37c) with (37d), we may explore an

[20] See Chao (1968: 325~350), Li and Thompson (1981: 594~622), and Chu and Chi (1999: 35~50) for detailed discussion of the pivotal construction.

interesting finding that (37d) or the BA construction may be derived from (37c). In other words, (37c) could be an overlap between the BA construction and the prototypical verbal expression of *NONG*, as in (37a-b).

To interpret the constructional meanings of the polysemy derived from [*NONG*+NP], the original diagram of [*NONG*+NP], as in Figure 9 above, should be modified as Figure 14 below and the semantic frame of the semi-filled pattern would be refined.

Figure 14: Modified Constructional Interpretation of [*NONG*+NP]

<table>
<tr><td colspan="13">NONG+Direct Object NP(+Complement)</td></tr>
<tr><td>syn</td><td colspan="12">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="12">frame: an active process=[x (volitional-Agent) does something (in an informal Manner$_k$) [[to obtain]$_{i\text{-}IT}$ or [with]$_{i\text{-}T}$ an object-NP$_{ij}$ (resulting in a Sate$_{j(l)}$ (RVC) [measured by the object-NP$_{ij}$] ([a beneficial sub-Event$_{j\text{-}RVCl}$]))]]
FE #x [Doer], FE #i-IT [Artifact$_{([+Q\text{-}A])}$], FE #i-T [Thing$_{([+Q\text{-}T])}$], FE #j [ ],
(FE #j-RVC [Result], (FE #k [Manner], FE #l [Event]))</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ [ ]
DA +
gf obj</td><td rowspan="2">(#j</td><td>rel</td><td>θ null
DA –
gf-rvc com
gf [ ]</td><td rowspan="2">(#k/
#l</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">))}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="13">lxm *nong*</td></tr>
</table>

In Figure 14 above, the separable complement (i.e. RVC) of Verb-Complement compounds is taken as a variable, since, according to the data, as in (29-32), it is a trigger of the resultative state when it exhibits in the constituent following the object-NP. Moreover, the separable complement would also imply that there is another hidden beneficial sub-event taken place after the resultative state accomplished.

5.2.3 Constructional Interpretation of [*NONG*+R+NP]

As the data shown above in (33), the most significant complement of the V-R Compound

in [*NONG*+R+NP] is *QINGCHU* 清楚 'clarify.' Namely, the representation of the construction can be paraphrased as [*NONG*+*QINGCHU*+NP]. Besides, the semantic role of the object-NP is not only a Theme, but also is nonphysical; hence, the construction can be realized as [*NONG*+R+NP-T]. On those grounds, the V-R compound takes over the function of the original verb as depicted in Figure 15 below, so the situation type changes into the resultative state composed in the construction becoming relatively salient. However, the sub-event implicated by the construction is somehow still opaque, even though the object-NP is expanded into a predicate, as in (38) below.

Figure 15: Constructional Interpretation of [*NONG*+R+NP-T]

<table>
<tr><td colspan="13">NONG+R+NP-T</td></tr>
<tr><td>syn</td><td colspan="12">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="12">frame: an active process=[x (volitional-Agent) gets through with an object-NP-T_i (in an informal $Manner_k$) to achieve the mental $State_h$ (RVC) ([a beneficial sub-$Event_j$])]
FE #x [Doer], FE #h [Result], FE #i [Nonphysical], (FE #j [Event], FE #k [Manner])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#h</td><td>rel</td><td>θ null
DA –
gf com</td><td rowspan="2">#i</td><td>rel</td><td>Θ theme
DA +
gf obj</td><td rowspan="2">(#j/
#k</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n -</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="13">lxm *nong*</td></tr>
</table>

(38) a. *NONG bu4 qing1 ta1men-de xi1xing4* 弄不清它們的習性
'NONG-NEG-RVC they-GEN habits' (a telic process)
ACCOMPLISHMENT [x cannot get through with their habits (in an informal Manner for better understanding them)]

b. *NONG4 shou2LE ma1ma1 'xiang3ting1'-de hua4* 弄熟了媽媽「想聽」的話
'NONG-RVC-ASP mother "want listen" GEN word' (a telic process)
ACCOMPLISHMENT [x has got through with the words mom 'likes to listen to' (in an informal Manner for better understanding her)]

c. **NONG shou2 fan4* *弄熟飯 '*to familiarize rice'
(but *BA3 fan4 NONG4shou2* 把飯弄熟 'to make rice be done' is OK)

d. **NONG qing1chu3 yi1tiao2 gou3* *弄清楚一條狗 '*to clarify a dog'

From (38a) to (38b) are examples to illustrate the template of Figure 15 above. In (38b), *shou2* 熟 'be familiar with' can be seen as a paraphrase of *QINGCHU* 清楚 'clarify,' so the specific interpretations of the V-R compound of [*NONG*+R+NP-T] are not diverse. Notwithstanding the semantic interpretation of the construction is very similar, the implicit sub-event undertaken by the semantic frame still needs to be explored by the whole template itself. On that account, we may interpret the implication bound in the indistinct sub-event as a beneficial event just like those encoded in the related sub-constructions of [*NONG*+NP].

Since the requisition of the mappings between the compositionality and the semantic frame of the construction is not necessarily one-to-one, the interpretation of [*NONG*+R+NP-T] changes its situation into a resultative state evoked by the V-R compound rather than a durative activity provoked by the construction itself. Therefore, the object-NP of (38c), 'rice,' is a physical stuff and is taken as a typical object-NP bearing Incremental Theme, so it is not colloquial here but will be a grammatical expression within the BA construction. In addition, the object-NP of (38d)—a dog—is obviously an animate animal or a typical Theme, it is ungrammatical. In consequence, the object-NP, following the V-R compound, being a physical stuff, is ruled out, unless it is a nonphysical stuff bearing Theme in the template.

5.2.4 Setting the Frame: *NONG* As a Frame-Evoking Verb

The same lexical status that the *WAN* may be not a full fledge pro-verb in some cases but it behaves like a pro-verb in the last chapter is undertaken by *NONG* here. For example, in these two sentences: *Ni3 zhi1bu4zhi1dao4 ze3me tiao2 jiang4liao4* 妳知不知道怎麼調醬

料？ ‘Do you know how to mix sauce?’ *Wo3 bu4zhidao4 ze3me NONG4* 我不知道怎麼弄 ‘I don’t know how to make it,’ it is obvious that *NONG* 弄 ‘do/make’ replaces the former verbal predicate *tiao2* 調 ‘mix’ in this case. Hence, the function of *NONG* is also like a pro-verb. As for the different parts, they are the semantic features for *NONG* to set its semantic frame. The semantic frame set by *NONG* may profile the following seven semantic features:

i. Active process: an event undertaken in the frame may be telic or durative but must be dynamic.
ii. Agent-control: the volitional agent can control the event.
iii. Informal Manner: a semantic feature is retrieved from the verbal predicate *NONG*.
iv. Object-NP-Incremental Theme: the object-NP may bear this semantic role and encode the qualia role [AGENTIVE].
v. Object-NP-Theme: the other semantic role may be bound in the object-NP and encode the qualia role [TELIC].
vi. Resultative state: an unspecified state is exhibited in the frame or a distinct resultative state may be activated by RVC.
vii. Beneficial sub-event: another unilluminated component is marked by the frame and introduced by the representation of RVC.

A vague event carried by *NONG* should be active and under the agent’s control, even though the process is either telic or durative. In addition, the object-NP following *NONG* may be equipped with Incremental Theme or Theme which are typical semantic roles bond in an object-NP, and, in particular, their qualia roles can be distinguished by [AGENTIVE] and [TELIC], respectively. As for the last two could-be-nontransparent features, the accomplishment depends on if there is a complement which may change the situation type into the state that is comprehensible or easily understood, and the beneficial sub-event needs an obvious predicate to clarify the enigmatic sub-event pertaining to the template set by *NONG*. Consequently, all of the components interrelated with *NONG* are semantic pebbles used to construct the meaning of the template that cannot be synthesized by its separate parts.

5.2.5 Qualia Structure and Constructional Interpretations

There may be potential ambiguity evoked by the frame which is set by a frame-evoking verb, because a number of features are potential semantic information to be equipped with each other and then to specify an intelligible meaning for the frame. For that reason, Qualia Structure, again, is applied to discern the ambiguity carried by the frame as illustrated in (39) below:

(39) Two possible interpretations of [*NONG4 yi1wan3 chao3fan4* 弄一碗炒飯 'to cook a bowl of fried rice'] with Qualia representation:

a. [*NONG4 yi1wan3 chao3fan4* 弄一碗炒飯]=[*chao3 yi1wan3 fan4* 炒一碗炒飯 'to fry a bowl of fried rice']
Fried rice [AGENTIVE=to fry]
ACCOMPLISHMENT [x fried a bowl of fried rice]

b. [*NONG4 yi1wan3 chao3fan4* 弄一碗炒飯]=[*chen2 yi1wan3 chao3fan4* 盛一碗炒飯 'to serve a bowl of fried rice']
Fried rice [TELIC=to serve]
ACCOMPLISHMENT [x served a bowl of fried rice]

In (39a) the AGENTIVE role of fried rice (the object-NP) is "to fry;" on the other hand, in (39b) the TELIC role of fried rice, which is already done, is "to serve." Moreover, since the Qualia roles are differential, the semantic role of the object-NP is set apart into two roles, viz., Incremental Theme for (39a) and Theme for (39b). Accordingly, the ambiguity is no more there, and the distinctive meanings of [*NONG4 yi1wan3 chao3fan4* 弄一碗炒飯] are easily understood.

