# Chapter 1 Introduction

The study of lexical semantics has become a central research area in linguistics in recent years. Especially, the study of verbal semantics has drawn substantial attention to a comprehensive lexical organization and semantic classification (Chang *et al.* 2000, Levin 1993, Liu 1999, Liu 2002, Liu and Chang 2005, Tsai *et al.* 1998). Among them, Levin (1993) is a pioneering work on the classification of English verbs and Liu (2002) is a pilot study on Mandarin verbal semantics. Still, in the field of Mandarin verbal semantic study, there are some issues that need to be further explored. Firstly, what are the criteria for semantic classification in Mandarin? Secondly, what are the correlations between syntax and semantics? That is, what do the syntactic patterns tell us about semantics? Thirdly, does semantic hierarchy exist? It seems that the classification of verbs should not be linear. To restore the missing pieces, this study focuses on a large set of Chinese statement verbs. It attempts to provide a unified frame-based solution (Fillmore and Atkins 1992) to the study of Mandarin verbal semantics.
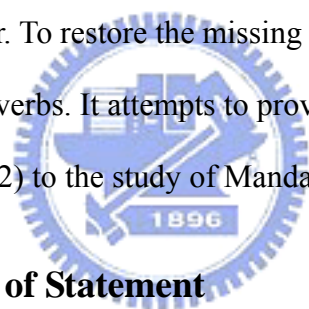
1.1 The Issue: Verbs of Statement

Liu (2003) pointed out that communication verbs constitute a basic domain, i.e., the Communication Domain and encode the most fundamental part of human activities. In the Communication Domain, various kinds of verbs were found, including verbs of conversation, statement, questioning, hearing, manner of communication, and other related verbs. Based on the classification in FrameNet, Liu and Wu (2003) distinguished fourteen frames in the Communication Domain, as given in the following table:

Table 1. Frames in the Communication Domain (Liu and Wu 2003)

No.	Frame Name	Lemma
1	Conversation	*talk, discuss, argue*, etc.
2	Statement	*address, claim, comment*, etc.
3	Candidness	(be) *candid, frank, honest*, etc.
4	Commitment	*promise, swear, threaten*, etc.
5	Encoding	*express, voice, put*, etc.
6	Gesture	*gesture, nod, beckon*, etc.
7	Manner	*babble, shout, whisper*, etc.
8	Noise	*groan, scream, bark*, etc.
9	Questioning	*inquire, ask, question*, etc.
10	Request	*ask, beg, command*, etc.
11	Response	*answer, reply, respond*, etc.
12	Volubility	(be) *talkative, chatty, silent*, etc.
13	Hear	*hear, overhear, read*, etc.
14	Means	*telephone, email, fax*, etc.

For verbs of statement, they include a wide variety of verbs and form a major group in the Communication Domain, e.g., *shuo* 說 'say', *jianghua* 講話 'talk/speak', *biaoshi* 表示 'express', *shuoming* 說明 'explain', *jianyi* 建議 'suggest', and some other words. They are verbs that express a communicative event whereby the Speaker conveys a Message to an Addressee. According to Givón's (1993) classification, these verbs are related to "utterance verbs" used for expressing a proposition related to some events. Prototypically, they tend to take a Speaker as the subject and a Message the object. The message can be coded as directly following the verb or introduced by a colon and quotation marks, as illustrated in the following examples:

(1) 她[speaker subject] 說/表示/解釋/建議/抱怨/透露/提醒 那麼你自由自在的飛吧 [message object]
Ta shuo/biaoshi/jieshi/jianyi/baoyuan/toulu/tixing name ni ziyouzizai de fei ba
She says/expresses/explains/suggests/complains/reveals/reminds then you freely fly
'She says/expresses/explains/suggests/complains/reveals/reminds that then you can fly freely.'

(2) 我[speaker subject] 說/表示/解釋/建議/抱怨/透露/提醒：「把傘打開吧。」。[message object]

Wo shuo /biaoshi/jieshi/jianyi/baoyuan/toulu/tixing:'ba san dakai ba.'

I say/express/explain/complain/reveal/remind, 'BA the umbrella open'

'I say/express/explain/complain/reveal/remind, 'Open the umbrella.'

Although these verbs share the basic surface pattern, they encode very different communicative events. One fundamental question in this study is: how do these verbs differ? More specifically, what are the distinctions in their lexical semantics and syntax-to-semantics correlates?

1.2 Theoretical Framework: Frame Semantics and Cognitive Semantics

In this study, the frame-based approach is adopted (Fillmore and Atkins 1992). Frame Semantics utilizes the theory of cognitive semantics that individual word meanings and relationships among the senses of polysemous and synonymous words can be associated with the "cognitive structures" or "frames" (cf. Fillmore and Atkins 1992). The cognitive structure can be understood as the "window" that defines as well as represents the background information of some words that share similar conceptual motivations. Only with reference to the background information, the meaning of words is definable and understandable. In each frame, some frame-specific crucial notions and participant roles, i.e., core frames are specified for differentiating a frame from others.

As pointed out by Liu and Chang (2005) and Liu *et al.* (2004), the flat structure of frames as adopted in FrameNet may be inadequate for exploring the granularity of verb types in Mandarin. Therefore, the analysis of the statement frame follows the 'five-layered hierarchical model' as mentioned above, trying to distinguish verbs into different subframes, then to near-synonym sets. The basic structure can be represented in the following figure:

Figure 1. Frame-based hierarchy of the Statement Frame
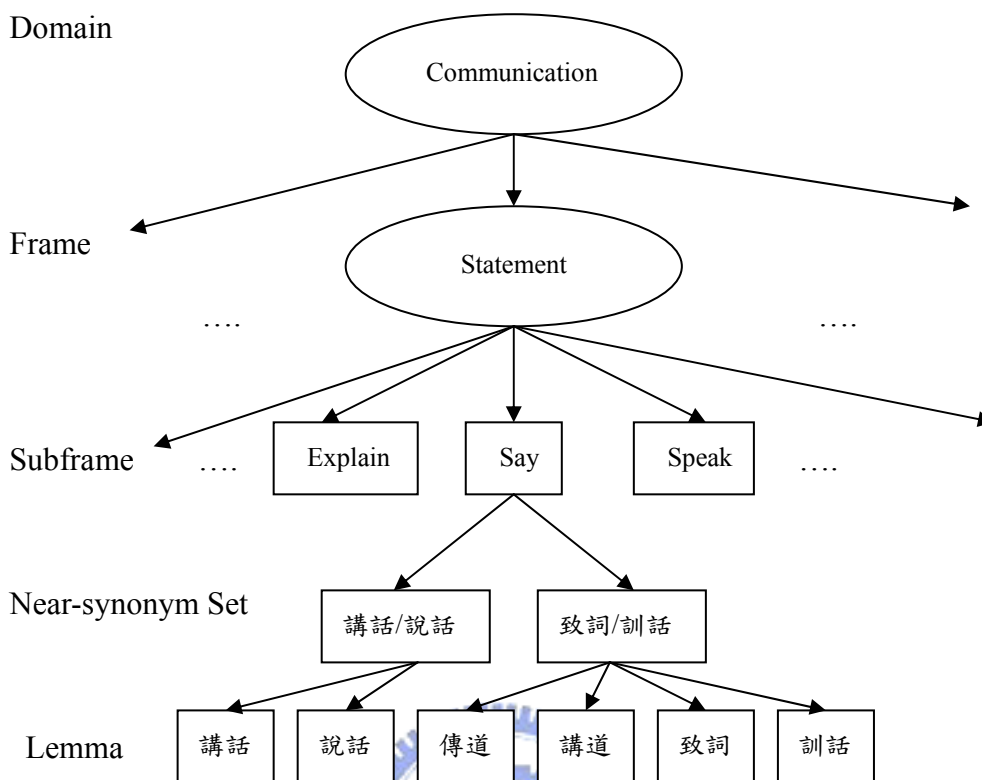
As can be seen, this model overall, is hierarchically structured with five levels: Domain
> Frame > Subframe > Near-synonym Set > Lemma (Liu and Chang 2005, Liu *et al.*
2004). It is structured from a macro to micro and top to down perspective. Statement
verbs all belong to the Statement frame, which is subsumed to a higher and larger
conceptual macro-structure—the Communication domain (Baker, Fillmore and Cronin
2003, Liu, Mei-chun 2003). Then, all the verbs in the Statement frame can be
categorized into several subgroups, i.e., subframes. In each subframe, more than one
near-synonym set can be further distinguished. Finally, in each near-synonym set, some
lemmas can be found.

The analysis and classification of statement verbs are mainly based on the
assumption that a verb's grammatical manifestations are largely projected from and
determined by its lexical meanings (Levin 1993). According to theses
syntax-to-semantics correspondences (cf. Levin 1993), verbs that behave syntactically

similar will be grouped together with lexicalized meanings being specified. The classification of subframes is made according to the syntactic foregrounding or backgrounding of certain core frame elements and their syntactic variations. As for the categorization of near-synonym sets, collocational associations of non-core arguments will be studied to capture the semantic uniqueness of each set as well as individual lemma. In each level, the syntactically-motivated manifestations will be attributed to their semantic attributes and will be represented in Module-Attribute Representation of Verbal Semantics (MARVS) proposed by (Huang *et al.* 2000).

When studying verbal semantics, one fundamental but complicated linguistic phenomenon—polysemy may occur. The current study follows the "one frame, one sense" principle proposed by Liu *et al.* (2004). In each frame, some polysemous words, i.e., words with the same morphological forms but different conceptual frames may be found. Since polysemous words share different conceptual frames and can be defined with different sets of core FEs[1], the different senses are treated as belonging to different frames. In the statement frame, some words are polysemous, for instance, *jianghua* 講話 'talk/speak', *biaoshi* 表示 'express', *shuoming* 說明 'explain', or *jianyi* 建議 'suggest', and other words. Take *jianghua* 講話 'talk/speak' as an illustration, one of its senses is 'to talk' and the other is 'to speak'. The former profiles the bidirectional communicative event while the later profiles the unidirectional message-transferring activity (cf. Liu *et al.* 2004), as presented in example (3a) and (3b), respectively:

(3)a. 他們父子[Interlocutors]高聲講話
  Tamen fuzi gaosheng jianghua
  They father and son loudly talk
  'They, the father and son, talk loudly.'
 b. 前一陣子，我[Speaker]在慈濟紀念堂對大家[Addressee]講話
  Qian yi zhenzi,wo zai CiJi jiniantang dui dajia jianghua

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[1] The abbreviation FEs represents 'Frame Elements'.

Before a period of time, I in *CiJi* Memorial Hall to everyone spoke

'A few days ago, I spoke to everyone in *CiJi* Memorial Hall.'

Following the 'one frame, one sense' principle, the two senses are defined in different cognitive frames (Conversation frame vs. Statement frame) with different sets of core frame elements. In this study, verbs that encode the unidirectional communicative events such as the statement *jianghua* will be focused.

1.3 The Merits of the Frame-based Approach to Verbal Semantics

To show that the 5 layered frame-based accounts of verbs are more comprehensive, fine-grained, and well-motivated, let us begin with discussing what the strengthes and of the frame-based approach are. Firstly, the frame-based account avoids circularity of the anaysis of near-synonyms. Traditionally, especially in dictionary, the analysis of near-synonyms is circular. That is, the definition of one word is mainly based on another lexical item, for example, the definition of *shuohua* 說話 'speak' is *jianghua* 講話 'speak' and the definition of *jianghua* 講話 'speak' is *shuohua* 說話 'speak'. On the other hand, a frame-based approach defines meaning with a semantic 'frame' that is cognitively anchored. The cognitive frame is the shared background for differentiating near-synonyms or related verbs. Within the same conceptual background, the semantically-related words can be defined with the same set of core Frame Elements. From the upper level, near-synonyms can be linked to macro-structures—frame, domain and even upper ontology.

Secondly, the proposed frame-based account is linguistically-motivated. Lexical semantic information is based on syntactic properties. More specifically, syntactically-relevant semantic classifications are based on basic syntactic patterns or collocational associations. It exceeds the existing lexical database, such as WordNet (Miller *et al.* 1990). WordNet (Miller *et al.* 1990) provides a listing of word senses and

relations without detailed syntactic realizations. Besides, the grouping of synsets in WordNet is not based on solid syntactic information. With the goal of providing a linguistically-motivated framework on Chinese verbal semantics, the proposed model makes heavy use of syntactic and collocational behavior. Thirdly, what has been revealed in the cuurect approach goes beyond the traditional concern of argument strucuture. Within this framework, the information regarding event type, basic syntactic pattern, collocational associations, semantic attributes, cognitive schema, and Frame Elements of each lexical item are all examined. Since the problems of the verb classification based on arguments and diathesis alternations has been pointed out by Tsai *et al* (1998), a well-structured approach must be adopted to the study of Mandarin verbal semantics.

Overall, the syntactically-determined, frame-based account provides the insight of dealing with near-synonyms, polysemies, and verbal semantics in general.

1.4 Scope and Goal

As an attempt to answer the questions raised in the beginning of this section, Mandarin statement verbs were extensively studied via a frame-based account. Previous works on Mandarin verbal semantics mainly focus on a near-synonym set (Tsai 1996, Chief *et al.* 2000, Liu 2002, 洪嘉翡 and 黃居仁 2004) or words in the same semantic field (Chang 2002). With limited scope, few works concern the conceptual motivations and semantic ontology of the words. Hence, this paper focuses on a large set of Chinese statement verbs. It aims to show that frame-based information—cognitive structure and manifestations of core frame elements—and collocational associations can provide a solid ground for the study of the granularity of verb types in Mandarin. Besides, it also demonstrates that verbal semantics should be represented and linked to a well-structured hierarchical framework.