5.3 Summary

In this chapter, the main verb or the transitive predicate, *NONG*, takes an object-NP to form [*NONG*+NP], and it combines with complements to form a V-R compound--[*NONG*+R], which takes an object-NP to construct the template: [*NONG*+R+NP]. Since the events contained in the former are dim, the meanings of the cryptic events are not just the semantic combination of constituents bound in the frame. Besides, the resultative state of [*NONG*+R+NP] is quite clear, because it is provoked by the *NONG*-R compound. Thus, the constructional interpretations of the frames may render the genuine meanings for the opaque events undertaken. On that ground, four sub-constructions taking two semantic roles of object-NPs, Incremental Theme (IT) and Theme (T), and a split complement (RVC) following the object-NP are interpreted as constructional polysemy of [*NONG*+NP], viz., [*NONG*+NP-IT], [*NONG*+NP-T], [*NONG*+NP-IT+C], and [*NONG*+NP-T+C]. In addition, the semantic role of the object-NP following the V-R compound is Theme; for such reason, [*NONG*+R+NP] is represented as [*NONG*+R+NP-T]. Accordingly, the complete form-meaning mappings of the semi-productive constructions with *NONG* are demonstrated as Figure 16 below.

In Figure 16, a bunch of features of the meanings are components for setting the frames that *NONG* can be taken as a frame-evoking verb. That is, active process, volitional Agent (or agent-control), informal Manner, object-NP-Incremental Theme, object-NP-Theme, resultative state, and beneficial sub-event are these distinctive semantic features pertaining to *NONG*. Finally, once there is any puzzling ambiguity prompted by the frame, we would appeal to Qualia Structure for support to distinguish the meanings underspecified and then the fixed template would coerce idiosyncratic meanings for each construct of the construction. That is, the construction is productive.

Figure 16: Form-Meaning Mappings of Constructions with *NONG*

Form: [*NONG*+NP]							
Meaning: an active process=[x (volitional-Agent) does something (in an informal $Manner_k$) [[to obtain]$_{i\text{-}IT}$ or [with]$_{i\text{-}T}$ an object-NP_{ij} (resulting in a $Sate_{j(l)}$ (RVC) [measured by the object-NP_{ij}] ([a beneficial sub-$Event_{j\text{-}RVCl}$]))]] FE #x [Doer], FE #i-IT [$Artifact_{([+Q\text{-}A])}$], FE #i-T [$Thing_{([+Q\text{-}T])}$], FE #j [ ], (FE #j-RVC [Result], (FE #k [Manner], FE #l [Event]))							
sub-frames/variables	FE #x	FE #i-IT	FE #i-T	FE #j	FE #j-RVC	FE #k	FE #l
[*NONG*+NP-IT]	∨	∨	--	∨	--	∨	--
[*NONG*+NP-T]	∨	--	∨	∨	--	∨	--
[*NONG*+NP-IT+C]	∨	∨	--	--	∨	∨	∨
[*NONG*+NP-T+C]	∨	--	∨	--	∨	∨	∨
Form: [*NONG*+R+NP]							
Meaning: an active process=[x (volitional-Agent) gets through with an object-$NP\text{-}T_i$ (in an informal $Manner_k$) to achieve the mental $state_h$ (RVC) ([a beneficial sub-$Event_j$])] FE #x [Doer], FE #h [Result], FE #i-T [Nonphysical], (FE #j [Event], FE #k [Manner)							

CHAPTER SIX

ANALYSIS OF *GAO* 搞+NP

6.1 Initial Observations of *GAO*

Just like those put in the constructions with *WAN* and *NONG*, systematic discussions as shown in the following section 6.1.1 are about some preliminary findings of the constructions and the grammatical function of *GAO*. To interpret the constructions with *GAO*, the semantic roles are utilized to identify the diverse nominal arguments, and the constructional meanings are retrieved from the patterns *per se*, as in sections 6.1.2 and 6.1.3.

6.1.1 Constructions with *GAO* in the Sinica Corpus

There are quite a few linguistic data of *GAO* retrieved from the Sinica Corpus. The initiatory findings include the grammatical functions pertaining to *GAO*: first, *GAO* is a transitive verbal predicate followed by an object-NP and, second, it takes a complement to compose verb-complement compounds (V-R compounds) followed by an object-NP, too. In addition, *GAO* and its following compositional items render a number of constructions as shown in Table 3 below. One of the major constructions with *GAO* is [*GAO*+NP] of which the meanings are like potpourri. For example, *GAO3 se2* 搞蛇 'to study snakes' and *GAO3 shui3ku4* 搞水庫 'to build a reservoir.' The other one is [*GAO*+R+NP] which is also quite lavish. For example, *GAO3 bu4dong3 zheng4zhi4* **搞**不懂政治 'cannot understand politics' and *GAO3 qing1chu3 dui4den3DE ming2ci2* **搞**清楚對等的名詞 'to clarify coordinate nouns.' As those examples just mentioned above and shown in Table 3 below, the meaning of the vague episode embedded in the framework is opaque and cannot be a compositional

meaning of the lexical items enclosed. Consequently, the constructional approach may render a comprehensible reading for each hidden event bound in the examples of Table 3. To follow given discussions in sections 4.1 and 4.2 above, we would decode the familiar constructions, such as [*GAO*+NP] and [*GAO*+R+NP], in the following sections. As for the idiomatic example and other obviously unrelated examples, such as the BA construction, they are out of the constructions that we won't discuss them here. Lastly, there are so many linguistic data interrelated with *GAO* that we would give a number of tokens in Appendix C for reference.

Table 3: Constructions with *GAO*

Examples of [*GAO*+NP]	Form	Meaning
GAO3-le zhang1 da4hai3bao4	搞了張大海報	'have got a piece of huge poster'
GAO3 se2	搞蛇	'to study snakes'
GAO3 wo3	搞我	'to fuck me up'
GAO3 fei1ji1	搞飛機	'to produce airplanes'
GAO3-le ge cheng2she4	搞了個澄社	'have set up Club Cheng'
GAO3 tong3yi1	搞統一	'to push unification'
GAO3-le zhang1 jia1na2da4 lu4ka3	搞了張加拿大綠卡	'have got a Canadian Green Card'
GAO3 shui3ku4	搞水庫	'to build reservoirs'
GAO3 she4hui4yun4dong4 qu4-le	搞社會運動去了	'have gone to launch social campaigns'
GAO3 zhi2ye4 lan2qiu2 bi4xu1 yao4zhao3 nei4hang2ren2	搞職業籃球必須要找內行人	'to launch professional basketball games one must seek out the experts'
Examples of [*GAO*+R+NP]	Form	Meaning
GAO3 bu4qing1 fang1xiang4	搞不清方向	'cannot clarify directions'
GAO3 qing1chu3 dui4deng3DE ming2ci2	搞清楚對等的名詞	'to clarify coordinate nouns'
GAO3 bu4dong3 zheng4zhi4	搞不懂政治	'cannot understand politics'
GAO3 hao3 shi4ye4ti3	搞好事業體	'to bring about business achieving a good state'
GAO3 bu4dong3 ta1 wei4she2me hui4 zhe4yang4	搞不懂他爲什麼會這樣	'cannot understand why he acts like this'
GAO3DE wo3	搞得我昏頭轉	'to cause me to faint'

hun1tou2zhuan3xiang4	向	
GAO3DE cheng2ban4ren2yuan2 da4gan3tou2tong4	搞得承辦人員大感頭痛	'to cause the staffs to be very headachy'
GAO3DE da4jia1 fei1chang2 nan2guo4	搞得大家非常難過	'to cause everyone to be very depressed'
GAO3DE tai2wan1 nei4wai4fan1teng2	搞得台灣內外翻騰	'to cause Taiwan inside and outside to be upside down'
GAO3DE tian1xia4 da4luan4	搞得天下大亂	'to cause the world to be complete chaos'
Examples of Idioms	Form	Meaning
Hu2GAO3Xia1GAO3	胡搞瞎搞	'to recklessly make a mess'
GAO3 she2me fei1ji1 ma	搞什麼飛機嘛	'What a mess you made!'
GAO3 she2me dong1xi1 ya	搞什麼東西呀	'What hell are you doing?'

6.1.2 Associated Patterns of [*GAO*+NP] and the Semantic Roles of the Object-NPs

In Table 3 above, two distinctive constructions are exemplified as [*GAO*+NP] and [*GAO*+R+NP], because there are so many sundry examples furnished by these templates and their meanings are not interpretable by their internal combination of *GAO* and its following compositional constituents, such as the object-NP. In other words, the constructional interpretation is the key to decipher the semantic features carried by the embedded cryptic event. Accordingly, as shown in (40) and (41) below, the semantic roles of the object-NPs set apart in these two idiosyncratic sub-frames are Incremental Theme and Theme. Moreover, following the object-NP, or specifically following the object-NP-Incremental Theme, there may be a complement. For example, *GAO3 she4hui4yun4dong4 qu4-le* 搞社會運動去了 'have gone to launch social campaigns.' That is, there are three sub-patterns in the [*GAO*+NP] construction. The sub-patterns of [*GAO*+NP] are hence construed as [*GAO*+NP-Incremental Theme], [*GAO*+NP-Theme], and [*GAO*+NP-Incremental Theme+C], respectively (Henceforth [*GAO*+NP-IT], [*GAO*+NP-T], and [*GAO*+NP-IT+C], respectively).