This paper mainly focuses on the distinction of subframes. It aims to look for a unified set of syntactically-motivated criteria and syntax-semantic correlates for distinguishing different verb types, i.e., subframes in the same conceptual frame. Then, it is at the well-motivated subframe level that all the near-synonym sets may be anchored.

1.5 Outline of the Thesis

This paper is structured as follows: 1) Chapter one is the general introduction of this study; 2) Chapter two generally reviews works related to Chinese communication verbs and the frame-based hierarchy proposed by (Liu *et al.* 2004); 3) Chapter three briefly introduces the database and methodology; 4) Chapter four focuses on the frame-based analysis of the statement verbs; 5) in Chapter five, the detailed characterizations of each subframe are provided; 6) Chapter six discusses information beyond Frame Semantics. We argue that 'perspective' should be taken into consideration and cope with Frame Semantics to study verbs of Statement; 7) lastly, the conclusion based on the proposed analysis is given in Chapter seven.

Chapter 2 Review of the Literature

This section briefly reviews the studies on Chinese Communication verbs and the framework of event type representation. Works on communication verbs will be first discussed in section 2.1., and the proposal of event type representation will be introduced in section 2.2.

2.1 Studies on Communication Verbs
2.1.1 Studies on Conversation Verbs

Liu (Liu 2003, Liu and Chang 2005, Liu and Wu 2003, Liu *et al.* 2004) are the most comprehensive and detailed works on the study of Chinese conversation verbs.

After a careful investigation of the conversation verbs in the Communication domain,
they suggested that the purely frame-based framework seems to be inadequate in two
aspects. Firstly, the different frames used to categorize verbs need to be defined
themselves. Secondly, the flat structure of 'frames' may be inadequate to account for the
semantic granularity of verb types (cf. Liu and Wu 2003, Liu *et al.* 2004). For the first
inadequacy, Liu and Wu (2003) proposed an overarching cognitive schema for capturing
and understanding the conceptual structure of events in the Communication domain.
The schematic representation is shown below:

Figure 2. Cognitive schema of Communication Domain
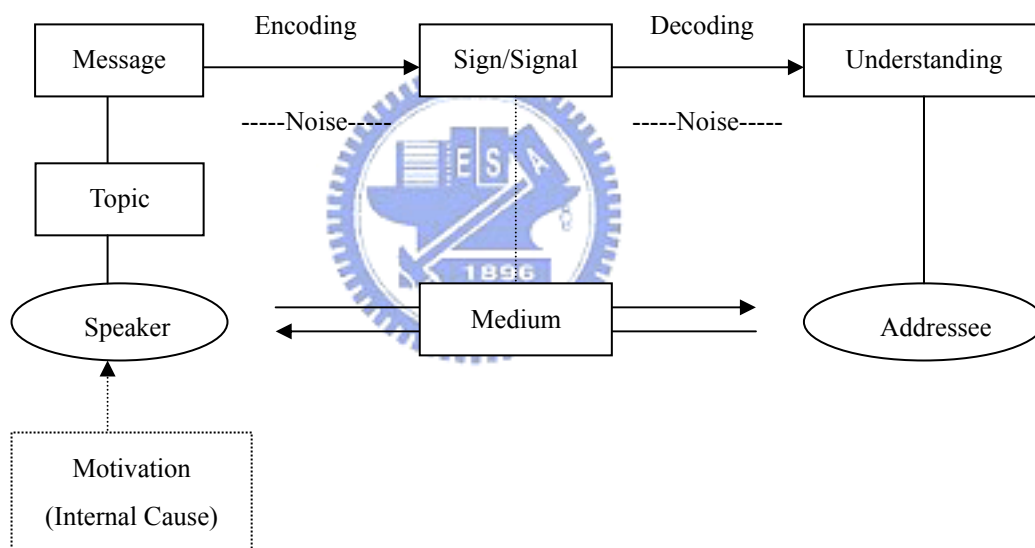
Following this proposal, different frames highlight a particular subpart of the conceptual
schema with frame-specific core frame elements. Mandarin conversation verbs can be
schematized with core frame elements: Speaker, Addressee, Topic, and Medium being
highlighted. As for the second problem, she proposed a syntactically motivated
hierarchy: Domain > Frame > Subframe > Near-synonym Set > Lemma to
systematically capture the semantic granularity of verb types in Mandarin. Within this
framework, a number of Mandarin conversation verbs were specified and grouped into

five subframes. Then, in each subframe, some verbs which behave collocationally-similar were further categorized into a near-synonym set, contrasting with verbs that behave collocationally-different (cf. Liu and Chang 2005; Liu *et al.* 2004).

In the Communication domain, one of the large sets of most frequently used verbs—the conversation verbs have been systematically studied. Yet, the other most frequently used verb group—the statement verbs remain unsolved. Since they all profile the most fundamental aspect of human verbal activity, the Chinese statement verbs should be extensively studied as well.

2.1.2 Studies on Statement Verbs: Speaking, Complaining, and Expression verbs

Liu (2002) is a pioneering study on Chinese statement verbs. In her study, three near-synonym sets of statement verbs, *shuo* 說 vs. *jiang* 講 'say', *baoyuan* 抱怨 vs. *manyuan* 埋怨 'complain', and *biaoshi* 表示 vs. *biaoda* 表達 vs. *biaolu* 表露 'explain' were examined with a corpus-based approach. The syntactic behaviors of the three near-synonym sets were first specified and then translated into the MARVS representation. She pointed out that speaking verbs—*shuo* and *jiang* profile the one-way communicative events with the focus on the Message-Theme and the information Sender while backgrounding the Recipient. Liu (2002) also stated that *shuo* and *jiang* are polysemous: they share three related but distinct senses—speaking a language (說中文), talking in general (講了半天), and citing a quotation (他說了一個故事). They were studied without clear sense differentiation but captured in different MARVS representations with different sets of role-internal attributes. In the case of complaining verbs, these two verbs may take a nominal, verbal, and clausal complement as the target of complaining. The two verbs differ in that *baoyuan* profiles a verbal act toward an

eventive target, while *manyuan* implicates a mental state toward a human causer. As for the expression verbs— *biaoshi*, *biaoda*, and *biaolu*, they all predicate verbal activities with shared participant roles: the Expresser and the Expressed. However, they differ mainly in the expression of means and manner: *biaoda* requires an overtly accessible means (戲劇表達人生) and *biaolu* implicates an unintentional manner (無意間表露).

Liu's study significantly provides a detailed analysis of syntax-to-semantics interdependencies. Nevertheless, the study on unidirectional verbal activity verbs is still unsatisfactory in two respects, and thus, shields light on the study of Mandarin statement verbs. Firstly, since speaking verbs, complaining verbs, and expression verbs all share the same conceptual structure, they should be studied in a unified framework together with more semantically-related words. Secondly, verbs that have related but distinct senses, i.e., polysemy and can be defined with different sets of role-internal attributes should be studied in different cognitive frames.
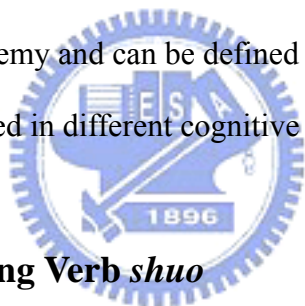
2.1.3 Studies on Saying Verb *shuo*

Su (2002) is a study of the diverse functions of *shuo* 說 'say' with primarily a grammaticalization concern. As an attempt to account for the diverse lexical and grammatical functions exhibited by *shuo*, she followed Traugott's claim (Traugott 1989) that grammaticalization is unidirectional in the early stages and further, proposed a model of the grammatical path of *shuo*, as represented below:

Figure 3. Grammaticalization paths of *shuo*
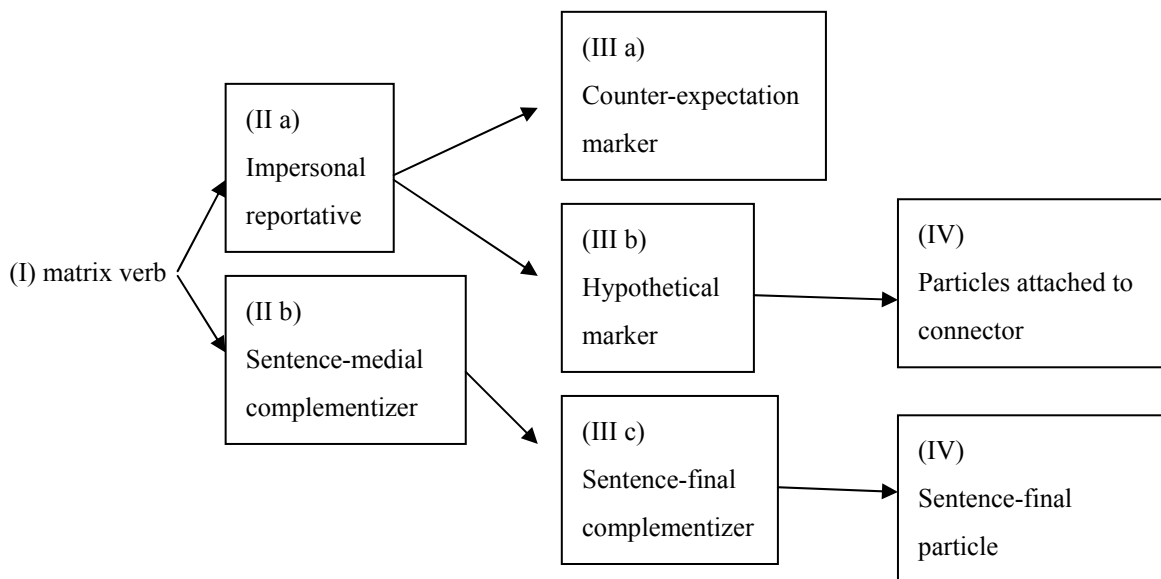
Originally, *shuo* is a canonical verb meaning 'to say' which can co-occur with modal verbs or aspect markers (Stage I). Through development, *shuo* undergoes grammaticalization and loses its verbal meaning 'to say'. It becomes a cohesion marker (textual level), and thus, can co-occur with other verbs, for example, *laixinshuo* '來信說' or *jianchishuo* '堅持說'. *Shuo* in this stage (Stage II) functions as a sentence-medial complementizer that can usually be omitted. Then it becomes a counter-expectation and hypothetical marker and sentence-final complementizer for expressing subjective belief or attitude (expressive level) (Stage III). Finally, it becomes a particle (Stage IV).

The co-occurrences of *shuo* with saying and mental verbs (Chang 1998, Cheng 1989) are attributed to the decategorization of *shuo*. In other words, *shuo* has become a sentence-medial complementizer just like English *'that'*, allowing it to co-occur with other verbs, including statement verbs. Su (2002) presents a significant analysis of Chinese *shuo,* encompassing diverse factors of cognition, syntax, and discourse. However, given a wide range of lexical compatibility, a more basic question needs to be asked: what semantic properties make it possible for the saying verb *shuo* to co-occur with various types of verbs? More specifically, what are the semantic motivations for

their co-occurrences?

2.2 Studies on Event Type Representation

As have been pointed out by Huang *et al.* (2000), in order to offer an adequate account of verbal semantics, it is important and essential to study the verb's event structure. The most important two aspects for defining a verb involve participant roles and the representation of the event (Jackendoff 1983 and Pustejovsky 1991). Within the Frame-based cognitively-motivated framework, the participant roles, namely, core Frame Elements of each event are thoroughly investigated. As for the representation of the verb's event information, the current study adopts the theory of event structure proposed by Chang *et al.* (2000) and Huang *et al.* (2000). Different from traditional autonomous view of event structure, i.e., the four-classification of event type (Vendler 1967), i.e., process, state, achievement, and accomplishment, Chang *et al.* (2000) developed five atomic event modules as the building blocks of linguistic event structure—boundary, punctuality, process, state, and stage. The building blocks can be used alone or combined together to capture the complex event structures. In their proposal, a total number of thirteen types, categorized into three groups of event structures was introduced to specifiy the aspectual information of the verbs: 1) nuclear event: activity, homogeneous state, punctuality, and complete; 2) simplex event: inchoative activity, bounded activity, inchoative stage, bounded stage, inchoative stage, and resultative, and cmpletive punctuality; 3) composite event: completive resultative and dual process-state. And also according to Liu (2003), the event type of the communication verbs, for example, *shangliang* 商量 may be more semantically complex, encoding a process with a 'semantic' endpoint. The event type, 'process with a semantic endpoint' was used along with the the above thirteen types to characterize the aspectual information of the Statement verbs.

The current study follows the proposal of Chang *et al.* (2000) and Huang *et al.* (2000) in describing eventive information for three reasons. Firstly, the account shares similar assumptions with Simth (1991). The module, overall, integrates the the viewpoint focus interpretation of aspectual facts (cf. Huang *et al.* 2000). Secondly, the classification of Vendler (1967) is too crose-grained and inadequate to capture the aspectuality of verbs. Some verbs which are classified as state or activity can be further distinguished. For example, traditionally, *gaoxing* and *kuaile* are regarded as state. However, they can be further distinguished: *gaoxing* is inchoative state which frequently co-occurs with verbal *le* and can take a clausal complement, signaling the cause of the event, while *kuaile* is homogenous state which seldom occurs with verbal *le* (cf. Tsai 1998). Thirdly, the situation type of a verb is generally complex and diverse. According to Chang *et al.* (2000) and Liu (1999), the verb *jian* 建 profiles three different event types, be it a process (他在建房子), a starting point (這房子建了五年了還沒建好), or an event boundary (這間房子建於民國五十一年). A detailed and revealing scheme of event types will help captuare the various facets of verb senses.

Chapter 3 Database and Methodology
3.1 The Database: Balanced Corpus

According to FrameNet (http://framenet.icsi.berkeley.edu/), verbs of statement are verbs used for communication by a Speaker to perform the act of addressing a Message to some Addressees by using language. Liu and Wu (2003) further defined the communicative event as unidirectional, with an emphasis on the process of information/message packaging by the Speaker to the Addressee. In Mandarin, the use of many verbs may involve the idea of unidirectional transfer of message such as *shuo* 說 'say', *biaoshi* 表示 'express', *biaoda* 表達 'express', *fabiao* 發表 'announce', *toulu* 透露 'reveal', *baogao* 報告 'report', and some other semantically-related words. In order to include a more complete set of lexical items, two

linguistically-motivated databases—FrameNet (Baker, Fillmore and Cronin 2003) and WordNet (Miller et al. 1990) were used. By first consulting the English FrameNet, a number of English lemmas subsumed to the Statement frame were obtained. Then, by referring to WordNet, the English lemmas were rendered and a set of possible Chinese equivalents was extracted. Among the possible candidates of Chinese statement verbs, frequencies of occurrences in Sinica Corpus were taken into consideration. In addition, the intuition of native speakers was consulted as well. By means of this process, verbs which are not included in Sinica Corpus, were excluded from the current study. On the other hand, verbs which were not found in the bilingual translation process, but in fact, used as a statement verb in Chinese will be added for analyzing. Finally, a set of target statement verbs was retrieved. They are listed in the order of Zhuyin with each lemma's Chinese characters, counts in Sinica Corpus, and Hanyu Pinyin, as shown below:

Table 2. Chinese lemmas in the Statement Frame

3.2 The Methodology: Corpus Distributions and Tendencies

The analysis of the present study is corpus-based. All the data and statistics of this paper were mainly based on "Academia Sinica Balanced Corpus of Modern Mandarin Chinese (Sinica Corpus)", which is a tagged Mandarin corpus containing a total of five million words. The distributional tendencies rather than grammaticality were taken as the important evidence for linguistic analysis. The distributional differences with respect to nominalization, syntactic variations of core frame elements, and collocational associations were counted and examined for the study of Mandarin statement verbs.

The method adopted for studying Mandarin statement verbs was two-way perspectives: both top-down and bottom-up. From a top-down perspective, verbs can be linked to a macro cognitive structure and semantic ontology, and thus, expand the scope of target lemmas. On the other hand, from a bottom-up perspective, individual verbs

will be specified with its syntactic behaviors and semantic correlations and then, categorized into a near-synonym set within a specific frame. Since there are so many words in the Chinese statement frame, higher-frequent verbs found in Sinica Corpus were investigated firstly. By roughly examining the first 200 examples of the corpus data, all the target verbs were intuitively grouped into several subclasses according to their morphological make-up and basic syntactic patterns found in Sinica Corpus. The intuitive classification is exhibited in the following table:

Table 3. Intuitive classification of statement verbs

	Morphological Make-up	Lemmas
說類	V	**說**、**講**、**道**、**言**
說話類	V + N	**說話**、**講話**、傳道、講道、訓話、致詞
表示類	V + V, V + R	**表示**、表達、表露、陳述、敘述、**發表**、**主張**、傳達、宣佈、宣稱、宣告、聲明、聲稱、堅稱、
說明類	V + R, V+V	**說明**、**解釋**、說清、闡述、闡明
建議類	V, V + V	**建議**、提議、**提醒**、警告、勸、勸說、勸誡、勸勉
透露類	V + V	**透露**、吐露、揭發、**揭露**
評價類	V + V	**抱怨**、埋怨、批評、**評論**、稱讚、讚美
承認類	V + V, V + R	**承認**、否認、**坦承**、保證、承諾、證明、證實
報告類	V + R	**報告**、報導、簡報、**交代**、吩咐

Within each subclass, high-frequency verbs were chosen as the representative lemmas for this study. They are 說 *shuo*, 說話 *shuohua*, 講話 *jianghua*, 致詞 *zhici*, 表示 *biaoshi*, 發表 *fabiao*, 主張 *zhuzhang*, 說明 *shuoming*, 解釋 *jieshi*, 建議 *jianyi*, 提醒 *tixing*, 透露 *toulu*, 揭露 *jielu*, 抱怨 *baoyuan*, 評論 *pinglun*, 承認 *chengren*, 坦承 *tancheng*, 證明 *zhengming*, 報告 *baogao*, and 交代 *baogao*. For each verb, the first 200 tokens of examples were thoroughly investigated if it the occurrence is more than 200 tokens. Contrarily, if the word counts less than 200, all the tokens will be examined. The data from Sinica Corpus were primarily used for examining the basic

syntactic patterns of the verbs. Considering that data in Sinica Corpus may be limited, two popular daily-updated search engines 'Google' and 'Yahoo' were used for double-checking each verb's collocational associations.

Chapter 4 Frame-based Analysis of the Statement Verbs
4.1 Frame-level Definition, Core Frame Elements, and Basic Patterns

Def.: Statement verbs profile one-way Message-packaging communicative events, focusing on the Speaker's delivering a Message on a Topic to the Addressee by using a certain Means.

Core Frame Elements: Speaker, Message, Topic, Addressee, Means

Basic Patterns: a) 周先生[Speaker]說：「我很快樂。」[Message]

      Zhou xiansheng shuo:'wo hen kuaile.'
      Zhou Mr. said, 'I very happy'
      'Mr. *Zhou* said, 'I am happy'.'

    b) 周先生[Speaker]跟/向/對我[Addressee]說：「我很快樂。」[Message]

      Zhou xiansheng gen/xiang/dui wo shuo:'wo hen kuaile4.'
      Zhou Mr. to I said, 'I very happy'
      'Mr. *Zhou* said to me, 'I am happy'.'

    c) 他們的/一個/許多/實際的建議[+nom]

      Tamen de/yige/xuduo/shiji de jianyi
      Their/one/a lot of/practical suggestion(s)
      'Their/a piece of/practical suggestion(s)'

4.2 Cognitive Schema for the Statement Frame

The shared cognitive structure for Mandarin statement verbs is defined as follows: A speaker expresses a Message on a Topic to some Addressees by means of a Medium_Means (language or Means). The communicative event is a unidirectional information-giving process. Since the Statement frame is subsumed to the Communication Domain, it can be represented in the cognitively-based archi-model proposed by Liu and Wu (2003). The cognitive schema for defining the Statement

Frame is schematized below with highlighted core frame elements:

Figure 4. Cognitive schema of the Statement Frame
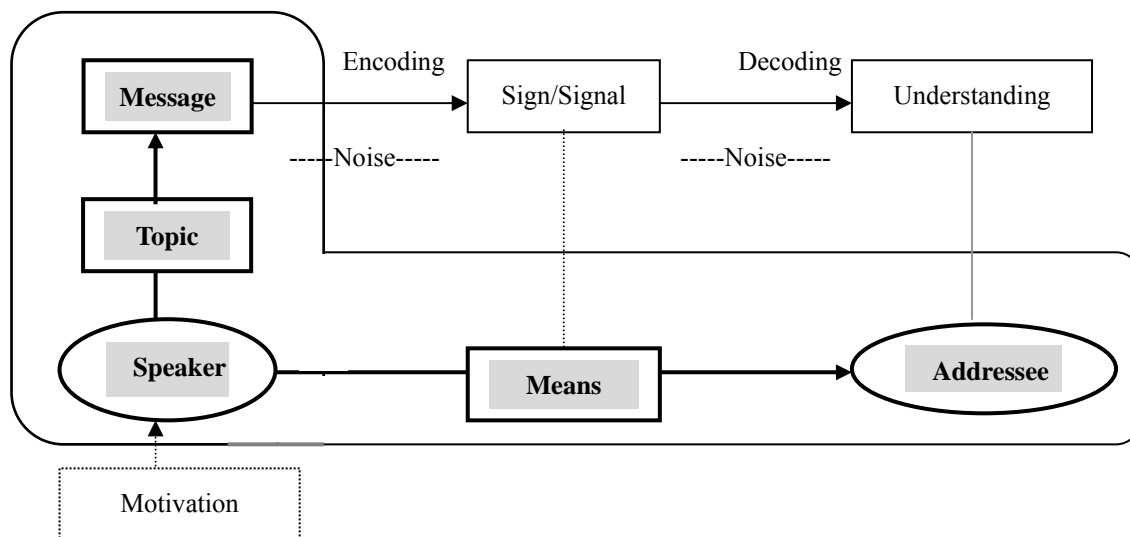
4.3 Syntactic Motivations for Distinguishing the Subframes

Verbs of statement involve a set of core frame elements: Speaker, Message, Topic, Means, and Addressee. As have been mentioned in the previous section, fifty nine statement verbs were found and can be defined by these core FEs. Then, one would wonder what motivates Chinese to have such a wide range of statement verbs. More specifically, what are each verb's unique lexicalized meanings that distinguish one from another? A satisfactory answer might not be easy to access to. Fortunately, a frame-based approach provides us with some useful insights.

By first investigating the high-frequent verbs in detail, eleven criteria for further dividing the subframes were found. Number two to five are distributions of core frame elements and number six to nine are variarions related to core frame elements. The last two are collocational patterns of non-core frame elements: 1) Frequency of nominalization 2) Incorporated Message: owing to morphological make-up, verbs such as *jianhua* '講話' or *shuohua* '說話' have theme incorporated, and thus, rarely can be followed by a Message 3) Distributional contrasts of Topic: Topic tends to be absent in

18

the speaking event 4) Distributional contrasts of Addressee: Addressee is highlighted in the Report subframe 5) Overt marking of Medium_Means: the explain event prefers to perform the verbal activity by means of an analogy or comparison Means such as 例子/實例/故事/經驗 6) Variation of Speaker role: speakers of some verbs tend to be professional (學者/專家/教授) or official (官員/議員) figures 7) Variations of Message types: Message is different among the various events; 8) Relation between Speaker and Addressee: some verbs may be more commonly used by a single Speaker to a collective Addressee, for instance, 他向他們. In addition, there exists different status relation between Speaker and Addressee, i.e., superior to inferior or *vice versa*, for example 學生向老師 or 縣太爺向衙役 9) Topic as Human: in the evaluating event, human topic can be frequently found (抱怨政府) 10) V+V pattern: some verbs may be proceeded by *jiayi* 加以 'treat/handle', others may co-occur with *xue/lianxi* 學/練習 'learn/practice'; 11) Collocational variations of aspectual modifications. Based on the above eleven criteria, verbs of statement can be further categorized into several subframes.
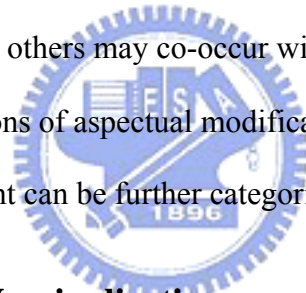
4.3.1 Frequency of Nominalization

In the Statement frame, some groups of verbs—speaking, expressing, explaining, suggesting, evaluating, and reporting verbs can be nominalized, whereas, some groups of verbs—saying, revealing, and admitting verbs cannot be nominalized, as illustrated below:

(4)a. 他人完全接受他們的建議[+nom]
 Taren wanquan jieshou tamen de jianyi
 Other people completely accept their suggestions
 'Other people completely accept their suggestions.'
 b. 他人完全接受他們的 *說/*透露/*承認[+nom]
 *Taren wanquan jieshou tamen de *shuo/*toulu/*chengren*
 Other people completely accept their *say/*reveal/*admit
 'Other people completely accept their *saying/*revealing/*admitting.'

The distributional skewing over grammatical functions is shown in table (4):

Table 4. Distribution of predicate vs. nominal uses

V Func.	說 200	說話 350	表示 600	說明 400	建議 251	透露 197	評價 279	承認 296	報告 239
Predicate	**100%** (200)	81.2% (284)	82.4% (494)	70.5% (282)	61.4% (154)	**100%** (197)	67.0% (187)	**100%** (296)	39.1% (110)
Nominalized	0%	**18.9%** (66)	13.6% (106)	**29.5%** (118)	**39.6%** (118)	0%	**33%** (92)	0%	**60.9%** (129)

Nominalization in the Statement frame correlates with the collocation with one of the most frequently used light verbs found in the Statement frame—*zuo* 做/作 'to do'. Verbs that can be nominalized were found to collocate with *zuo*, as presented in table 5:

Table 5. Collocation with light verbs *zuo* 做/作

[+nom]	說 0	說話 25	表示 104	說明 107	建議 95	透露 0	評價 79	承認 0	報告 124
做/作	0%	**4%** (1)	**6.7%** (7)	**17.8%** (19)	**1.1%** (1)	0%	**8.9%** (7)	0%	**12.9%** (16)

(5)a. 我們相信仍有足夠的時間來<u>做</u>**說明**[+nom]
   Women xiangxin rengyou zugou de shijian lai zuo shuoming
   We believe still have enough time do exposition
   'We believed that there is still enough time for us to make an exposition.'

  b. 美國國防部長錢尼對第一師的官兵<u>作</u>精神**講話**[+nom]。
   Meiguo guofang buzhang Qianni dui di yi shi de guanbing zuo jingshen jianghua.
   US Secretary of Defense *Qianni* to the first division DE soldiers do the moral lecture
   'US Secretary of Defense *Qianni* gives the moral lecture to the soldiers of the first division.'

  c. 我們相信仍有足夠的時間來<u>做/作</u> ***說**/***透露**/***承認**
   *Women xiangxin rengyou zugou de shijian lai zuo/zuo *shuo/*toulu/*chengren*
   We believe still have enough time do *say/*reveal/*admit
   'We believed that there is still enough time for us to make
      *saying/*revealing/*admitting.'