(40) [*GAO*+NP-IT]:

GAO3-le ge cheng2she4	搞了個澄社	'have set up Club Cheng'
GAO3 tong3yi1	搞統一	'to push unification'
GAO3-le zhang1 da4hai3bao4	搞了張大海報	'have got a piece of huge poster'
GAO3-le zhang1 jia1na2da4 lu4ka3	搞了張加拿大綠卡	'have got a Canadian Green Card'
GAO3 shui3ku4	搞水庫	'to build reservoirs'

(41) [*GAO*+NP-T]:

GAO3 se2	搞蛇	'to study snakes'
GAO3 wo3	搞我	'to fuck me up'

(42) [*GAO*+NP-IT+C]:

GAO3 she4hui4yun4dong4 qu4-le	搞社會運動去了	'have gone to launch social campaigns'

In view of the fact that there are prolific senses of the vague events embedded in the constructions with *GAO*, such examples as (40-42) above, the constructional interpretations of [*GAO*+NP-IT], [*GAO*+NP-T], and [*GAO*+NP-IT+C] will illustrate in the section 6.2.2. In addition, the depictions of the constructions and the critical examples pertaining to [*GAO*+NP] will also be simultaneously exemplified in that section.

6.1.3 Associated Patterns of [*GAO*+R+NP] and the Semantic Roles of the Object-NPs

As shown in (43) and (44) below, the two distinctive sub-constructions of [*GAO*+R+NP] are [*GAO*+R+NP-T] and [*GAO*+DE+NP+C]. In [*GAO*+R+NP-T], the semantic role of the object-NPs is Theme. For example, *GAO3 qing1chu3 dui4deng3DE ming2ci2* **搞**清楚對等的名詞 'to clarify coordinate nouns,' as in (43) below. The V-R compound, *GAO*+R, takes an

object-NP to set the template where the encoded event is salient and will achieve a resultative state. As for [*GAO*+DE+NP+C], it is a peripheral construction with *GAO* in which the causative V-R compound, *GAO*+DE, always takes a human nominal argument and an inchoative verb as a complement. For example, *GAO3DE wo3 hun1tou2zhuan3xiang4* 搞得**我**昏頭轉向 'to cause me to faint,' as in (44) below. Actually, this kind of causative function of the V-R compound may also be taken as the pivotal construction in Mandarin Chinese.

(43) [*GAO*+R+NP-T]:

GAO3 bu4qing1 fang1xiang4	搞不清方向	'cannot clarify directions'
GAO3 qing1chu3 dui4deng3DE ming2ci2	搞清楚對等的名詞	'to clarify coordinate nouns'
GAO3 bu4dong3 zheng4zhi4	搞不懂政治	'cannot understand politics'
GAO3 hao3 shi4ye4ti3	搞好事業體	'to bring about business achieving a good state'

(44) [*GAO*+DE+NP+C]:

GAO3DE wo3 hun1tou2zhuan3xiang4	搞得我昏頭轉向	'to cause me to faint'
GAO3DE cheng2ban4ren2yuan2 da4gan3tou2tong4	搞得承辦人員大感頭痛	'to cause the staffs to be very headachy'
GAO3DE da4jia1 fei1chang2 nan2guo4	搞得大家非常難過	'to cause everyone to be very depressed'
GAO3DE tai2wan1 nei4wai4fan1teng2	搞得台灣內外翻騰	'to cause Taiwan inside and outside to be upside down'
GAO3DE tian1xia4 da4luan4	搞得天下大亂	'to cauuse the world to be complete chaos'

Even though these two sub-constructions of [*GAO*+R+NP] may render a resultative state which is relatively prompt, we still need diagrams to demonstrate their feature elements and their constructional from-meaning mappings. The according depictions will be illustrated in 6.2.3.

6.2 Constructional Analyses of [*GAO*+NP] and [*GAO*+R+NP]

In this section, we will depict and interpret the interrelated constructions with *GAO*. The first construction is [*GAO*+NP], as in section 6.2.1. According to the examples as shown above in (40-42), three sub-constructions of [*GAO*+NP] undertaken as constructional polysemy of the construction are equipped with obscure events and their meanings are incomprehensible from the combination of their constituents. That is, in section 6.2.2, their constructional interpretations would render a proper sense for each specified construct. The second one is [*GAO*+R+NP], as in section 6.2.3. Also, the template is divided into two sub-constructions and depicted by two idiosyncratic diagrams. Eventually, the frame set by *GAO* is postulated as a pro-verb in section 6.2.4. Accompanying with the vivid semantic components, there might be a deal of potential ambiguity that needs to be interpreted by the object-NPs with inherent Qualia Structure as illustrated in section 6.2.5.

6.2.1 Constructional Interpretation of [*GAO*+NP]

The form-meaning mapping of the [*GAO*+NP] construction is preliminarily demonstrated as Figure 17 below. According to above examples (40-42), there are two basic elements in the construction: one is a volitional Agent, x, and the other an object-NP with a semantic role (i.e. FE #i) following the transitive verb—*GAO*. When the Agent taking long time engaged in an opaque episode, the speaker would take it as an informal event in a rather pejorative Tone. These variables are not salient, so the FE #j (i.e. the Time frame) and FE #k (i.e. the Tone) are parenthesized in the semantic frame. In addition, the hidden process of the construction will result in a state which is featured by #l and implied by the object-NP. In other words, the object-NP correlated with two feature elements: #i, the semantic role of the object-NP, and #l, the state of the enigmatic event bound in the construction. In view of the

fact that there are sub-constructions derived from [*GAO*+NP], some elaborate demonstrations pertaining to the template will show in section 6.2.2.

Figure17: Constructional Interpretation of [*GAO*+NP]

<table>
<tr><td colspan="10">GAO+Direct Object NP</td></tr>
<tr><td>syn</td><td colspan="9">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="9">frame: an active process=[x (volitional-Agent taking Time$_j$) engaged in an Event (as an informal event in the speaker's rather pejorative Tone$_k$) [associated with an object-NP$_{i(l)}$ (resulting in a State$_l$ [measured by the object-NP$_{il}$])]]
FE #x [Doer], FE #i [$_{([+Q])}$], (FE #j [Time], FE #k [Tone], FE #l [ ])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ [ ]
DA +
gf obj</td><td rowspan="2">(#j/#k/#l</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="10">lxm *gao*</td></tr>
</table>

6.2.2 Constructional Polysemy of [*GAO*+NP]

In [*GAO*+NP], three sub-constructions taking two different semantic roles, Incremental Theme and Theme, and a separable complement (i.e. RVC) of the Verb-Complement compound render three idiosyncratic frames: [*GAO*+NP-IT], [*GAO*+NP-T], and [*GAO*+NP-IT+C], as in (40), (41), and (42) above, respectively. For the constructional denotations of these frames can not be interpreted by their individual component parts, we need the diagrams to illustrate the form-meaning pairs as shown in the following figures.

In Figure 18 below, the object-NPs take Incremental Theme as their semantic role, such examples as (45) below, so the template can be realized as [*GAO*+NP-IT]. As the constructional denotation shows in the semantic frame, the object-NPs are probably an entity-goal or an eventive nominal. As for the under-specified stage, it interrelates with the object-NP. That is, with or without any classifier or quantifier, the object-NPs can render

different situation types, a telic or a durative process, for the construct, as in (45a) and (45b).

Figure 18: Constructional Interpretation of [*GAO*+NP-IT]

<table>
<tr><td colspan="10">GAO+Direct Object NP-IT</td></tr>
<tr><td>syn</td><td colspan="9">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="9">frame: an active process=[x (volitional-Agent taking long Time$_j$) engaged in an Event (as an informal event in the speaker's rather pejorative Tone$_k$) [to bring about an object-NP-IT$_{i(l)}$ (resulting in a State$_l$ [measured by the object-NP-IT$_{il}$])]]
FE #x [Doer], FE #i-IT [Entity-Goal$_{([+Q-A])}$],
(FE #j [Long-time], FE #k [Tone], FE #l [ ])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ Incremental Theme
DA +
gf obj</td><td rowspan="2">(#j/#k/#l</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="10">lxm *gao*</td></tr>
</table>

(45) a. *GAO3 shui3ku4* 搞水庫 'GAO reservoir$_{[+Q-A: building]}$' (a durative process)
ACTIVITY [x (taking long Time) builds reservoirs (as an informal event in the speaker's rather pejorative Tone)]

b. *GAO3-le ge cheng2she4* 搞了個澄社 '*GAO*-LE CL Cheng Club$_{[+Q-A: setting up]}$' (a telic process)
ACCOMPLISHMENT [x (taking long Time) has set up Club Cheng (as an informal event in the speaker's rather pejorative Tone)]

c. *GAO3 tong3yi1* 搞統一 '*GAO* unification$_{[+Q-A: pushing]}$' (a durative process)
ACTIVITY [x (taking long Time) pushes unification (as an informal event in the speaker's rather pejorative Tone)]

From (45a) to (45c), the nominal arguments are changed from a physical entity to a nonphysical entity, and they are actually a time-consuming entity-goal. In (45b), the constructional interpretation is resulting in a telic state where the embedded opaque event is prompted by the object-NP with a classifier, and by the aspectual marker 'LE,' too. On the

other hand, in (45a-c) the senses of the template would be in a durative process, since the bare noun does not imply any end point of the embedded obscure event. The identical sense of these constructs is that the hidden events consume a long period of time, because the object-NPs are probably event-evoking nominals which may bring about long-term events in the construction. In addition, these opaque events are taken by the speaker as informal events in a rather pejorative Tone which is one of the distinguished semantic features in the frame. As for the qualia role [AGENTIVE] enclosed in the nominal argument with Incremental Theme, it helps provoke the real denotation of the vague episode.

Another polysemous sub-construction of [*GAO*+NP] is depicted in Figure 19 below. In Figure 19, the unspecified denotation of the vague event would be activated by the object-NPs and specified by the whole template; however, the difference between Figures 18 (above) and 19 is that the object-NPs take Theme as their semantic role, as in (46) below.