On the other hand, among all the nominalized Statement verbs, only the nominalized

explaining, evaluating, and reporting verbs can co-occur with the light verb, *jinxing* 進行 'proceed', as shown below:

Table 6. Collocation with light verbs *jinxing* 進行

[+nom]	說	說話	表示	說明	建議	透露	評價	承認	報告
	0	25	104	107	95	0	79	0	124
進行	0%	0%	0%	**0.9%** (1)	0%	0%	**1.3%** (1)	0%	**1.6%** (2)

Example (6a) and (6b) are presented to illustrate such a contrast:

(6)a. 他們在場外進行**說明/評論/報告**。
    Tamen zai changwai jinxing shuoming/pinglun/baogao.
    They outside the field proceed explanation/comment/report
    'They are giving explanations/reports outside the hall.'
  b. 他們進行 *說/*說話/*表示/*建議/*透露/*承認
    *Tamen jinxing *shuo/*shuohua/*biaoshi/*jianyi/*toulu/*baoyuan/*chengren*
    They carry on *say/*speak/*express/*suggest/*reveal/*admit
    'They are *saying/*speaking/*expressing/*suggesting/*admitting.'

According to Huang *et al.* (1995), *zuo* and *jinxing* are the most frequently-used light verbs found in corpus. *Zuo* takes a deverbal noun which refers to the result of the event, while *jinxing* takes a processal type deverbal noun which denotes a non-telic and non-punctual event. Besides, as suggested by Liu and Chang (2005), the use of the light verb, *jinxing* 進行, also entails a formal register. The former generalization suggests that nominalization in the statement frame provides a means to refer to the result (or the end product) of some stating events. As for the collocation with *jinxing*, it seems to indicate that the event type of the explaining, evaluating, and reporting verbs is 'procedural process' and tends to require a formal register.

    Furthermore, in the Statement frame, all the deverbal nouns can be modified by determiners such as *yige* '一個', *yipian* '一篇', *yifen* '一份', *yixiang* '一項', or *yizhong*

'一種' and quantifiers such as *yixie* '一些', *xuduo* '許多' or *zhuduo* '諸多', as

exemplified below:

(7)a. 今天我看到陸委會的一個說明[+nom]

    Jintian wo kandao luweihui de yige shuoming

    Today I see Mainland Affairs Council DE one exposition

    'Today, I saw an exposition provided by the Mainland Affairs Council.'

  b. 因無法盡如人意，受到了許多抱怨[+nom]

    Yin wufa jinrurenyi, shoudao le xuduo baoyuan

    Because unable entirely as desired, received a lot of complaint

    'Because it is impossible to please everyone, (someone) has received a lot of

      complaints.'

Table 7. Colloaction with determiners and quantifiers

[+nom]	說 0	說話 25	表示 104	說明 107	建議 95	透露 0	評價 79	承認 0	報告 124
Determiners & Quantifiers	0%	**8%** (2)	**6.7%** (7)	**18.7%** (20)	**14.7%** (14)	0%	**19%** (15)	0%	**6.5%** (8)

Nominalized event nominals can all be modified by prenominal adjectival phrases,

indicating that they can be evaluated or commented on, as illustrated in example (7):

(8) 我們應該對社會大眾做更詳細的說明

    Women yinggai dui shehui dazhong zuo geng xiangxi de shuoming

    We should to the society people do more detailed exposition.

    'We should give more a detailed exposition to the people in our society.'

The above collocational associations suggest that the deverbal nouns in the Statement

frame are referable and measurable. That is, through the process of explaining,

suggesting, evaluating, and reporting, a referable and measurable incremental theme is

created.

      However, among all the verbs that can be nominalized, only the speaking verbs

cannot co-occur with another frequently used light verb, *tichu* 提出 'present/propound',

as shown below:

Table 8. Collocation with light verb 提出

[+nom]	說話 25	表示 104	說明 107	建議 95	評價 79	報告 124
提出	**0%** (0)	7.7% (8)	2.8% (3)	13.7% (13)	3.8% (3)	3.4% (3)

(9)a. 羅伯茲向周芷提出合作建議[+nom]。
   Luobozi xiang Zhouzhi tichu hezuo jianyi
   Robert to *Zhouzhi* propose cooperation suggest
   'Robert made a suggestion of cooperation to *Zhouzhi*.'

   b. 羅伯茲向周芷提出合作 *說話/*講話[+nom]。
   *Luobozi xiang Zhouzhi tichu hezuo *shuohua/*jianghua*
   Robert to *Zhouzhi* propose cooperation speak/address
   'Robert made a *speaking/*addressing of cooperation to *Zhouzhi*.'

This collocational variation may be attributed to the different semantic subtypes (subframes). As suggested by Huang *et al.* (1995), Mandarin light verb, *zuo*, not only retains the "activity skeleton" but also entails the creation of a theme. Expressing, explaining, suggesting, evaluating, and reporting verbs which can co-occur with *zuo* and *tichu* encode the process as well as the creation of a 'verbal product'—the Message itself. On the contrary, saying verbs focuses more on the process of the activity, and thus, cannot co-occur with *tichu*.

Nominalized patterns in the Statement frame and Conversation frame differ. Nominalized statement verbs refer to the verbal product, with an emphasis on the result of the event, while nominalized conversation verbs refer to the event nominal emphasizing the process of the event (Liu and Chang 2005, Liu *et al.* 2004), as illustrated in (9a) and (9b), respectively:

(10)a. 他人完全接受他們的**建議**[+nom]

    Taren wanquan jieshou tamen de jianyi

    Other people completely accept their suggestions

    'Other people completely accept their suggestions.'

  b. 拒絕接受他人的**協調**[+nom]。

    Jujue jieshou taren de xietiao

    Refuse accept other people DE negotiation

    'Refuse to accept a third party's negotiations.'

The referable verbal product can be modified by determiners, while the event nominal cannot, as show below:

(11)a. 他提出一項/一個　**主張/說明/解釋/建議**

    Ta tichu yixiang/yige zhuzhang/jianyi/shuoming/jieshi

    He propose an item of/one assertion/suggestion/exposition/explanation

    'He proposed an item of/an assertion/suggestion/exposition/explanation.'

  b. 一項/一個　*__協調__

    *Ta tichu yixiang/yige *xietiao*

    He propose an item of/one negotiation

    'He proposed an item of/a *negotiation.'

High-frequency of nominalization in the Statement frame is also associated with the overt marking of Message, which constitutes the most important prerequisite for defining statement verbs. And this will be discussed in the next section.

4.3.2 Incorporation of Message

    Although statement verbs emphasize the addressing of message or information, however, speaking verbs—*shuohua* and *jianhua* rarely take a Message-object. That is, different from other events in statement frame, the event of speaking tends to not overtly present the statement or message. The frequency of overt Message object is presented below:

Table 9. Frequency of overt Message object

V	說 200	說話 284	表示 494	說明 282	建議 156	透露 197	評價 186	承認 296	報告 110
Overt Mess.	87% (174)	**1.1%** (3)	98.4% (486)	47.2% (133)	87.2% (136)	93.4% (184)	48.6% 90)	80.1% (236)	50.5% (55)

(12)a. 講演的人站在講臺上，開口**講話**，眼睛要看著聽眾。

    Jiangyan de ren zhan zai jiangtai shang,kaikou jianghua

    Speaking DE person stand on the platform, open mouth speak

    'The person stands on the platform, opened his mouth and gave a speech.'

  b. 周先生**說**：「我很快樂。」[Message]

    Zhou xiansheng shuo:'wo hen kuaile.'

    Zhou Mr. said, 'I very happy'

    'Mr. *Zhou* said, 'I am happy'.'

This distributional variation can be attributed to the verb's morphological-makeup. The Verb-Noun sequence indicates that the Message object of the speaking event has been incorporated and lexicalized, and thus, the core frame element—Message is lexically backgrounded. This also suggests that the speaking event focuses more on the process of speaking activity than the process of packaging the message. On the other hand, all the other statement verbs emphasize on how the Speaker packages the Message.

4.3.3 Distributional Contrasts of Topic

In our framework, the element, Topic, is semantically-defined. It is irrelevant with the syntactically-defined 'Topic' in the distinction of 'Topic and Comment'. According to the definition from FrameNet, topic is the entity that the proposition or propositions conveyed relate to or about. A stretch of linguistic discourse or a Text that a Communicator produces has a Topic that it is about (cf. FrameNet). In the Statement frame, some statement events tend to require a topic to be a core frame FE. The Topic may directly follow the verb, i.e., Topic as object or get moved to the front with an overt topic marker such as *youguan* '有關', *guanyu* '關於', or *zhendui* '針對', as shown

below:

(13)a. 每一個人都可以**評論**<u>國是</u>[Topic]。

       Mei yige ren dou keyi pinglun guoshi

       Each person all can comment the national affairs or issues

       'Everyone can comment on the affairs of their own country.'

    b. <u>關於這一點</u>[Topic]，我們可以用一個譬喻來**說明**…

       Guanyu zhe yidian,women keyi yong yige piyu lai shuoming

       About this point, we may use a analogy to explicate

       'Regarding this point, we may use an analogy to explicate.'

And their distributional differences are shown in Table 10:

Table 10. Frequency of Topic

V	說 200	說話 284	表示 494	說明 282	建議 156	透露 197	評價 185	承認 296	報告 110
Frequency of Topic	4.5% (9)	0%	2.8% (14)	28.7% (81)	0.6% (1)	2.5% (5)	11.9% (22)	8.8% (26)	6.4% (7)

As can be seen in the above table, except speaking verbs, all statement verbs are topic-oriented.

The occurrences of Topic and Message are highly correlated with each other. Since the speaking event rarely requires a Topic, what the Speaker states, i.e., Message becomes not so important. When the Message role is backgrounded, as in *shuohua* 說話, it rarely requires a Topic.

4.3.4 Distributional Contrasts of Addressee

Another observation related to core frame elements is that some events tend to prefer an overt realization of the Addressee; contrarily. It is important to note that the case with indirect Addressee object which is introduced by a preposition is dealt with in the Statement frame while the case with direct Addressee object, namely, the telling

verb '*gaosu* 告訴' will be dealt with in other frames[2].

(14)a. 學生<u>向</u>老師報告[Verb of Statement]

    Xuesheng xiang laoshi baogao

    Student to teacher report

    'The student reported to the teacher.'

  b. 學生報告[Non-Verb of Statement]老師

    Xuesheng baogao laoshi

    Student report teacher

    'The student reported to the teacher.'

Although all the statement events might involve an Addressee by default, taking charge

of receiving the message conveyed by the Speaker, only the reporting verbs have a

higher tendency (36% vs. less than 14%) in taking an overtly marked or specified

Addressee. This is exhibited in table 11:

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[2] There are two reasons for viewing verbs which take indirect Addressee object, i.e., the Statement verbs *shuo* or *biaoshi* and verbs which take direct Addressee object, i.e., *gaosu* or *gaozhi* as different frames. Firstly, their syntactic manifestations differ. The prototypical Basic Pattern of the Statement verbs is 'Speakert < Statement verbs < Message', e.g., 周先生說我很快樂. This is regarded as the default BP in the Statement frame. In the subframe level, some subframes tend to foreground the use of indirect Addressee (reporting event) while others tend to background the overt realization of an indirect Addressee. However, the telling verbs cannot be used in this pattern where no direct Addressee is realized, *周先生 告訴我很快樂. Only when a direct Addressee is inserted, can this sentence become grammatical. The prototypical Basic Pattern of the telling verbs is 'Speaker < Telling verbs < Addressee < (Message)', e.g., 周先生告訴他我很快樂 or 你去告訴他. The Addressee object is an obligatory argument which must be realized directly after the verb. Moreover, dative alternation is not allowed in the Telling verbs, for example, *我向/對他 告訴一個秘密 is unacceptable. Secondly, based on the assumption that semantics determines syntax (syntax-to-semantics correspondences, Levin 1993), the use of direct Addressee object and indirect Addressee object (preposition + Addressee) should be deemed as having different verbal meanings. These two types of verbs profile different communicative events. The Statement verbs largely profile the Message-packaging and conveying events with the element 'Message' being highlighted. As for the telling verbs, they highlight the 'target' of the communicative event with the Core Frame Element 'Addressee' being highlighted. In other words, the element 'Message' is obligatory in the Statement event, while optional in the telling event. The element 'Addressee' is optional in the Statement event, whereas it is obligatory in the telling event. Hence, following the 'one sense, one frame' principle, verbs of telling are regarded as belonging to another frame, namely, the Telling frame rather than a subframe in the Statement frame.

Table 11. Frequency of Addressee

V	說 200	說話 284	表示 494	說明 282	建議 156	透露 197	評價 185	承認 296	報告 110
Frequency of Addressee	2.5% (5)	4.9% (14)	2.6% (13)	13.8% (38)	7.1% (11)	6.1% (12)	8.1% (15)	4.7% (14)	**35.5%** (39)

(15)c. 學生並向老師[Addressee]報告：「神說你最有智慧。」

Xuesheng bing xiang laoshi baogao:'shen shuo ni zui you zhihui.'

Student also to teacher report, 'God say you are most intelligent'

'The student reported to the teacher, 'God said that you are most intelligent'.'

The high frequency of Addressee with *baogao* 報告 suggests that events of reporting require the coding of an Addressee, as it has to satisfy the inferior-to-superior relation between the Speaker and the Addressee, as discussed in Section 4.2.8 below.

4.3.5 Overt Marking of Means

According to Liu and Wu (2003), the event of verbal activity, i.e., communication events may be performed by means of a certain Medium, be it a language (用中文), person (透過人), or a Means. The use of Means may include phone, fax, email or face-to-face communication. In the statement frame, a special way of conveying the Message was found. In the event of explaining, rhetoric strategies, i.e., analogy or comparison (*ju lizi* '舉例子', *yong kushi* '用故事', or *yong piyu* '用譬喻') are often used as a Means. This shows that the explaining verbs prefer to make use of an analogy or comparison as a Means to expand on a specific Topic for expressing the Message, as illustrated below:

(16) 關於這一點，我們可以用一個譬喻[Means]來說明：譬如我們去訪問一個朋友…

Guanyu zhe yidian,women keyi yong yige piyu lai shuoming

About this point, we may use a analogy to explicate

'Regarding this point, we may use an analogy to explicate.'

Below is the distributional difference over the use of Analogy Means found in Sinica Corpus:

Table 12. Frequency of Medium_Means

V	說 200	說話 284	表示 494	說明 282	建議 156	透露 197	評價 185	承認 296	報告 110
Frequency of Means	0% (0/)	0.4% (1)	0.3% (2)	**16%** (47)	0% (0)	1% (2)	1.1% (2)	1% (3)	1.8% (2)

The use of Means may comply with the purpose specific to the explaining event: to explicate or make things easier to understand.

4.3.6 Variation of Speaker Role

Among all the core frame elements, Speaker is the most fundamental one in that all the statement verbs must take a Speaker-subject (almost 100% of all the occurrences). However, after a careful investigation of the corpus data, the role of the Speaker among the statement verbs was found to differ. Firstly, in contrast to human participants, some verbs tend to take inanimate subjects (place or institute name) as Speakers, as exemplified below:

(17)a. 周先生/他/杜象/爸媽/另一位/評審說…
　　　Zhou xiansheng/ta/Duxiang/ba ma/ling yiwei/pingshen shuo
　　　Mr. *Zhou*/he/*Duxiang*/Father and Mother/another one/judge say
　　　'Mr. *Zhouu*/he/*Duxiang*/Father and Mother/Another one/Judge said'

　b. 經建會/公司/善後小組/天文台[Inanimate Subject]表示，由於全球石油需求成長…
　　jingjianhui/gongsi/shanhou xiaozu/tianwentai biaoshi,youyu quanqiu shiyou xuqiu chengzhang,yijing chengxian chizhi xianxiang…
　Council for Economic Planning and Development/ Reconstruction g

group/Astronomical Museum express because the global petroleum demand

grow…

'Council for Economic Planning and Development/ Reconstruction

group/Astronomical Museum expressed that because the global petroleum

demand grows…'

In addition to inanimate subjects, some verbs were found to have a higher tendency in

taking an official and professional speaker e.g., 官員 and 專家. The examples are

shown as follows with the contrast between ordinary, i.e., unmarked participants and

official/professional, i.e., marked participants:

(18)a. 我/他/評審/有人/雷履泰/吳先生說…

　　　wo/ta/pingshen/youren/Leilvtai/wu xiansheng shuo

　　　I/he/judge/someone/*Leitailv*/Mr. *Wu* say…

　　　'I/He/The judge/Someone/*Leitailv*/Mr. *Wu* said…'

　　b. 教育部長/議員/學者/法律專家表示[Official/Professional Speaker]教官室…

　　　Jiaoyu buzhang/yiyuan/xuezhe/falv zhuanjia biaoshi jiaoguan shi...

　　　Minister of Education/congressman/scholar/expert of law express Office of

　　　　Drillmaster…

　　　'Minister of Education/congressman/scholar/expert of law expressed that Office

　　　　of Drillmaster…'

Variations as to the Speaker role in the statement frame are summarized in table 13:

Table 13. Variation of Speaker role

V	說 199	說話 284	表示 494	說明 284	建議 158	透露 196	評價 186	承認 296	報告 129
Inanimate subject	1.5% (3)	1.1% (3)	**11.1% (55)**	**8.8% (25)**	**8.9% (14)**	**11.7% (23)**	2.7% (5)	**9.8% (29)**	4.7% (6)
official/ professional Speaker	1.5% (3)	1.1% (3)	**47.6% (235)**	11.3% (32)	**20.9% (33)**	**23% (45)**	7% (13)	12.2% (36)	10.1% (13)

　　The application of inanimate subjects has been discussed by Liu and Chang

(2005). They asserted that this usage tends to be associated with verbs which entail a

formal register requiring a formal and non-personal topic as well. Similarly, the application of official and professional speaker role may be correlated with verbs that comply with the non-personal issue, namely, public topic. Besides, it might indicate that the Speaker may have a certain degree of authority over the Message. In sum, expressing, suggesting, and admitting verbs tends to encode events which require a formal register, non-personal topic, and a Speaker with authority. On the other hand, saying and speaking verbs may tend to be unrestricted with respect to the verb's register, speaker, and topic.

In contrast to identifying the Speaker, some verbs are prone to conceal the identity of the Speaker by means of the source marker source marker, *ju* 據 'according to'. The subject may be either an unspecified identity (某某人士/人員) or completely absent (據透露/表示). Example (19a) illustrates an individual Speaker, (19b) an unspecified Speaker, and (19c) exemplifies a covert null identity:

(19) a. 簡春安[Speaker]就大聲的說:「那個男生現在心跳加快..」
   Jian chunan jiu dasheng de shuo:'nage nansheng xianzai xintiao jia kuai..'
   Jian chunan then loud say, 'that male now the palpitation accelerate…'
   '*Jian chunan* then said loudly, 'That boy's palpitation accelerates now…'
   b. 據廣州一位金融界權威人士[unspecified identity]透露:今年底深圳市發行上市股票的公司將會增加十家
   Ju Guangzhou yiwei jinrongjie quanwei renshi toulu: jinnian di shenzhunshi fahxing Shangshi gupiao de gongsi jiang hui zengjia shi jia
   According to financial circle a person with authority in *Guangzhou*: End of this year *Shenzhen* release stock DE company will increase to ten
   'According to an authority in financial circle in *Guangzhou*: At the end of this year, The company in *Shenzhen* which releases stock DE will increase to ten.'
   c. 據[covert null identity]透露,劉邦友一行也將與台塑董事長王永慶會面
   Ju toulu,Liu Bangyou yixing ye jiang yu taisu dongshizhang wang yongqing huimian
   It is reported, *Liu Bangyou* a group of people also will and chairman of Formosa Cooperation meet

'It is reported that a group of people with *Bangyou Liu* will also meet the chairman of Formosa Cooperation.'

Nevertheless, verbs such as saying, speaking, suggesting, evaluating, admitting, and reporting verbs rarely used with the source marker, as exemplified in (19d):

(19) d. 據 *說話/*建議/*抱怨/*承認…

*ju *shuohua/*jianyi/*baoyuan/*chengren...*

According to speak/*suggest/*complain/*admit

'It is speaked/*suggested/*complained/*admitted'

The corpus data show that only the revealing events have a preference for unspecified Speakers, in the following table:

Table 14. Frequency of unspecified Speaker

V	說 199	說話 284	表示 494	說明 284	建議 158	透露 196	評價 186	承認 296	報告 129
據 + unspecified Speaker	0% (0)	0% (0)	1.6% (8)	0.4% (1)	0% (0)	**15.8%** **(31)**	0% (0)	0% (0)	0% (0)

This phrase '*ju* + unspecified Speaker' marks the way or the means of obtaining the message. By concealing the identity of the Speaker, the responsibility of delivering a Message is also cancelled. Besides, the occurrence of an unknown speaker may be highly associated with the marked content of the Message unique to the revealing event, which will be discussed in the next section.

4.3.7 Variation of Message Type

With respect to the role-internal features of Message, some verbs tend to encode Messages with a special content. The Message in the statement frame may be realized as nominal phrases (NP) or clauses (CL). Verbs of revealing are found to prefer an NP Message, i.e., Message_description (Baker, Fillmore and Cronin 2003) (23% vs. 0%).

And the NP message pertains to secretive matters such as *mimi* '秘密', *zhenxiang* '真相', *neimu* '內幕'. The expressed Message is often removed from or counter to peoples' knowledge. The distributional variations and examples are shown below:

Table 15. Frequency of presumably unknown NP Message

V NP Message	說	說話	表示	說明	建議	透露	評價	承認	報告
Presumably unknown Message (秘密/真相/內幕)	0%	0%	0%	0%	0%	**22.7%** (10/44)	0%	0%	0%

(20)a. 她向我**透露**<u>了她的心頭秘密</u>[presumably unknown Message]：她做夢都想當一名解放軍戰士

Ta xiang wo toulu le ta de xintou mimi: ta zuomeng dou xiang dang yiming jiefangjun zhanshi

She to I revealed her mind secret: She dream want to be a People's Liberation soldier

'She revealed to me about the secret in her mind, 'She dreamed to be a soldier of People's Liberation'.'

b. 青山決定向世人**揭露**<u>真相</u>[presumably unknown Message]。

Qingshan jueding xiang shiren jielu zhenxiang.

Qingshan decide to common people disclose truth

'*Qingshan* decided to disclose the truth to the world.'

This collocational pattern might be associated with the communicative purpose unique to the revealing event. The revealing events presumably go with the intension to disclose unknown secret. Since the Message is highly marked, the identity of the Speaker tends to be concealed or protected.

When the Message is coded as a clause, i.e., Message_content (Baker, Fillmore and Cronin 2003), some event specific variations were found as well. Firstly, for the evaluating event, the expressed Message tends to be a negative evaluation or judgment

containing negative adjectival or verbal phrases e.g., *buzu* '不足', *chou* '醜', or

shaoyijian '少一件', as illustrated in example (21a) and (21b), respectively:

(21)a. 有的人**評論**他的字說英勁有餘，渾厚不足[negative evaluation]
   You de ren pinglun ta de zi shuo yingjinyouyu, hunhoubuzu
   'Some people commented on his calligraphy and said that it's handsome but not
  vigorous enough.'
  b. 女性[Speaker]**抱怨**衣服永遠少一件[negative evaluation]
   Nvxing baoyuan yifu yongyuan shao yijian
   Female complains clothes forever lack one
   'Females complained that they are always short of one piece of clothes.'

This usage accounts for 51% of all the occurrences in the evaluating event, while less

than 2% in other events. This pattern may suggest that when evaluating verbs are used,

some personal judgment or evaluations are involved. It seems to indicate that verbs

which involve positive evaluation such as *chengzan* 稱讚 'compliment' or *zanmei* 讚

美 'praise' should also be considered in the Statement frame. A larger class of 'judging

verbs' including complaining and praising verbs should be viewed as cross-frame verbs

that involve both 'statement' and 'judgment'.

  Secondly, about 40% of all the Messages with suggesting verbs are irrealis i.e.,

coded with irrealis modals such as *yao* 要, *yingai* '應該', or *bixu* '必須'. The Message

itself conveys a future projecting proposition. This is illustrated as follows:

(22)a. 楊寬弘最後**建議**，身為輔導青少年工作者，**必須**確切了解孩子們的次級文化
   Yang kuanhong zuihou jianyi, shenwei fudao qingshaonian gongzuozhe, bixu
    queqie lejie haizimen de ciji wenhua
   Yang Kuanhong last suggest as counselor teenagers, must exactly understand the
    children sub-culture
   '*Kuanhong Yang* at last suggested that as a counselor of teenagers, we must
    understand the sub-culture of the minors.'
  b. 早晨，營地的一個同志**提醒**要帶乾糧
   Zaochen, yingdi de yige tongzhi tixing yao dai ganliang

Morning, campsite DE one fellow remind must bring prepared food suitable for
 a journey
'In the morning, a fellow in the campsite reminded (us) to bring some dried
 food.'

This pattern may be correlated with the communicative purpose unique to suggesting
event: to provide a solution or plan for future action.

  Thirdly, contrary to irrealis Messages, the Message of the admitting verbs tends to
be realis. The high percentage of the use of confirmation markers such as *queshi* '確實'
or *dique* '的確' (6.6% vs. 0.7%) in the Message of admitting events may suggest that
before making a statement, a presupposition has been established. The use of
confirmation markers is exemplified as follows:

(23) 我們也承認在推動大和解的過程及方式上的確有許多地方值得我們來檢討
  [Presumably known Message]
  Women ye chengren zai tuidong dahejie de guocheng ji fangshi shang deque you
   xuduo defang zhide women lai jiantao
  We also admit in set into action big reconciliation DE process and the way indeed
   has a lot of places worth we examining
 'We also admitted that the process and the way of promoting the great
  reconciliation still leave a lot of room for re-examination on our part.'

The occurrence of realis Message with confirmation markers seems to implicate that the
admitting event is used to encode a presumably known Message to further verify a
presupposition.

  Lastly, the Message of some events may be interrogative introduced by Mandarin
WH words such as *shemo* '什麼', *weishemo* '為什麼', or *ruhe* '如何'. Explaining verbs
outrank other verbs in taking an interrogative Message, as shown below:

(24) 並舉例說明在院區要如何運用以及使用ＡＳＰＡＣＫ[Interrogative Message]。
  Juli shuoming zai yuanqu yao ruhe yunyong yiji shiyong　ＡＳＰＡＣＫ。

Use examples explicate in institute area need how apply and use ASPACK

'Give an illustration to explicate how to make use of ASPACK in the institute.'

Despite of the low frequency (10%), it is still significant for other verbs seldom used so (less than 3%). This finding, again, might be associated with the purpose of the explaining event. The WH words may reveal that the information is insufficient or unclear, and thus, motivates the Speaker to further expand on the topic or state out more messages.