Figure 19: Constructional Interpretation of [*GAO*+NP-T]

<table>
<tr><td colspan="10">GAO+Direct Object NP-T</td></tr>
<tr><td>syn</td><td colspan="9">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="9">frame: an active process=[x (volitional-Agent taking a period of Time$_j$) engaged in an Event (as an informal event in the speaker's rather pejorative Tone$_k$) [to do with an object-NP$_{i(l)}$ (resulting in a State$_l$ [measured by the object-NP$_{il}$])]]
FE #x[Doer], FE #i-T[Thing$_{([+Q\text{-}T])}$], (FE #j[A-period-of-time], FE #k[Tone], FE#l[ ])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ Theme
DA +
gf obj</td><td rowspan="2">(#j/#k/#l</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="10">lxm *gao*</td></tr>
</table>

(46) *GAO3 se2* 搞蛇 'GAO snakes$_{[+Q\text{-}T=studying]}$' (a durative process)
ACTIVITY [x (taking a period of Time) studies snakes (as an informal event in the speaker's rather pejorative Tone)]

There are a number of similar components in (45) and (46) above, such as a volitional

Agent, a pejorative Tone, and the States determined by the object-NPs. Nevertheless, for the object-NPs bearing Theme (enclosed with the [TELIC] meaning) are different from time-consuming and event-evoking nominals encoding Incremental Theme (enclosed with the reading of [AGENTIVE]) in (45), the constructional reading implies to consume 'relatively short-term' time in (46) where we would put it this way—taking a period of Time. On the other hand, comparing with these constructional denotations of *NONG*, even though the sense of [*GAO*+NP-T] does not imply taking time as long as that of [*GAO*+NP-IT], the specified meaning is still lasting a relatively long period of time. In consequence, the time scale of this construction is not short for sure. A solid proof is that there is a complete data of (46) saying *GAO3 se2 DE zhuan1jia* 搞蛇的專家 'the expert of studying snakes,' as in Appendix C. That is, the interpretation of the frame implies that the encoded opaque event takes a period of time.

Figure 20 (below) shows the last polysemous sub-construction of [*GAO*+NP]. In the diagram, the most significant component is the separable complement (or RVC) of the Verb-Complement compounds. In addition, the complement causes a resultative state which is unspecified in the other two sub-constructions but salient in this sub-pattern. Moreover, the object-NPs carry Incremental Theme (with [AGENTIVE]) in the template, and they are eventive nominals, too. In other words, the embedded vague event will last for a long term of time until achieving a resultative state activated by the complement, as in (47) below.

(47) *GAO3 she4hui4yun4dong4 qu4-le* 搞社會運動去了
'GAO society campaign$_{[+Q\text{-}A=lauching]}$ RVC-LE' (a telic process)
ACCOMPLISHMENT [x (taking long Time) has gone to launch social campaigns (as an informal event in the speaker's rather pejorative Tone)]

The constructional denotation of (47) shows that the telic process is a long-term episode. Furthermore, no matter how good the event is for people, the episode encodes an implication

that it is taken by the speaker as an informal event in a rather pejorative Tone. That is, the encoded event is different from those correlated with *NONG* in the similar constructions, viz., [*NONG*+NP-IT+C] and [*NONG*+NP-T+C] in section 5.2.2 above. Finally, the long-term episode will achieve a resultative state in the long run.

Figure 20: Constructional Interpretation of [*GAO*+NP-IT+C]

<table>
<tr><td colspan="13">GAO+Direct Object NP-IT+Complement</td></tr>
<tr><td>syn</td><td colspan="12">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="12">frame: an active process=[x (volitional-Agent taking long Time$_j$) launches an Event (as an informal event in the speaker's rather pejorative Tone$_k$) [to bring about an object-NP-IT$_i$ resulting in a State$_l$ (RVC)]]
FE #x [Doer], FE #i-IT [Entity-Goal$_{([+Q-A])}$], (FE #j [Long-time], FE #k [Tone]),
FE #l-RVC [Result]</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ
incre-
mental
theme
DA +
gf obj</td><td rowspan="2">(#j/
#k</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)#l</td><td>rel</td><td>θ null
DA –
gf com</td><td rowspan="2">}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="13">lxm *gao*</td></tr>
</table>

To review the above analyses, the diagram of [*GAO*+NP] as shown in Figure 17 above must be re-depicted as Figure 21 below. It is for sure that the unspecified template of [*GAO*+NP] would be refined and modified as the following semi-filled diagram with more elaborate variables.

According to above examples (45-47) and Figures 17-20, in Figure 21 below, RVC is an implicit variable, marked by the frame element #l-RVC (viz. a resultative state); therefore, it is parenthesized in the unspecified frame. Besides, for the frame elements #j (i.e. the Time frame) and #k, the Tone, are not so salient in this template, they are in the parentheses, too.

However, FE #j always interrelates with FE #i, carrying the semantic role with qualia role of the object-NP, to render a proper reading for the template. Hence, comparing with FE #k (i.e. the Tone) and FE #j (viz. the Time frame), the latter is more active than the former in this construction. That is, the semantic role with the qualia interpretation will determine FE #j which may take long time or just a period of time in the opaque event undertaken.

Figure21: Modified Constructional Interpretation of [*GAO*+NP]

<table>
<tr><td colspan="11">GAO+Direct Object NP(+Complement)</td></tr>
<tr><td>syn</td><td colspan="10">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="10">frame: an active process=[x (volitional-Agent taking Time$_{ij}$) engaged in an Event (as an informal event in the speaker's rather pejorative Tone$_{k}$) [to [bring about]$_{i\text{-}IT}$ or [do with]$_{i\text{-}T}$ an object-NP$_{i(jl)}$ (resulting in a State$_{l}$ (RVC) [measured by the object-NP$_{ijl}$])]]
FE #x [Doer], FE #i-IT [Entity-Goal$_{([+G\text{-}A])}$], FE #i-T [Thing$_{([+G\text{-}T])}$],
(FE #j-IT [Long-time], FE #j-T [A-period-of-time], FE #k [Tone],
FE #l [ ], FE #l-RVC [Result])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#i</td><td>rel</td><td>θ [ ]
DA +
gf obj</td><td rowspan="2">(#j/#k/#l</td><td>rel</td><td>θ null
DA –
gf-l-rvc com
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="11">lxm gao</td></tr>
</table>

6.2.3 Constructional Interpretation of [*GAO*+R+NP]

Instead of taking an object-NP as the immediate constituent, *GAO* may take a complement (viz. RVC) to form a V-R compound and then take a nominal argument. That is, the [*GAO*+R+NP] construction is the other template interrelating with *GAO*, such examples as shown in (43-44). In this section, we would like to decipher the constructional sense of [*GAO*+R+NP]. As the following Figure 22 shows, the semantic frame would be realized as in

a resultative state rendered by the V-R compound. Moreover, since the eventive noun phrase following the V-R compound carries Theme, the template can also be exemplified as [*GAO*+R+NP-T].

Figure 22: Constructional Interpretation of [*GAO*+R+NP-T]

<table>
<tr><td colspan="14">GAO+R+Object NP-T</td></tr>
<tr><td>syn</td><td colspan="13">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="13">frame: a resultative state=[x (volitional-Agent taking a period of Time$_j$) brings about an object-NP-T$_i$ achieving a potential State$_h$ (RVC) resulted from an activity (as an informal event in the speaker's rather pejorative Tone$_k$) ([a beneficial sub-Event$_l$])]
FE #x [Doer], FE #h [Result], FE #i-T [Thing],
(FE #j [A-period-of-time], FE #k [Tone], FE #l [Event])</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#h</td><td>rel</td><td>θ null
DA –
gf com</td><td rowspan="2">#i</td><td>rel</td><td>θ theme
DA +
gf obj</td><td rowspan="2">(#j/
#k/
#l</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n -</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="14">lxm *gao*</td></tr>
</table>

(48) a. *GAO3 hao3 shi4ye4ti3* 搞好事業體 'GAO-RVC business body' (a resultative state)
STATE [x (taking a period of Time) brings about business achieving a good state (as an informal event in the speaker's rather pejorative Tone for making a lot of fortune)]

b. *GAO3 bu4dong3 zheng4zhi4* 搞不懂政治
'GAO-NEG-RVC politics' (a resultative state)
STATE [x (taking a period of Time) cannot understand politics (as an informal event in the speaker's rather pejorative Tone that x cannot gain profit from it)]

c. *GAO3 bu4dong3 ta1 wei4she2me hui4 zhe4yang4* 搞不懂他爲什麼會這樣
'GAO-NEG-RVC he why would this' (a resultative state)
STATE [x (taking a period of Time) cannot understand why he acts like this (as an informal event in the speaker's rather pejorative Tone that x cannot understand him)]

(48a) and (48b) are the typical examples of the [*GAO*+R+NP-T] construction, so they undertake a number of common features. The different point between these two constructs is that the RVC, *dong3* 懂 'understand,' in (48b) would coerce the unspecified construction into a resultative state embedded in the speaker's mind. Furthermore, in addition to achieving a resultative state, the interpretation of the template also implies a beneficial event which is distinguished from the other constructional interpretations of [*GAO*+NP], such examples as shown above in section 6.2.2. As for (48c), it is actually a pivotal construction, because the object-NP following the V-R compound is an animate pronoun or specifically a third personal pronoun which is taken as the agent of the sub-event, even though it carries an accusative case given by the compound or the first predicate of the pivotal construction.

In Figure 22 above, although the V-R compound of [*GAO*+R+NP] provides a specific reading for the construction, there is another template, [*GAO*+DE+NP+C], correlating with the same frame as shown in Figure 23 below. In Figure 23, *GAO* and DE form a V-R compound to take an object-NP and then another complement. That is, just like (48c), the template obviously is a pivotal construction, such examples as (49a) and (49b).