To briefly sum up, variations of Message types may be highly correlated with the purpose of the event. The varied types of clausal message and distributional skewing are summarized in the following table:

Table 16. Distributional variations of clausal Message

V CL Message	說 161	說 話 3	表示 290	說明 112	建議 138	透露 134	評價 88	承認 229	報告 33
Message as negative evaluation (不足/醜/少一件)	0%	0%	1.4% (4)	1.8% (2)	0%	0%	**51.1%** (45)	2.2% (5)	0%
Irrealis Message (irrealis modals: 要/應該/必須)	0%	0%	5.9% (17)	0%	**40.0%** (55)	0%	0%	0.4% (1)	18.2% (6)
Message encoding Realis events	5.6% (9)	0%	12.1% (35)	11.6% (13)	0%	5.2% (7)	4.5% (4)	**69.9%** (160)	6.1% (2)
Interrogative Message (什麼/為什麼/如何)	1.9% (3)	0%	0%	**10.7%** (12)	0.7% (1)	0.7% (1)	0%	0%	3% (1)

4.3.8 Relation between Speaker and Addressee

As noted above, among the statement verbs, the event of reporting is prone to highlight the core frame element—Addressee. Then, next question arises: for what reasons do some verbs tend to overtly realize the Addressee? What are the motivations?

After carefully examining the examples with overt coding of Addressee, some interesting patterns were found. Firstly, for the reporting verbs, the verbal activity is often performed by a single Speaker to a collective Addressee (50% vs. less than 30%). This is exemplified in (25):

(25) 而且在<u>下級幹部</u>[Single Speaker]向<u>他們</u>[Collective Addressee]**報告**了產量和災情之後，許多人還不相信

Erqie zai xiaji ganbu xiang tamen baogao le chanliang he zaiqing zhihou,xuduo ren hai bu xiangxin

Moreover in subordinate to them reported the production and disaster situation, many people still not believe

'Moreover, after the subordinate reported the production and disaster situation, many people still didn't believe it.'

Instead of coding interpersonal communication, the reporting event is inclined to code public communicative events. Further, the overtly coded Addressee normally has some kind of a status relation over the Speaker, being inferior to or superior:

(26)a. <u>學生</u>[Inferior Speaker]並向<u>老師</u>[Superior Addressee]**報告**：「神說你最有智慧。」

Xuesheng bing xiang laoshi baogao:'shen shuo ni zui you zhihui.'

Student also to teacher report, 'God say you are most intelligent'

'The student reported the teacher, 'God said that you are most intelligent'.'

b. <u>縣太爺</u>[Superior Speaker]低聲向<u>身旁的衙役</u>[Inferior Addressee]**交代**一番

Xiantaiye disheng xiang shenpang de yayi jiaodai yifan

The county magistrate in a low voice order to near body DE government office

'They county magistrate ordered the government offices near him in a low voice.'

Examples above demonstrate that the reporting verbs tend to profile formal and public events rather than interpersonal communicative events. The distributional tendency found in Sinica Corpus is presented as follows:

Table 17. Distributional variations of the relation between Speaker and Addressee

V CL Message	說 5	說話 14	表示 13	說明 38	建議 11	透露 12	評價 15	承認 14	報告 39
Single to Collective	0%	28.6% (4)	30.8% (4)	13.2% (5)	9.1% (1)	16.7% (2)	6.7% (1)	0% (0)	**48.7%** (19)
Status relation between Speaker and Addressee	0%	7.1% (1)	23.1% (3)	0%	18.2% (2)	8.3% (1)	13.3% (2)	0%	**51.3%** (20)

4.3.9 Variation of Topic Type

As noted in Section 4.3.3, Topic can be found in all the statement verbs except verbs of speaking. However, different from Topics referring to events or affairs, some Topics are human Topic, as provided in (27a) and (27b):

(27)a. 在臺灣念書的孩子大多數都**抱怨**政府[Human Topic]。
　　　Zai Taiwan nianshu de haizi daduoshu3 dou baoyuan zhengfu.
　　　In Taiwan study DE kids most all complain the government
　　　'Most of the Kids who study in Taiwan all complain about the government.'
　　b. 陳壽**評論**曹操[Human Topic]：廣用謀略
　　　Chen Shou pinglun Cao Cao:guangyongmoulve
　　　Chen Shou comment *Cao Cao*: extensively use the strategy
　　　'*Chen Shou* commented on *Cao Cao*, '(He) makes extensive use of military strategies.''

The event of evaluating is unique in this usage and accounts for 52% of all the Topic occurrences. The distributions of human Topic among verbs of statement are listed below:

Table 18. Frequency of Topic type

V	說	說話	表示	說明	建議	透露	評價	承認	報告
Topic as human	0%	0%	0%	0%	0%	0%	**50%** (11/22)	0%	0%

This observation may suggest that the target of evaluating events may be human. The event of evaluating may be used to state messages about events or human beings, whereas all the other events tend to address messages about events.

4.3.10 V+V pattern: with the Preceding Verbs *jiayi* 加以 and *xue/lianxi* 學/練習

Another pattern that sets the verbs apart is the collocation with preceding verbs. After looking into the verbs in detail, two kinds of preceding verbs were found to collocate with one specific group of statement verbs. Some verbs may co-occur with the preceding verb *jiayi* 加以 'treat/handle', others occurs with *xue/lianxi* 學/練習. For the collocation with *jiayi*, significantly, only the explaining verbs[3] can occur with *jiayi*, while others cannot, as illustrated in (28a) and (28b), respectively:

(28)a. 但我認為，如果不對現代人的塵勞根源[Topic]加以說明，確實很難有效掌握。
　　　 Dui xiandairen de chenlao genyuan jiayi shuoming
　　　 To modern people's dust fatigue root inflict to explain
　　　 'Inflict on and explicate about the source of modern people's worldly fatigue.'
　 b. 加以 *說/*說話/*表示/*建議/*透露/*抱怨/*承認/*報告
　　　 *Jiayi *shuo/*shuohua/*biaoshi/*jianyi/*toulu/*baoyuan/*chengren/*baogao
　　　 'Inflict on and *say/*speak/*express/*reveal/*complain/*admit/*report'

This pattern is highly associated with the overt marking of Topic, Means, and Addressee. 75% of the occurrences of *jiayi* were found to collocate with a Topic, Means, or Addressee, suggesting that the explaining event may entail a specific target including person and event.

Secondly, the ordinary but significant preceding verbs—*xue*, *xuexi*, and *lianxi* were found to be used with the statement verbs. What they encode seems to differ from

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[3] Some of the evaluating verbs such as *pinglun* and *piping* can occur with *jiayi*. However, other evaluating verbs such as *baoyuan* or *miayuan* cannot collocate with *jiayi*. This asymmetrical variation can be attributed to the differences of near-synonym sets.

the former one. In the statement frame, only the speaking event[4] was found to be

preceded by preceding verbs like *xue*, *xuexi*, and *lianxi*, as exemplified below:

(29)a. 但我還是會找適當的時機，讓小朋友們上台<u>練習</u>**說話**。

 Dan wo haishi hui zhao shidang de shiji, rang xiao pengyoumen shangtai lianxi

  shuohua.

 But I still will look for suitable opportunity let children come on stage practice

  speak

 'But I still will look for suitable opportunities to let the children practice speaking

  on the stage.'

 b. 讓小朋友們上台<u>練習</u> ***說/*表示/*說明/*建議/*透露/*抱怨/*承認**。

 Rang xiao pengyoumen shangtai lianxi

  *shuo/*biaoshi/*shuoming/*jianyi/*toulu/*baoyuan/*chengren

 Let children come on stage practice

  *say/*express/*explicate/*suggest/*reveal/*complain/*admit

 'Let the children practice

  saying//*expressing/*explicating/*suggesting/*revealing/*complaining/*ad

  mitting.'

As have been mentioned in section 4.3.1 to 4.3.3, the speaking verbs largely profile the

speaking activity. Here, this usage may indicate that the speaking verbs encode the most

basic verbal activity of human beings (Brown 1958) with little restriction on the

speaking activity's register, topic, and manner.

 The collocational associations with preceding verbs are summarized in the

following table:

Table 19. Collocational associations with preceding verbs

	說	說話	表示	說明	建議	透露	評價	承認	報告
jiayi 加以	No	No	No	**Yes**	No	No	No[5]	No	No
xue/*lianxi* 學/練習	No	**Yes**	No	No	No	No	No	No	No

---

[4] Among the reporting verbs, *baogao* can co-occur with *lianxi*, while other verbs cannot occur with *lianxi*. Again, this asymmetry is attributed to the distinction of near-synonym sets.

[5] 評論 can be used with 進行 and 加以.

4.3.11 Collocational Associations with Aspectual Markers

Last but not the least important, statement verbs differ with respect to the collocation with aspectual modifications. The collocational asymmetries over aspectual modifications are provided in table 20:

Table 20. Collocational asymmetry of aspectual modifications

Aspectual Modifications Verb	Aspectual markers			Durational Phrase of time	Endpoint marker
	[正在/正/著]	Verbal 了	Sentential 了	了＋duration[NP/AdvP]	Adverbial [完]
說/表示/說明/建議/評價/報告	Yes	Yes	No	**Yes**	Yes
說話	Yes	Yes	**Yes**	No	Yes
透露/承認	**No**	Yes[6]	No	No	Yes[7]

The majority of verbs (saying, expressing, explaining, suggesting, evaluating, and reporting verbs) differ from the revealing and admitting verbs in aspectual modifications. The former can take progressive markers, i.e., 正 *zheng*, 正在 *zhengzai*, and 著 *zhe* and duration phrases (*le* + time duration). Also, they can take perfective markers denoting possible event boundary such as 了 *le* and 完 *wan*. The association patterns are illustrated in (30a), (30b), and (30c), respectively:

(30) a. 他正/正在 說/表示/說明/建議/抱怨/報告：被採訪的股民反應平靜、承受力很強[8]

Ta zheng/zhengzai shuo/biaoshi/shuoming/jianyi/baoyuan/baogao: bei caifang de gumin fanying pingjing, chengshouli hen qiang

He ZHENG/ZHENGZAI say/express/explicat/suggest/complain/report: be interviewed DE investor response calm, the ability to endure very strong

'He is saying/expressing/explicating/suggesting/complaining/reporting, 'the investors who are interviewed respond calmly and have great ability of

---

[6] This usage was from Google (941203). '記者讓她用一句話來形容自己目前的感情狀態時，徐若瑄終於忍不住親口**承認**了兩人已分手的事實。'

[7] This usage was from Yahoo (941202). '當我一**承認完**,我的心立刻變得好輕鬆。'

[8] Example found in Google (950207)

endurance'.'

b. [9]飄雲說/表示/說明/建議/抱怨/報告了許久，中間有些話我聽得不真切。

Piaoyun shuo le xujiu, zhongjian youxie hua wo ting de bu zhenqie.

Piaoyun say LE for a long time, middle some of the words hear not realistic

'*Piaoyun* talked for a long time, (but) some of the words didn't sound real.'

c. [10]他說/表示/說明/建議/透露/抱怨/承認/報告 了/完, 又馬上告訴你一個訊息。

Ta shuo/biaoshi/shuoming/jianyi/toulu/baoyuan/chengren/baogao le/wan, you mashang gaosu ni yige xunxi.

He say/express/explicate/suggest/reveal/complain/admit/report LE/WAN, again immediately tell you a news

'After finishing saying/expressing/explicating/suggesting/revealing/complaining/admitting/reporting, he immediately told you a piece of news again.'

The acceptability with progressive markers may be attributed to the event type: a process instead of a state. The event is processal and can be lasted for a time course (Chang *et al.* 2000, Huang *et al.* 2000). As for the acceptability with perfective markers, the collocation might suggest that the event may be terminated.

As for the speaking verbs, they have similar aspectual collocations with the above six groups of verbs but differ in the collocation with sentential *le*. The speaking verbs can be modified by sentential *le*, indicating that the event not only has a potential endpoint but also has a starting point (Ross 1957). It can be concluded that the event type of the speaking verbs is 'bounded process' (Chang *et al.* 2000, Huang *et al.* 2000) which includes an endpoint and a starting point.

(31) 他終於開口說話了

Ta zhongyu kaikou shuohua le

He finally open mouth and speaks

He finally speaks.

---

[9] Example found in Google (941208).
[10] Example found in Google (941213).

However, the revealing and admitting verbs were found to be different from all the above-mentioned verbs. They are unique in that they cannot take progressive markers, i.e., *zheng*, *zhengzai*, and *zhe*, as exemplified in (32a) and (32b), respectively:

(32)a. 他 *正/*正在承認/透露：『還是愛的。』
　　　 *ta *zheng/*zhengzai chengren/toulu:"haishi ai de."*
　　　 He ZHENG/ZHENGZAI admit/reveal: still love DE
　　　 'He is *admitting/*revealing, 'I still love (her)'.'
　　b. 他正/正在 說/表示/說明/建議/抱怨/報告…：被採訪的股民反應平靜、承受力
　　　 Ta zheng/zhengzai shuo/biaoshi/shuoming/jianyi/baoyuan/baogao: bei caifang
　　　　 de gumin fanying pingjing, chengshouli hen qiang
　　　 He ZHENG/ZHENGZAI say/express/explicat/suggest/complain/report: be
　　　　 interviewed DE investor response calm, the ability to endure very strong
　　　 'He is saying/expressing/explicating/suggesting/complaining/reporting, 'the
　　　　 investors who are interviewed respond calmly and have great ability of
　　　　 endurance'.'

This means that the event type of revealing verbs may be 'punctual' (Chang *et al.* 2000, Huang *et al.* 2000). The collocational associations with aspectual modifications provide another syntactically-motivated evidence for categorizing verbs in the Statement frame. A large group of the Statement verbs can be grouped into three major types. The detailed aspectual information of each subframe will be discussed in Chapter five.

4.4 Distinctions of Distributional Variations among Subframes

As demonstrated in the previous section, the asymmetrical distributions with respect to the manifestations of nominalization, core Frame Elements, and non-core Frame Elements may serve as the anchor for the categorization of verbs. The following five tables are summarize the collocational patterns (including collocation of core FEs and non-core FEs) associated with the nine subframes within the Statement frame. The preliminary distinction of the nine subframes regarding grammatical functions and distributions, distributions of core FEs, variations of internal features of core FEs, and

asymmetrical collocation with non-core FEs are shown as follows.

Table 21 is the summary of the grammatical functions and distributions of different groups of verbs in the Statement frame. Verbs of Saying, Revealing, and Admitting cannot be nominalized. On the contrary, verbs of Explaining, Suggesting, Evaluating, and Reporting have a higher percentage of nominalization, especially when used as a head noun.

Table 21. Grammatical functions and distributions

It is found that a certain core FE tends to be foregrounded or backgrounded in a specific subframe. The distributional variations regarding core FEs are summarized in the following table:

Table 22. Distribution of core FEs

From table 22, it is shown that all the verbs require the use of a human subject to be the Speaker of the communicative event. Slightly different, except the Speaking verbs, all the Statement verbs require the conveying of a Message complementl, be it a nominal phrase or clause. Since what is said is closely related to what is being discussed about, namely Message is closely related to Topic, the application of the two is shown to be parallel. Different from most of the verbs, the Speaking verbs tend to background the use of Topic. As for another FE 'Addressee', although all the Statement events might involve an Addressee by default, the Reporting verbs are prone to highlight the participation of an Addressee. At last, it is shown that the Explaining event prefers the use of Means_Analogy when performing the verbal activity.

However, we can only distinguish the differences among the Speaking, Explaining, and Reporting verbs from table 22. Lots of verbs remain undifferentiated. Verbs of saying, expressing, suggesting, revealing, evaluating and admitting all profile

the same Frame Elements: Speaker and Message. As a consequence, the internal

features of core frame elements are need to further differentiating the sub-types of these

statement verbs, as provided in table 23:

Table 23. Distributional asymmetries of internal features of Speaker and Message

As can be seen from table, the above-mentioned six verbs types manifest different

internal features on these two Frame Elements. Firstly, the Saying verbs are

underspecified with regards to these elements. Secondly, the Expressing verbs tend to

use inanimate subject and official/professional as the Speaker of the event. Thirdly, for

the Suggesting verbs, in addition to exhibit similar syntactic realizations on Speaker role,

they have a higher percentage of profiling an irrealis Message. Fourthly, the Revealing

verbs are shown to be sharply different from others in preferring the use of '據 +

unspecified Speaker' and presumably unknown Message. Fifthly, the Evaluating verbs

frequently profile negative evaluations. Finally, the Admitting verbs are prone to encode

realis Messages.

In addition to grammatical functions and variations of core FEs, the lexical

collocation, i.e., preceding verb pattern and grammatical collocation, i.e, aspectual

modifications can also serve as the basis for categorizing the verbs, as provided in table

24:

Table 24. Distributional asymmetries associated with non-core FEs

Although sharing the same cognitive frame, subgroups of verbs manifest distinct

variations of syntactic properties, indicating that they may have different lexicalized

semantic properties (syntax-to-semantic correspondences).

4.5 Summary

The above-mentioned syntactically-motivated classifications of verbs in the Statement frame clearly suggest that a purely flat structure of frame may be inadequate for specifying the verbs. Since the verbs exhibit different syntactic patterns and event types, a clearly defined subframe level should be introduced. According to the eleven syntactically-motivated criteria, a total of nine subframes within the Statement frame were distinguished. They nine subframes are: 1) subframe 1- Say subframe 說類; 2) subframe 2- Speak subframe 說話類; 3) subframe 3- Express 表示類; 4) subframe 4- Explain 說明類; 5) subframe 5- Suggest 建議類; 6) subframe 6- Reveal 透露類; 7) subframe 7- Evaluate 評價類; 8) subframe 8- Admit 承認類; 9) subframe 9- Report 報告類. Furthermore, it is at the subframe level that near-synonym sets may be anchored. Once the subframe is well-defined, the characterization of near-synomyms and individual lemmas become easier.
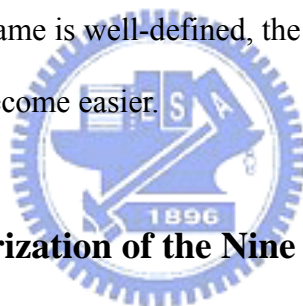
Chapter 5 Characterization of the Nine Subframes in the Statement Frame

In this Chapter, the detailed analyses and characterizations of all the subframes are provided. Instead of presenting all the subframes according to their numerical order, we use five sections to group as well as compare and contrast all the subframes. First, the default set of the Statement frame—the Say subframe is discussed. Second, the Speak subframe is discussed, which is also the default set but with Message incorporated. Then, the subframe which highligts one of the Semantic Attributes, formal Regist—the Express subframe is dealt with in Section 5.3. Fourthly, the ones which have multiple inheritances—the Explain, Suggest, and Evaluate subframes are provided with detailed analyses in Section 5.4. Finally, the Reveal and Admit subframes which highlight a specific core FE are introduced in Section 5.5.

5.1 The Default Member of the Statement frame: Say Subframe 說類

In the Statement frame, the Saying verbs are distinguished from the other subframes for several reasons. Firstly, the verbs in the Say subframe are monosyllabic, whereas the other verbs are all disyllabic. Secondly, as can be seen in table 21 and 22, although they highlight the same set of core FEs with the Express and Reveal subframe, the internal features of these FEs tend to be unrestricted and unmarked in the Say subframe. Therefore, the collocations of Saying verbs are also unrestricted. That is, the verbs can collocate with various kinds of grammatical and lexical collocations instead of preferring some specific kinds of collocation, be it the use of inanimate or official/professional subject or manner modifiers.

Thirdly, the event type of the Saying verbs is simple process. The evidence from collocation with aspectual modifications can prove this point, as given in the following table:

Table 25. Collocational Associations of the Say subframe

	CA
1	Aspectual modification：＊ ＜Aspectual Marker[著/過/完/了]
2	Duration Phrase：＊ ＜ 了 ＜duration[NP, AdvP][半天/許久/一會兒]
3	Preverbal Modification: Preverbal Frequency/Aspectual modifier[一直/持續]

(33)a. 李文秀說著伸手去握刀柄。
　　　Li Wenxiu shuo zhe shenshou qu wo daobing.
　　　Li Wenxiu say ZHE stretch out a hand grasp the hilt
　　　'While talking, *Wenxiu Li* stretched out her hand to grasp the hilt.'
　b. 聽家康一說完，秀吉也歎了一口氣
　　　Ting Jiakang yi shuo wan, Xiuji ye tan le yi kouqi
　　　hear *Jiakang* say WAN, *Xiuji* sign
　　　'Right after hearing *Jiakang* finish his talk, *Xiuji* signed.'
　c. 飄雲說了許久，中間有些話我聽得不真切。 (Google 950207)
　　　*Piaoyun shuo le xujiu, zhongjian youxie hua wo ting de bu zhenqie.*
　　　Piaoyun say LE for a long　time,　middle some of the words hear not realistic

'*Piaoyun* talked for a long time, (but) some of the words didn't sound real.'

d. 秀晴啜泣的<u>一直</u>道：『來不及了！ (Yahoo 950531)

   Xiuqing chuoqi de yizhi dao: "laibuji le!

   Xiuqing weep say: There won't be enough time

'*Xiuqing* sobbed and said, 'There won't be enough time'.'

e. 他能一個人<u>持續</u>說半小時 (Yahoo 950531)

   Ta neng yige ren chixu shuo ban xiaoshi

   He can a person continue say for half an hour

   'He can keep talking for an hour by himself.'

The term frequency and aspectual modifier in CA 3 is adopted from (Givón 1993). Since the verbs can occur with duration phrases which is used to measure the length of the time course of the event, progressive markers such as *zhe*, and frequency modifiers, their event type is simple process.

    The subframe-specific information and BPs unique to the Saying verbs are given as follows:
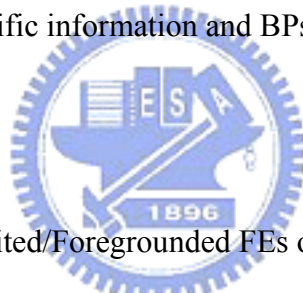
(34) Definition and Inherited/Foregrounded FEs of the Say subframe

Definition: A speaker conveys a Message, sometimes on a Topic.

Inherited FE: Speaker, Message, Topic

As for Basic Patterns, the Saying verbs exhibit a total of four BPs which all inherit from the Statement frame, as provided below:

Table 26. Basic Patterns with Frame Elements of the Say subframe

No	Core FEs	BP
1.	[+Speaker] [+Message]	Speaker[NP]＜ ＊ ＜（：+) Message[CL/NP]
2.	[+Speaker] [+Topic]	Speaker[NP] ＜ ＊ (+ 的) ＜ Topic [NP]
3.	[+Speaker] [+Topic] [+Message]	關於＋ Topic[CL] ＜ Speaker[NP] ＜ ＊ ＜ Message[CL]
4.	[+Speaker]	Speaker [NP] ＜ ＊

For the first BP, about 87% of all the verb tokens take a Message complement. In addition, within the Statement frame, verbs in the Say subframe have highest percentage of realizing their Message in direct quotes (26% vs. 5%), as exemplified in (35a):

(35)a. 周先生[Speaker]馬上說：「當然做啊！」[Clausal Message Complement of Direct Quote]

Zhou xiansheng mashang shuo:'dangran zuo a!'

Mr. *Zhou* immediately say, 'I Certainly do'.

'Mr. *Zhou* said immediately, 'Of course, I will do it!''

  b. 她[Speaker]說那麼你自由自在的飛吧[Message of Indirect Quote]！

Ta shu name ni ziyouzizai de fei ba

She says then you freely fly

'She says that then you can fly freely.'

The function and implication of the manipulation of direct and indirect speech will be thoroughly discussed in the next chapter.

Moreover, Topic is also used in the Saying event. The Topic can either directly follow the verb or be preposed, as illustrated in the contrived sentences below:

(36)a. 我們[Speaker]所說的國學[Topic]

Women suo shuo de guoxue

We say national studies

'The so-called national studies we talked about.'

  b. 關於棋賽[Topic]，他[Speaker]說：「祺賽有很高的可塑性。[Message]

Guanyu qisai,ta shuo:'qisai you hen gao de kesuxing.

As for auspicious match, he say, 'The auspicious match has very high plasticity'

'As for the auspicious match, he said, 'The auspicious art shows high flexibility'.'

The Saying verbs can also be used in the pattern where no Message is explicitly expressed, as exemplified in (37):

(37) 李文秀[Speaker]說著伸手去握刀柄。

Li Wenxiu shuo zhe shenshou qu wo daobing.

Li Wenxiu say ZHE stretch out a hand grasp the hilt

'While talking, *Wenxiu Li* stretched out her hand to grasp the hilt.'

To briefly sum up, verbs in the Say subframe are the default set of the Statement frame. They are the representative members as well as the basic-level lexical item (Berlin and Paul 1969, Browm 1958, Rosch 1973, Rosch 1975) in the Statement frame. Their verbal meanings are less restricted with few specifications on the role-internal attributes. Accordingly, verbs in this subframe can co-occur with all the verbs in other subframes, for instance, *biaoshishuo* '表示說', *jianyishuo* '建議說', *jieshidao* 解釋道, and some other combinations. More importantly, the co-occurrence normally triggers the use of direct speech, which is a highlighted feature of the Saying verbs.

(38)a. 他最後<u>發表說</u>：<u>太陽是像陀螺一樣旋轉著的</u>[CL Complement in Direct Quote]。

　　Ta zuihou fabiao shuo:taiyang shi xiang tuoluo yiyang xuanzhuan zhe de.

　　Ta zuihou fabiao shuo:taiyang shi xiang tuoluo yiyang xuanzhuan zhe de

　　He at last announce say: The sun is like top revolves

　　'He finally announced and said, 'The sun revolves just like the top'.'

b. 蔣介石<u>致詞說</u>：<u>我今天代表本黨同志，根據國父的遺教，說明外蒙古和西藏的民族問題</u>[CL Complement in Direct Quote]。

　　Jiang Jieshi zhici shuo: wo jintian daibiao ben dang tongzhi4, genju guofu de yijiao, shuoming waimenggu he xizang de minzu wenti

　　Jiang Jieshi address say, 'I today represent this party fellow, according to God Father's legacy of teachings, explain Mongolian and Tibet's national question'

　　'*Chiang Kai-shei* addressed and said, 'Today, as the representative of the comrades of my party, according to our founding Father's instructions at death bed, I will talk about the ethnic problems of Mongolian and Tibet'.''

The verb 發表 *fabiao* which is one of the members of the Express subframe typically (98%) takes a nominal Message complement such as 演說 *yanshuo* or 論文 *lunwen*. Significantly and interestingly, when occurring with *shuo*, a clausal complement realized in direct quote may follow. Alternatively, some of the verbs which barely take a

Message complement such as verbs in the Speak subframe, e.g., 說話 *shuohua*, 講話 *jianghua*, or 致詞 *zhici*, may take a clausal complement of direct quote after co-occurring with *shuo*, as shown in example (37b).

The syntactic manifestations of the Saying verbs such as the unrestricted use of collocational associations and the frequent collocate with verbs in other subframes may be ascribed to the semantic nature of the Saying verbs. The semantics of the verbs are unspecified with regards to the Register, Manner, or role-internal attributes, as summarized in (39):

(39) Semantic Attributes of the Say subframe

Semantic Attributes: [Event type: process]

[Register: unspecified]

[Speaker: unspecified]

[Topic: unspecified]

[Purpose: unspecified]

At last, more lemmas which are also monosyllabic need to be added in this suframe, as given below:

(40) Lemmas belonging to the Say subframe

Representative Lemmas: *shuo* 說 and *dao* 道 (Selected as representative lemmas for most frequent usage)

Other lemmas: 講, 言

5.2 Subframe with Message Incorporated: Speak Subframe 說話類

In the Statement frame, most of the verbs are formed in V-V or V-R sequences.