Figure 23: Constructional interpretation of [*GAO*+DE+NP+C]

<table>
<tr><td colspan="13">GAO+DE+Object NP-T+C</td></tr>
<tr><td>syn</td><td colspan="12">cat v, max -, lex +, voice active</td></tr>
<tr><td>sem</td><td colspan="12">frame: a resultative state=[x (volitional-Agent taking a period of Time$_j$) causes an object-NP-T$_i$ to achieve the State$_h$ (DE) and be in a calamitous sub-Event$_l$ (as an informal event in the speaker's rather pejorative Tone$_k$)]
FE #x [Doer], FE #h [Result], FE #i-T [People],
(FE #j [Long-time], FE #k [Tone]), FE #l [Event]</td></tr>
<tr><td rowspan="2">val</td><td rowspan="2">{#x</td><td>rel</td><td>θ agt
DA –
gf sub</td><td rowspan="2">#h/
#l</td><td>rel</td><td>θ null
DA –
gf-h com
gf [ ]</td><td rowspan="2">#i</td><td>rel</td><td>θ theme
DA +
gf obj</td><td rowspan="2">(#j/
#k</td><td>rel</td><td>θ null
DA –
gf [ ]</td><td rowspan="2">)}</td></tr>
<tr><td>syn</td><td>n +</td><td>syn</td><td>n -</td><td>syn</td><td>n +</td><td>syn</td><td>n -</td></tr>
<tr><td colspan="13">lxm *gao*</td></tr>
</table>

(49) a. *GAO3-DE wo3 hun1tou2zhuan3xiang4* 搞得**我**昏頭轉向
‘GAO-RVC I faint’ (a resultative state)
STATE [x (taking a period of time) causes me to faint (as an informal event in the speaker’s rather pejorative Tone)]

b. *GAO3-DE Tai2wan1 nei4wai4fan1ten2* 搞得**台灣**內外翻騰
‘GAO-RVC Taiwan inside outside upside down’ (a resultative state)
STATE [x (taking a period of Time) causes Taiwan inside and outside to be upside down (as an informal event in the speaker’s rather pejorative Tone)]

In (49a) and (49b), the object-NPs are animate nominals. Videlicet, they are the agent of the following complement or sub-event but possess an accusative case marked by the V-R compound. Notwithstanding these examples can be taken as the pivotal construction, we may depict them and set a frame to illustrate their semantic denotations, as in Figure 23 above. Accordingly, the [*GAO*+DE+NP+C] construction can be taken as a peripheral construction correlating with [*GAO*+R+NP].

6.2.4 Setting the Frame: *GAO* As a Frame-Evoking Verb

To properly interpret the semantic denotation of the frame set by *GAO*, we cannot just combine the meanings rendered by the basic-level predicate and an array of nominal arguments. In other words, *GAO* can be taken as a “super-lexical” morpheme and predicate the nominal arguments with or without a complement to set the verb constellation, which modulates the focus of a situation type of the embedded event rather than determining the situation itself. Accordingly, the interpretations of the frames set by *GAO* are denoted by the matrix of the following eight semantic features:

i. Active process: the event undertaken in the frame is telic or durative, and might be dynamic.
ii. Agent-control: the volitional agent can control the event.

iii. Time frame: the agent spends long time or just a period of time on the event undertaken.
iv. Pejorative tone: the event is probably taken by the speaker as an informal event in a pejorative tone.
v. Object-NP-Incremental Theme: the object-NP may be an entity-goal or an event-evoking nominal, bear Incremental Theme, and encode the qualia interpretation of [AGENTIVE].
vi. Object-NP-Theme: the other semantic role may be bound in the object-NP and encode the qualia meaning of [TELIC].
vii. Resultative state: the situation type of the undertaken event includes a change of state and an outcome, and it may be activated by the V-R compound in the constellation.
viii. Sub-event: another unilluminated component is marked by the frame and would be introduced by the representation of the complement.

For an opaque event bound in [*GAO*+NP] should be active, can be controlled by the volitional agent, may be in the speaker's pejorative tone and last for a long period of time, and would embed an object-NP, *GAO* sometimes behaves like a pro-verb which substitutes for the function of some basic-level verbal predicates. For example, as the original complete example in (41) above *Guo2ji4shang4* ***yan2jiu4 pa2chong2****DE xue2zhe3zhuan1jia1 dou1 zhi1dao4, Tai2wan1 you3ge GAO3 se2 DE zhuan1jia1 "Professor Mao" Mao2jiao4shou4* 國際上**研究爬蟲**的學者專家都知道，臺灣有個**搞蛇**的專家「Professor Mao」毛教授 'The international researchers and experts of **reptile-studying** all know that there is an expert of **snake-studying**--Professor Mao--in Taiwan,' *GAO* obviously substitutes for the use of *yan2jiu4* 研究 'to study.' On the other hand, as in (43) (above) *GAO3 bu4dong3 zheng4zhi4* 搞不懂政治 'cannot understand politics,' the V-R compound is regarded as an ordinary verb compound with a general range of meanings rather than a pro-verb, because it does not substitute for some other basic-level verb, as *GAO* would do in the former case.

6.2.5 Qualia Structure and Constructional Interpretations

Any possible ambiguity pertaining to the nominal arguments of the verb constellations can be coerced to take idiosyncratic denotations by Qualia structure; hence, again we use the

tool to decipher the under-specified senses of the nominal arguments bound in the construction for specifying the constructional interpretation of the embedded vague episode. Take (50) for example. There are two possible readings of (50) illustrated as follows:

(50) Two possible readings of [*GAO3-le zhang1 da4hai3bao4* 搞了張大海報 'have got a piece of huge poster'] with Qualia representation:

a. [*GAO3-le zhang1 da4hai3bao4* 搞了張大海報]=[*hua4-le zhang1 da4hai3bao4* 畫了張大海報 'have drawn a piece of huge poster']
Huge poster [AGENTIVE=drawing]
ACCOMPLISHMENT [x (taking long Time) has drawn a piece of huge poster (as an informal event in the speaker's rather pejorative Tone)]

b. [*GAO3-le zhang1 da4hai3bao4* 搞了張大海報]=[*na2-le zhang1 da4hai3bao4 lai2* 拿了張大海報來 'have got back a piece of huge poster']
Huge poster [TELIC=getting back]
ACCOMPLISHMENT [x (taking a period of Time) has got back a piece of huge poster (as an informal event in the speaker's rather pejorative Tone]

The AGENTIVE role of the huge poster in (50a) means 'drawing.' In contrast, the TELIC role in (50b) means 'getting back.' Furthermore, when we take the huge poster as an Incremental Theme, it may coerce the event undertaken to last for long time in the frame. It seems reasonable in this case that the agent may take long time to draw a huge poster.

6.3 Summary

Even though the enigmatic events contained in the frames set by *GAO* can not be interpreted from the pure combination of verbal predicates and nominal arguments, we can decode their semantic denotations encoded in the verb constellations of [*GAO*+NP] and [*GAO*+R+NP]. At the preliminary step, since the object-NPs bear the key code of the frame set by *GAO*, we need to mark their semantic roles and then decipher their interrelationship

with the verbal predicate to render the specified sense of the construction. On that account, we take [*GAO*+NP] as a polysemous construction that can be divided into three sub-constructions: [*GAO*+NP-IT], [*GAO*+NP-T], and [*GAO*+NP-IT+C] where IT represents the Incremental Theme, T the Theme, and C the separable Complement of Verb-Complement compounds, respectively. Besides, the classifier of the object-NP may interfere with the situation type of the encoded event; that is, when the nominal argument is a mass noun, the event will be an activity or a durative process in this case. In contrast, if the nominals carry a classifier, the opaque event may be a telic process or accomplishment which would change its state in the final stage and have an outcome. As to the other constellation of [*GAO*+R+NP], in view of the fact that R is resultative complement, which is a common complement following the verb predicate in Mandarin Chinese, it probably coerces the situation type from Activity to Accomplishment that the event would have a resultative state in the final stage and have an outcome, too. Consequently, we would depict a form-meaning mapping diagram of the verb constellations with *GAO*, as in Figure 24 below.

In Figure 24, the semantic features are illustrated as FEs or frame elements in the semantic frame, including Active process, volitional Agent, Time frame, pejorative Tone, Incremental Theme, Theme, resultative State, and sub-Event. Since the situation modulated by a frame is different from that is determined by a basic-level verbal predicate, *GAO* sets the frame and behaves like a pro-verb substituting for a verb in the context. Finally, any possible ambiguous readings of the frame may be reinterpreted by the Qualia roles of the nominal arguments following the verbal predicate. That is, the unspecified denotations of the nominals would be coerced into idiosyncratic senses, and then the specified meanings of the frame would be distinguished.

Figure 24: Form-Meaning Mappings of Constructions with *GAO*

Form: [*GAO*+NP]

Meaning: an active process=[x (volitional-Agent taking $Time_{ij}$) engaged in an Event (as an informal event in the speaker's rather pejorative $Tone_k$) [to [bring about]$_{i\text{-}IT}$ or [do with]$_{i\text{-}T}$ an object-$NP_{i(jl)}$ (resulting in a $State_l$ (RVC) [measured by the object-NP_{ijl}])]]

FE #x [Doer], FE #i-IT [Entity-$Goal_{([+G\text{-}A])}$], FE #i-T [$Thing_{([+G\text{-}T])}$],
(FE #j-IT [Long-time], FE #j-T [A-period-of-time], FE #k [Tone],
FE #l [ ], FE #l-RVC [Result])

sub-frames/variables	FE #x	FE #i-IT	FE #i-T	FE #j-IT	FE #j-T	FE #k	FE #l	FE #l-rvc
GAO+NP-IT	∨	∨	--	∨	--	∨	∨	--
GAO+NP-T	∨	--	∨	--	∨	∨	∨	--
GAO+NP-IT+C	∨	∨	--	∨	--	∨	--	∨

Form: [*GAO*+R+NP]

Meaning: a resultative state=[x (volitional-Agent taking a period of $Time_j$) brings about an object-NP-T_i achieving a potential $State_h$ (RVC) resulted from an activity (as an informal event in the speaker's rather pejorative $Tone_k$) ([a beneficial sub-$Event_l$])]

FE #x [Doer], FE #h [Result], FE #i-T [Thing],
(FE #j [A-period-of-time], FE #k [Tone], FE #l [Event])

CHAPTER SEVEN

DISCUSSION AND CONCLUSION

7.1 Theoretical Implication

There are two advantages of the constructional analysis. Take an example that seems not applicable in the [*WAN*+NP] construction but it may be interpreted in certain contexts as illustrated in (51) below.

(51) Three interpretations[21] of an implausible example: [*WAN2 zao3can1* 玩早餐]

a. *zao3can1* 早餐 'breakfast' as a physical object:
Meimei bu2yao4 WAN2 zao3can1, gan3kuai4chi1
妹妹不要玩「早餐」，趕快吃!
'Don't you (a little girl) play with your "breakfast (=toy)," and eat quickly.'
Breakfast [FORMAL=toy]
ACTIVITY [to play with toys]

b. *zao3can1* 早餐 'breakfast' as a game:
Xian4zai4 you3 hen3duo1ren2 zai4WAN2 zao3can1, ke3jian4 zhe4zhong3 xian4shang4you2xi4 hen3shou4huan1ying2
現在有很多人在玩「早餐」，可見這種線上遊戲很受歡迎。
'There are many people playing "Breakfast (=an online game)." It is obvious that this kind of online games is very popular.'
Breakfast [TELIC=entertaining]
ACTIVITY [to play an online game called Breakfast]

c. *zao3can1* 早餐 'breakfast' as an Incremental Theme to be made:
Ta1men yi1da4zao3 jiu4 qi3lai2 WAN2 zao3can1, yong4 shou4si1mi3 nie1chu1 ge4shi4ge4yang4DE ka3tong1ren2wu4 fan4tuan2
他們一大早就起來玩「早餐」，用壽司米捏出各式各樣的卡通人物飯糰。
'They get up very early to "play(=prepare) breakfast" that they use Sushi rice to make rice balls in diverse cartoon figures.'
Breakfast [AGENTIVE=preparing]
ACTIVITY [to prepare breakfast (in a playful Manner)]

[21] These examples are invented by the author.

In (51a), the FORMAL role of ‘breakfast’ in the dish may be viewed as a ‘toy’ and played around by children. In (51b), the TELIC meaning of ‘breakfast’ is ‘entertaining,’ when there is an online game called ‘*Zao3can1* 早餐 “Breakfast”.’ In (51c), the AGENTIVE sense of ‘breakfast’ is the factor that brings forth breakfast—‘preparing.’ By means of examining these interpretations of an implausible example as illustrated in (51) above, two advantages of the constructional approach are demonstrated as follows. First, even though the initial sense rendered by the object-NP, *zao3can1* 早餐 ‘breakfast,’ is not applicable in [*WAN*+NP], the combination of the constructional approach and Qualia Structure facilitates to render a fixed construction and specifies diverse meanings in [*WAN*+NP]. In other words, with four qualia roles of Qualia Structure, the interpretation of the object-NP of the undertaken construction in a certain context can be properly accounted for without any additional explanatory mechanisms. Second, the constructional approach is quite productive. In [*WAN*+NP], any potential object-NP could correlate with *WAN* to render a proper interpretation of the event encoded in [*WAN*+NP].

7.2 The Idiomatic Use of Frame-Evoking Verbs in the [V+NP] Construction

Albeit the idiomatic use of these three frame-evoking verbs is not the matter for discussion, we would try to render a plausible interpretation to the idiomatic use in the [V+NP] construction. Take the example as we mentioned above in section 2.2 for detailed discussion: *GAO3 fei1ji1* 搞飛機 ‘to make troubles’ is a typical example of the idiomatic use in the [V+NP] construction. To interpret its constructional meaning, we can put it in the semantic frame of the [*GAO*+NP-IT] construction, as in (52) below. Besides, though this example is a typical idiomatic expression, it also has a literal meaning, too. On one hand, the literal meaning of the example is illustrated in (53a) below; on the other hand, the idiomatic sense of the identical syntactic form is shown in (53b).

(52) The semantic frame of the [*GAO*+NP-IT] construction:

sem	frame: an active process=[x (volitional-Agent taking long $Time_j$) engaged in an Event (as an informal event in the speaker's rather pejorative $Tone_k$) [to bring about an object-NP-$IT_{i(l)}$ (resulting in a $State_l$ [measured by the object-NP-IT_{il}])]] FE #x [Doer], FE #i-IT [$Entity\text{-}Goal_{([+Q\text{-}A])}$], (FE #j [Long-time], FE #k [Tone], FE #l [ ])

(53) Two possible readings of [*GAO3 fei1ji1* 搞飛機]:

a. [*GAO3 fei1ji1* 搞飛機 'to produce airplanes']
ACTIVITY [x (taking long Time in the speaker's rather pejorative Tone) produces airplanes]

b. [*GAO3 fei1ji1* 搞飛機]=[*zhi4zao4 fei1ji1* 粗製濫造飛機 'to churn out airplanes']
Airplanes [AGENTIVE=cheap in make]
ACTIVITY [x (taking a short period of time) churns out airplanes]=[x makes troubles]

The interpretation of (53a) is salient, because we can read its compositional meaning from its derivational verbal predicate and nominal argument. Therefore, we do not need the qualia role to help decode the object-NP. However, when the original pejorative tone is not the speaker's opinion, it actually becomes the agent's manner; in other words, it is lexicalized in the verbal predicate, as in (53b). In addition, the time frame should be shortened, for the qualia role renders the nominal argument the sense of [AGENTIVE] reading as 'cheap in make.' Accordingly, we may acquire an implication by means of Conceptual Metaphor that 'the airplanes of a very poor make' are 'potential troubles;' namely, *GAO3 fei1ji1* 搞飛機 'to churn out airplanes' means 'to make troubles.' In consequence, notwithstanding the idiomatic interpretation of [*GAO3 fei1ji1* 搞飛機] is hardly decoded in the first glance, we can decipher the vague event embedded in the construction or the lexical item by appealing to Qualia Structure and Conceptual Metaphor, and finally acquire the proper idiomatic interpretation, 'to make troubles,' of the lexical item.

7.3 Conclusion

This thesis is an interesting verbal semantic study of *WAN*, *NONG*, and *GAO* in Mandarin Chinese. As mentioned above in the thesis, these transitive verbs take object-NPs to form a construction--[*WAN*+NP], [*NONG*+NP], and [*GAO*+NP], respectively. On the base of the fact that the nominal arguments take diverse idiosyncratic semantic roles, the [V+NP] construction can be viewed as a polysemous construction. In addition, the proper interpretation of the construction cannot be obtained by its derivational parts (viz. the verbal predicate and the object-NP) but can be acquired from the construction itself. In other words, the real activity encoded in the [V+NP] construction should be examined to render a proper interpretation for the construction. Therefore, two equally significant approaches are applied in this thesis.

First of all, on the base of the Constructional approach (Goldberg 1995), a construction is taken as a lexical item of which the interpretation is underspecification and can be specified by its compositionality of syntactic form and semantic meaning but by its derivational components. Accordingly, the [V+NP] construction can be viewed as a form-meaning pair encoded with all the semantic components needed.

Second, the approach of Qualia Structure (Pustejovsky 1995) is utilized to distinguish the potential ambiguity of the [V+NP] construction. To tackle down the problem of the constructional ambiguity, four qualia roles coerce the nominal arguments to take idiosyncratic denotations, while the construction is still fixed without any further explanatory mechanism. For illustrating the semantic denotations possessed by these three constructions, we would put their form-meaning mappings together in Figure 25 below.

In this study, according to the linguistic data retrieved from the Sinica Corpus, the syntactic forms of these three constructions are identical and focused on the [V+NP] construction. Nevertheless, their semantic frames are quite different. As far as these verbal

constellations are concerned, the semantic components, such as Active process, Agent control, and two prototypical semantic roles, Incremental Theme and Theme, are the required items in the semantic domain, as in Figure 25. Besides, to render better semantic denotations for the constructions undertaken, the other semantic features would be distinguished from construction to construction as illustrated in Figure 25, too. Take *NONG* for example, it is obvious that it would carry a resultative state when there is a RVC in the construction of *NONG*, and this semantic component seems quite popular for all of these three verbs. In addition, the most distinct semantic frame elements for *WAN* should be BK and the playful Manner, since the former is probably encoded in the object-NP and the latter is derived from the verbal predicate *WAN* itself. Moreover, a Time frame and the speaker's rather pejorative Tone are the must for the construction of *GAO*, because the events are usually taken by the speaker as an informal episode in a rather pejorative tone and would last for long time before they are accomplished. Accordingly, *WAN* is the most general transitive verb that it takes ten semantic components, and *GAO* taking eight semantic features is the first runner after *WAN*. The last one is *NONG* taking seven semantic frame elements in its semantic domain.

As far as these verbal predicates or 'super-lexical' morphemes are concerned, they may be not full fledged pro-verbs, but they behave like a pro-verb that their behaviors are different from those of other verbal predicates. In other words, their semantic components carry out diverse opaque events encoded in the whole construction. In consequence, all of the semantic components can be utilized to set a frame or denote a manner or even a time domain, rather than just to predicate a salient event.

To conclude this work and make a comparison with Wang (2004), we would find that this thesis brings about some more fine-grained ideas than what Wang presents in the similar studies of the [*NONG*+NP] and [*GAO*+NP] constructions in Mandarin Chinese as shown below:

First, a proper interpretation of the [V+NP] construction must consider the

interrelationship between its syntactic form and semantic meaning. For example, there are a number of classifiers (such as *yi1ge* 一個 'a/one,' *ji3xiang1* 幾箱 'few cases,' and *yi1wan3* 一碗 'a bowl of' in the cases of *NONG*) almost bound with nominal arguments, and they may coerce the situation type of the embedded event from an activity to an accomplishment, as in 5.2 and 6.2.

Second, the nominal arguments bound with the semantic roles (viz. Incremental Theme or Theme) are diverse and may take specific nominal categories, such as Artifact and Thing (for *NONG*, as in sections 5.2.2), Entity-Goal and Thing (for *GAO*, as in section 6.2.2). Hence, there would be a number of polysemous sub-constructions in the [V+NP] template.

Third, a number of semantic components, such as Resultative State and Sub-Event (of *NONG*), Pejorative Tone and Time Frame (of *GAO*), can be inferred from the construction *per se*. Namely, the frame-oriented verbal predicates can take all semantic features to set a frame. That is why they are called Frame-Evoking Verbs, as in sections 5.2.4 and 6.2.4.

Fourth, to distinguish the potential ambiguity derived from the construction itself is not difficult by appealing to the qualia denotations of the nominal arguments, as in 5.2.5 and 6.2.5.

Last, in the [V+NP] constellation, what makes the verbal predicate behave like a pro-verb is not only because it sets a frame to profile manners, tones, time frames, or sub-events, but also because it replaces some general verbal predicates in certain contexts, as in sections 5.2.4 and 6.2.4.

When we mention what contribution this thesis adds to the field of verbal semantic studies in Mandarin Chinese, maybe we can put it this way: this thesis takes advantages of the constructional approach, Qualia Structure, and some significant Mandarin verbal semantic studies, such as Liu (2002, 2005), in proof of our claim to the proper interpretation of the [V+NP] construction in Mandarin Chinese.

Figure 25: Form-Meaning Mappings of Constructions with *WAN*, *NONG*, and *GAO*

Meaning\Form	*NONG*	**NP-T**	**NP-IT**	NP-IT+C	NP-T+C	R+NP-T	
Theme		**NGW**					NP-T
Incremental Theme			**NGW**				NP-IT
Resultative State				NG			--
Resultative State					N		--
Resultative State						NG	--
Active Process	**NGW**						*WAN*
Agent Control	**NGW**						*WAN*
Sub-Event	**NGW**						*WAN*
Informal Manner	N						--
Inceptive	**W**						**R+NP-IT/T**
Locaative Goal	**W**						**NP-G**
Means	**W**						**NP-M**
BK	**W**						**WAN**
Playful Manner	**W**						**WAN**
Pejorative Tone	***G***						--
Time Frame	***G***						--
	GAO	NP-T	NP-IT	NP-IT+C	--	R+NP-T	

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Appendix A: The Linguistic Data of *WAN*

Constructions	Examples
WAN+NP	陪侍坐檯的案件，一件從事色情行業，還有兩件 <玩賭博性電玩>。 睡上床時間在和奶媽斤斤計較。他要求再給三分鐘 <玩手上型電玩>。 研究中並顯示，目前小朋友 <玩電視遊樂器與電腦遊戲>的時間大多以假日爲 剩下的很長很長時間，他可以 <玩電動>，那我也都接受他，爲什麼？ 因此會場中，也特別舉行三代同堂大家樂的活動，讓親子一起 <玩玩具>並相互競賽。 在分類分級的管理原則下，使十八歲以下青少年可以 <玩益智類的電動玩具>。 負責規劃課程的老師余文冰說：「就像在 <玩遊戲>一樣，」所以你覺得準不準這樣 的分析? 好像有點準確性吧！就是剛剛 <玩那個遊戲>，我覺得我們倆也很 那我們所謂的防衛型，他又會做出什麼樣的動作來 <玩這個遊戲>呢? 你現在說非常適合，非常適合就是，「什麼年紀就 <玩什麼遊戲>」這樣子。 往年都會在會場設一個遊戲攤位，讓小朋友盡情 <玩各種玩具>， 他用一種諒解的態度，和兒子 <玩一齣很有意思的遊戲>，使兒子自知錯誤， 跟小朋友 <玩做買賣的遊戲>。他有時候假裝挑擔子賣菜的小， 秋，你來了嗎？別再跟我 <玩捉迷藏的遊戲>了。 該名貨主即邀他一起 <玩擲圈圈的遊戲>，表示如果能擲中陶磁製水牛的牛角， 買到那樣好的木炭。我在那玩得好開心哪！<玩了好多遊樂器>，每樣都好好玩喔！ 突然，一陣紅、黃葉片紛飛，難不成森林 <玩起大風吹>？不是的， 讓乒乓球在空中飛來飛去，你 <玩過這樣的乒乓球>嗎？ 筆者相當同意他的見解。<玩過象棋>的人都知道，車馬炮是直線戰將， 抱怨許多同學佔用政大電算中心中教室中的電腦 <玩ＢＢＳ>， 號子的貴賓室裡更是花招百出，或 <玩橋牌>。或大賭十三支，以度過難捱的時刻； 曾是一個手氣闊綽的賭徒（無論 <玩雀牌或撲克牌>，輸了總不肯離開賭桌， 都是靠著全民的愛好。他們從小就 <玩球>，那球比小孩的頭還大， 來來來，大家來 <玩皮球>。你拍皮球，我踢皮球。拍皮球，你比我拍得多。 每個人心情都不好，「爲什麼飆車？爲什麼 <玩大家樂>？正因爲沒有什麼好玩。」 見祖孫三代同堂，手持彈珠汽水、熱狗，一起 <玩砂畫>、動動腦猜謎， 如塞外隨想、鷹之戀等。雖然我也 <玩笛子>，但是老實講，笛子的表現力有限， 「若要加入慈濟，必定要戒賭。除了不賭博、不 <玩股票>、六合彩以外， 地將校園環境如沙坑、草地、水池、跑道等設計成可 <玩沙堆>、測風向、氣象， 似乎並沒有長遠躍進。而能 <玩音響>。聽音樂的人，其實本身經濟條件都不錯， 她學鋼琴也學了一年多，最近在暑假期間，唐語謙也試著 <玩陶土>。 那你剛剛說，玩電動玩具像，像大麻煙一樣會上癮，那 <玩益智性的機器>哪? 所以「愈不能讓政治人物 <玩政治秀>，愈要謹守理性、冷靜的遊戲規則。」 當然，喜歡觀書賞畫，親瓷 <玩玉>的中國人也不少。本來外行看熱鬧，

	這方面都有一手。老大玩火（站鼎）、老二 <玩刀>（拿刀）， 高三時就買網路卡回家接電腦 <玩網路>，現在是清大ＢＢＳ站的站長， 我們便要爸爸帶我們去附近的公園 <玩雪橇>。在小小的山坡頂上，我和妹妹 我總會去摸摸它那粗壯的樹幹，和鄰家的小朋友在樹底下 <玩家家酒>， 在水裡跑，在水裡跳，在水裡 <玩紙船>。３小時候，我喜歡玩姑姑的大鋼琴。 兒沒時間玩樂，男孩子呢？年紀小的在地上 <玩沙子>，弄得一身髒。 在板橋的時候，就看到幾個青少年這樣子。然後在那邊 <玩摩托車>。 「是你不肯上進，整天 <玩女人>，交朋友，說笑話，正事不做。」 後來覺得這個活動不錯，又臨時邀了二位 <玩音樂>的朋友一起來參加活動。 孫經偉有時也會參加車隊的活動，跟著大家 <玩車>。 那好，現在你再爬到那賤貨身上，讓老子看著你們 <玩花樣>！ 但若是雷奈並無此意，也難逃另一個指責：他 <玩卡通>玩樂了， 他的室友很高興地跑來找他 <玩花繩>，又恍然大悟地說要有十個手指頭才能玩時， 在全省北、中、南爲小朋友舉辦六場「美祿帶你 <玩滑板>」活動。每場的活動， 陳偉誠與他們 <玩肢體與聲音、肢體與空間的關係>。 婚後，我才發現老公對於 <玩模型>和收集軍方科技書籍的熱衷遠非我所能形容的。 曾經看到兩個大約八、九歲的男孩在 <玩摔角>；另外一個男孩則在踢毽子， 說來那件是重要的？又不是 <玩事業>賭大的，驚心動魄的事可聳人聽聞。 ‖不要，一點兒也不好玩。‖那我們來 <玩跳房子>，你不是最喜歡 <玩跳房子>嗎? 在我國小三年級的時候，就是跟我姐姐 <玩那個扮家家酒>，然後他就說我當爸爸呀， 雅惠，等早飯後，我們就來 <玩捉迷藏>。我應了一聲，便衝進家裡準備。 妹妹，不要不高興嘛！哥帶你去玩！‖玩什麼嘛！‖我們來 <玩辦家家>好不好? 你不是最喜歡 <玩跳房子>嗎? 我們就在這個人行道紅磚上面玩，好不好? 可能許多六合彩迷，今後將會漸漸改爲 <玩賽馬>，除非國內六合彩之組頭亦跟進， 附近幾個小孩到我家來，預備 <玩翻花鼓>。我說：「要這樣，好好坐著。」 外公的大手牽著我，一步一步的走向公園去玩。我想 <玩盪秋千>，卻一直盪不高， 下課了，同學正要邀我去 <玩跳繩>，虹音，過來幫忙改考卷。虹音，幫老師倒茶。 據潭潤桂供稱，該電動玩具以投幣及開分方式 <玩賭>，經警訊後， 男生常覺得女生不能清楚的表達自己的感情，男生只好很辛苦的 <玩猜謎**遊戲**>，所以對於女生主動，如果不是很誇張，男生都很樂於 唐朝時，詩人們就常常藉著翻頁數抽詩句 <玩預卜**遊戲**>； 伊拉克不再向以色列發射飛彈，轉向沙烏地聯軍大本營空對空 <玩碰撞**遊戲**>， 下學期上課時大家就可以用卡紙 <玩拼音**遊戲**>。 一年丙班・陳怡如・三粒棒球，六根球棒，一副棒球手套，來 <玩拼拼看**遊戲**>， 通常在吃完午飯到午睡的這段時間，老師會讓幼兒 <玩組合**玩具**>或欣賞文學作品， 買了一盒「看圖識字」，每天等她午睡醒後，邀她陪爺爺 <玩讀字**遊戲**>。 「政府在 <玩著賭輪盤>，被動地等待著它無法控制的號碼出現」、 見那人正興致十足地陪六、七歲的女兒 <玩擲沙袋>。

	第四天，我們搭船到一個小島上 <玩拖曳傘和水上摩托車>，爸爸還去射擊， 男生最喜歡 <玩殺刀>，騎馬打仗，官兵捉強盜；女生則是跳橡皮筋，翻花股。 最後我和弟弟 <玩射箭比賽>，我們把愛黏人的鬼針草，往對方的身體上亂射， 因而歇斯底里驚叫出聲，如此一來，也就清楚他們在 <玩什麼花樣>了。 部屬只有請示的分、聽訓的分，哪能 <玩什麼把戲>呢？ 時間安排得好，可以 <**玩很多地方**>，太魯閣，天祥知道吧? 一定得去！
WAN+R+NP	或是與環保機關 玩起官兵捉強盜的遊戲（轉入地下），轉嫁成本給社會， 突然，一陣紅、黃葉片紛飛，難不成森林 玩起大風吹？ 讓清涼的浪花打在我身上，也不管衣裳是否會溼透，就和海水 玩起捉迷藏了。 拿了兩千元給他，要他支付自己所需，然後家人聯合起來和塞奧 玩起買賣遊戲。
Idioms	玩物喪志 玩世不恭

Appendix B: The Linguistic Data of *NONG*

Constructions	Examples
NONG+NP	**弄 稀飯** 要 **弄 sauce** 還不是想法子 **弄 錢** 我就一定叫我媽去 **弄 一個蛋** 你怎麼樣去 **弄 那個稀飯** 這位讀書人懇切地要求候選人選後不要再 **弄** 什麼大規模的謝票活動 只敢玩玩文字遊戲 **弄** 一些費率明降暗升的小把戲 你 **弄** 那什麼難看的臉色 媽媽就到廚房 **弄了 一盤的蓮霧** 他說他們 弄了 **好幾百個人**嘛 少 **弄 這些靡靡之音** 請他們 **弄 個消息** 怎麼是 **弄 馬桶** 這位 **弄 蛇**數十年的大師愣了一下 褲子後面 **弄 把槍**啊 那你在家裡面 **弄 個小餐盤** **弄 點藥** 如在爐檯後面 弄 一個氣幕 不要 **弄** 這些叮叮噹噹的 妳要 **弄** 很多嗎 也是他幫我 **弄** 很多東西 完了 **弄** 兩個簡單的動作 不論如何我要想辦法 **弄** 些錢來 她去廚房 **弄** 些酒菜上來 打算 **弄** 些吃的來 他們就 **弄 餃子**要給兒子吃 **弄 飯**給他吃 她們經常在外埠 **弄 些男人回來** 都 **弄 他**不下來 你去 **弄** 一支什麼**來** 趕緊 **弄** 幾箱可樂**來** 我還可以 **弄** 隻大狼狗來 就是 **弄** 那棒子打那球哇 **弄** 那些擺一桌

	再 **弄** 塊木板寫上幾個字 下次要 **弄** 卷**帶子**來瞧瞧 **弄** 點什麼做火柴 就隨意 **弄** 些什麼東西來吃 **小隊露營**你們要怎麼 **弄** 別的**不許** **弄** 龍蝦還不快點 **弄一弄**
NONG+R+NP	懵懂的孩子 **弄** **不清楚**這些 沒有人花時間去 **弄** **清楚**排班和裝配等功能 我們還是很難 **弄** **清楚**他們之間的關係 一般民眾卻總 **弄** **不清**它們的習性 因發生追撞車輛 弄 **不清**誰對誰錯 於是十分聰敏的 **弄** **熟**了媽媽「想聽」的話 但雙方要 弄 **清楚**爲什麼而吵 爲了 弄 **清楚**牠究竟是什麼 大多數人都 弄 **不懂**米羅(JaonMir)畫裡畫的是什麼 弄 **不清**他們要的是甚麼 有時還**沒** **弄** **清楚**狀況就大肆開炮 余登發猝死案也 **弄** **不大清楚** 連「建設」與「破壞」都 **弄** 不清了嗎 目標 **弄** **清楚** 剛對園中的事務與院方關係 **弄** 清楚不久就要易人了 瘦身中心的形象也 **越弄越糟** 了 **把**自己的長短處 **弄** **清楚** 一發生溝通問題他就抱著辭典非**把**對方的意思 **弄** **清楚**不可 結果是因爲他收（開）弓子的時候不小心太大力**把**琴馬 **弄**歪了 要**將**野兔 **弄** 了烤熟吃肉 而**把**關係 **愈弄愈糟** 往往會**把**事情 **愈弄愈僵**
Idioms	也不得不對聚散無常的 **弄人造化** **搬神弄鬼** 地煽動親友之間須互送禮品 但是它卻不停地向好萊塢 **濟眉弄眼** 天上群星張狂地 **舞牙弄爪** 集合了全校愛好 **蒔花弄草** 教職員生的團体 《**草螟弄雞公**》
$NONG_{[+NOM]}$	基址標高、舖地、里 **弄** 寬度、門樓、廁所

Appendix C: The Linguistic Data of *GAO*

Constructions	Examples
GAO+NP	趙之誠一群十八人連名 搞了 張大海報 國際上研究爬蟲的學者專家都知道，臺灣有個 搞 蛇的專家「Professor Mao」毛教授 不管你們怎麼 搞 我 你的朋友楊國樞 搞了 個澄社 湖南五八年 搞了 五萬個土高爐 妻子給他 搞了 張加拿大綠卡 一說要 搞 水庫 有人 搞 飛機 可能已經 搞了 幾百次這樣的手術 他不能 搞 政治 無一人在 搞 軍事訓練 日本人在台灣運用金權 搞 文化滲透 林彪的兒子 搞 政變 搞 共產主義 鄧小平 搞 農村改革 你們 搞 臺灣共和國更是死路一條 你 搞 兩個中國 中共現在 搞 愛國教育 人人都覺得你 搞 統一 客家人幾乎一直都在 搞 「革命」 所以他們經常 搞 一些民主運動 原因是各省各部爭著 搞 建設工程 我們並不是在美國背後 搞 花樣 在辦公室 搞 羅曼史是得不償失的一件事 您與主管在 搞 小圈圈 搞 關係 那 搞 屁啊 搞 性 又不許他們 搞 副業 透過 搞 電影的帥嶽峰安排 內政部長許水德只知 搞 公關 搞 職業籃球必須要找內行人 兩人合作設場子 搞 賭場

	你又說是 搞 俱樂部 自己 搞 一個出版公司呢 我自己 搞 一個舞台劇 搞 那個 搞 這一套 記者同他們合伙 搞了 鬼 搞 什麼飛機嘛 搞 什麼東西呀 搞 什麼名堂 大學裡很多有名的老師也 搞 社會運動去了 批判運動搞了整整一年半 人民公社 搞了 二十年 合作化還是非 搞 不可 生產總是 搞 不上去
GAO+R+NP	他也 **搞** 不清楚那一個 一個 **搞** 不清楚狀況的內政部官員負責主祭 **搞** 不清方向 有些女孩子他沒有 **搞** 清楚工作性質 **搞** 清楚對等的名詞 聯誠的老板確實有心 **搞** 好事業體 商人 **搞** 不懂政治 我真 搞 不懂他爲什麼會這樣 所以家人也往往 搞 不清楚我「高壽」如何 已 搞 不清楚祖先是姓「高」 什麼問題 搞 不通 我跟外在事物的關係要 搞 清楚 一件事情還沒 搞 清楚之後他們就…不分青紅皂白就罵我們 這種事要 搞 大 我**把**自己淚水縱橫的臉 搞 乾淨 可以**把**國府的意思 搞 活 首先要**把**問題 搞 清楚 別**把**幾個小女生 搞 迷糊了 搞得 **我**七葷八素 搞得 **我**昏頭轉向 搞得 **承辦人員**大感頭痛 搞得 **全家**烏煙瘴氣 搞得 **大家**非常難過 搞得 **大夥兒**人心惶惶

	搞得 **台灣**內外翻騰 搞得 **天下**大亂 好好一塊地方 搞得 喧譁聒噪 合作化運動 搞得 聲勢浩大 要**把**教育 搞得 一團亂 螢光幕上**把**戰爭 搞得 熱熱鬧鬧 就**把**場地 搞得 亂七八糟了 只有**把**內情 搞得 更撲朔迷離 而**將**全國 搞得 天翻地覆的「全民煉鋼」 後來經過兩次大戰**把**世界 搞得 亂七八糟 最後只會**把**國庫 搞得 空虛 **把**那十來個縣 搞得 一片蕭條 常常**把**我 搞得 烏煙瘴氣的 **把**好好的一趟旅行 搞得 一團亂的不是別人
Idioms	東搞西搞 胡搞瞎搞