However, the Speaking verbs are far different from other members in the same frame. Their morphological make-ups are V-N sequence, making them rarely take direct complement. From other perspective, verbs in this subframe are cognate verbs since the verbs can be paraphrased as follows:

(41)a. 說話
    shuohua
    speak
  b. 說一句話
    shuo yiju hua4
    speak

The subframe-specific information used to characterize the Speaking verbs is exhibited as follows:

(42) Definition and Inherited/Backgrounded FEs of the Speak subframe

Definition: A speaker speaks. Due to morphological make-up (Verb-Noun sequence), verbs in this subframe seldom take a direct complement. In other words, the Message of the Speaking event is incorporated and lexicalized. This Frame element, namely, Message is shown to be backgrounded in the Speak subframe. Also, Topic tends to be absent. This means that the speaking activity is emphasized over the packaging of the Message, which is the most central and basic concept profiled by verbs of Statement.

Inherited and Backgrounded FE: Speaker, Message (backgrounded)

Compared to verbs in other subframes, the Speaking verbs manifest the simplest BP with limited set of core EFs when. The Basic Patterns associated with core Frame Elements are shown as follows:

Table 27. Basic Patterns with Frame Elements of verbs of Speaking

No	Core FEs	BP
1.	[+Speaker]	Speaker[NP] ＜ ＊
2.	[+Speaker] [+Message]	Speaker[NP] ＜ ＊ ＜ ： ＋ Message[CL]

Verbs in the Speak subframe have only two BPs. The first BP, with Message backgrounded and unrealized, accounts for the vast majority (98%), as illustrated in (43a).

(43)a. 我們學校五年級的一位同學[Speaker]，到臺上說話

    Women xuexiao wu nianji de yiwei tongxue,dao taishang shuohua

    Our school five Grade DE one schoolmate, on the platform speak

    'A schoolmate who is five Grade of my school, spoke on the platform.'

  b. 正想開口，孔融[Speaker]已經先說話了：我們家和李先生是世交，麻煩您通報一下[Message]

    Zheng xiang kaikou,kongrong yijing xian shuohua le: women jia he Li xiansheng shi shijiao,mafan nin tongbao yixia

    Right want open mouth, *Kong Rong* already first speak: Our family and the Li family are good friends, please notify

    'At the moment of starting to talk, *Kong Rong* has already spoken, 'Our family and the Li family have good relationship, can you please help me notify them'.'

If the Message is overtly realized (only 2%), it must occur in indirect quote where a colon or quotation marks must be used, as exemplified in (41b).The syntactic realization of not taking an explicit complement can be attributed to the morphological make-up of verbs in this subframe. Since they are all formed in Verb-Theme sequence, they cannot take another syntactic complement. According to the principle proposed by Liu *et al.* (2004), it is suggested that the Speak subframe has the core FE, Message, backgrounded. This in turn becomes one of the distinguishing features of the Speak subframe.

    This syntactic realization may imply that the verb focuses on the activity of speaking instead of the conveying or expressing of the Message. This application is also

correlated with the collocation with preceding verbs such as *xue, xuexi*, and *lianxi* mentioned in Section 4.3.10 and the manner modifiers which denote the manner of speaking activity, as summarized below:

Table 28.Collocational Associations of the Speak subframe

	CA
1.	Preverbal Modification: manner modifier[粗氣/慢慢/高聲/很響的] ＜ ＊
2.	Postverbal Complement : ＊ ＜complement of manner of speaking[慢聲細語/粗聲粗氣/結結巴巴/流暢/粗魯]
3.	Aspectual Modification:＊ ＜aspect marker[在/了/完]
4.	Preverbal Modification: Preverbal Frequency/Aspectual modifier[一直/不停地]
5.	Determiner and Measurement: Classifier[一場/一次]＜ ＊ [+nom]

(44)a. 但即使是很響的說話，李文秀其實也是聽而不聞
　　　 dan jishi shi hen xiang de shuohua, Wenxiu Li qishi ye shi ting 1er bu wen
　　　 But even if is very loud speak, *Li Wenxiu* in fact also hear it but not catch it
　　　 'But even if very loud speaking, in fact, *Wenxiu Li* also ignores it.'
　　b. 人人都厭惡他講話粗聲粗氣
　　　 ren ren dou yanwu ta jianghua cushengcuqi
　　　 Everybody all hate him speak a deep and gruff voice
　　　 'Everybody all hates him speak with a deep and gruff voice.'

All these findings point to the assumption made in Section 4.3.10 that the Speaking verbs are used to specify the most basic verbal activity of human beings (Brown 1958). Hence, the verbal activity can be learned or practiced.

　　　 Additionally, the event type of the Speaking verbs is different from other Statement verbs. The event structure of the Speaking verbs is bounded activity which includes a starting point and evet boundary (Chang *et al.*, Huang *et al.*). The syntactic manifestations listed in table 25 can support this point. On the one hand, they can be used with progressive markers such as *zhengzai, zheng*, or *zai* or the frequency/aspectual mofifiers (Givón 1993), suggesting that the event type of the verbs

is *process*, or *activity* (Ross 1957) in nature. On the other hand, they can occur with sentential 了 *le* and event boundary marker 完 *wan*, as shown in (45a) and (45b), respectively:

(45)a. 正要掬水洗人面瘡時，人面瘡**講話**了
    zheng yao jushui xi Renmianchuang shi, Renmianchuang jianghua le
    Just about hold water with both hands wash *Renmianchuang, Renmianchuang*
        speak
    'Just about to hold water with both hands to wash *Renmianchuang,*
        Renmianchuang spoke.'
  b. **說話**完後他丟１本書在地上 (Google 950517)
    shuohua wan hou ta hui diu yi ben shu zai dishang
    Speak WAN he threw one book on the ground
    'After speaking, he throws a book to the ground.'

Together they imply that the event is bounded.

Chang *et al.* (2000) claimed that the event type of verbs is highly correlated with the verbs' coumpounding process. When studying Mandarin verbs of emotion, they suggested that the VV compounds such as 快樂 *kuaile* or 痛苦 *tongku* tend to be used to indicate homogeneous states. The V takes one more constituent to make the event more complete or specific (cf. Chang *et al.* 2000), whereas, other compounding processes such as VO where an object is incorporated into event structure or VR are used to mark inchoative state. In the case of the Speaking verbs, the object is also incorporated, indicating the inchoativity of the event property. From this, we may conclude that there is a strong correlation between the event type of the Speaking verbs and their morphological make-up. To put it differently, the Chinese Speaking verbs which are VO compounds are chosen to mark a bounded activity in the Statement frame.

Significantly, verbs of Speaking can only occur with light verbs 做/作 *zuo* after
 nominalization.

Table 29. BP of the nominalized Evaluating verbs

Func.	BP
Head noun	Modification Phrase: 作/做＋ (modifier(+的)) ＜ ＊[+nom]

(46)b. 由日本國際教育協會常務理事橋本幹夫先做<u>致詞</u>[+nom] (from Yahoo 950315)

you Riben guoji jiaoyu xiehui changwu lishi Qiaoben Ganfu xian zuo zhici

By Japanese International Education Association Managing Director *Hashimoto* first do give a speech

'Let the Managing Director of the Japanese International Education Association, *Hashimoto*, first gives a speech.'

Since the Speaking event includes the process and the boundary, this may suggest that only the speaking process can be referred, while the verbal product created after the activity of speaking cannot be derived. The nominalized verbs refer to the event nominal, denoting the process of verbal activity rather than the end product (an evaluation, an explanation, or a report), which is a highlighted feature in the Statement frame. In other words, when verbs of Speaking are used, people only extract a part concept 'Speaking' from the whole event 'Saying + Message Delivering'. As for the use of other verbs of Statement, a more complicated concept—'Saying + Message Delivering', register, manner, or presupposition is involved.

Liu (2003) proposed that the grammatical process of nominalization specifies different ''event focuses''. The event focus of the Speaking verbs is the process of verbal activity, while that of other verbs of Statement is the process of verbal activity plus a semantically implicated verbal product. The event focuses of the former and the latter are schematized, respectively :

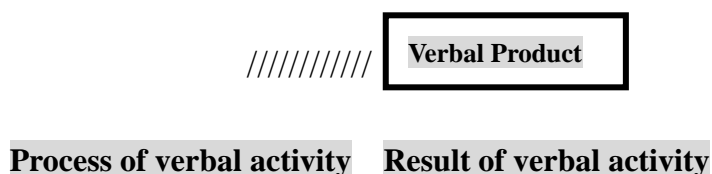Figure 5a. Conceptual schema for the implication of nominalization of the Speaking verbs

/////////// | Verbal Product

Process of speaking   Result of speaking
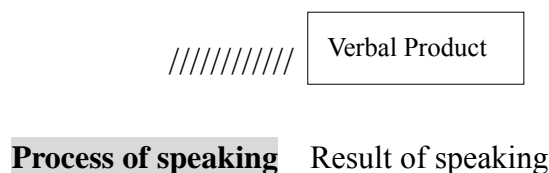
Figure 5b. Conceptual schema for the implication of nominalization of other Statement verbs (e.g., Evaluate, Suggest, Explain, or Report)

/////////// | **Verbal Product**

Process of verbal activity   **Result of verbal activity**

The event focus of the Speaking verbs also complies with the collocate of the nominalized Speaking verbs with determiners such as 一場 *yichang* ' a round of' or 一次 *yici* 'one', as shown in the fifth CA in table 25 and example (45a). These two determiners are normally used to modify event nominals rather than verbal products. When looking at more examples of event nominals such as 比賽 *bisai* 'competition', 戰爭 *zhanzheng* 'war', 革命 *geming* 'revolution', and 戀愛 *lianai* 'love', as shown in (45b), the answer becomes straightforward. These event nominals all refer to the process of a certain activity but not the end product of the activity and they tend to co-occur with the determiner *yichang*.

(47)a. 一場講話
　　　yi chang jianghua
　　　A rond of speak
　　　'A round of speaking'
　　b. 一場比賽/戰爭/革命/戀愛
　　　yi chang bisai/zhanzheng/geming/lianai
　　　A round of competition/war/revolution/love
　　　'A round of competing/fighting/revolution/loving'
　　c. 一個解釋/建議/抱怨
　　　yigejieshi/jianyi/baoyuan

One explain/suggest/complain

'An explanation/suggestion/complaint'

This contrasts with the nominal entity derived by some verbal activities, for instance: 解釋 *jieshi* 'explain', 建議 *jianyi* 'suggest', and 抱怨 *baoyuan* 'complain'. These nominal entities have a higher tendecy to collocate with the determiner, 一個 *yige* 'a piece of' but not *yichang* , as illustrated in (45c).

According to the above-mentioned Basic Patterns and Collocational Associations shown by verbs subsumed to the Speak subframe, more verbs which are also formed by VO compounding process and exhibit similar syntactic patterns should be taken into consideration. The representative lemmas and more lexical items that can be added to elaborate our study are listed below:

(48) Lemmas belonging to the Speak subframe

Representative Lemmas: *shuohua* 說話 and *zhici* 致詞 (Selected as representative lemmas for most frequent usage)

Other lemmas: 講話、傳道、講道、訓話

Following all the observations, the Speaking verbs are shown to profile bounded process of verbal activity. Their verbal semantics is unmarked with few specifications on the only FE, Speaker, as well as event Register and event Purpose. Put differently, they are the first candidates chosen by people to report the simple event of speaking activity. The Semantic Attributes unique to the Speak subframe can be summarized as follows:

(49) Semantic Attributes of the Speak subframe

Semantic Attributes: [Event type: bounded process]

[Speaker: unspecified]

[Purpose: unspecified]

[Register: unspecified]

Contrarily, verbs in other subframes are marked in verbal meanings with restricted role-internal attributes, register, manner, and event purposes.

5.3 Subframe Highlighting Formal Register: Express Subframe 表示類

The reason why the Say, Speak, and Express subframe are jointly discussed is that they differ only in Register[11]. Both the Say and Express subframe highlight the same set of core FEs, Speaker, Topic, and Message. However, the Express subframe prefers the use of inanimate subject and official/professional Speaker, indicating restriction of the event Register and Topic. This will be thoroughly investigated later in this section.

Firstly, the definition and core FEs used to characterize the Expressing verbs are provided.

(50) Definition and Inherited/Foregrounded FEs of the Express subframe

Definition: A speaker—usually a person with authority/information—expresses a

           Message on a Topic.

Inherited FE: Speaker, Message, Topic

As for the Basic Patterns associated with these FEs, they are given in the following table:

---

[11] The Speak subframe differs from the Say subframe in the backgrounding of Message while the Say subframe and the Express subframe differ in foregrounding of formal Register.

Table 30. Basic Patterns with Frame Elements of the Express subframe

No	Core FEs	BP
1.	[+Speaker] [+Message]	Speaker[NP]< ＊ <（：+) Message[CL/NP]
2.	[+Speaker] [+Preposed Topic] [+Message]	有關/對/關於 + Topic[CL] < Speaker[NP] < ＊ < Message[CL]

More than 98% of the verb tokens are associated with the use of Message object, be it a clause or nominal phrase.

(51)a. 何先生[Speaker]，靦腆的**表示**：這不過是盡心盡力做好份內工作[CL Message]

　　　He xiansheng, miantian de biaoshi: zhe buguo shi jinxinjinli zuo hao fennei gongzuo

　　　Mr. *He*, shy express: It's just does one's best to complete the part of ones' duty work

　　　'Mr. *He* expressed shyly, 'I just tried my best to finish my duty work or what I should do''

　　b. 民進黨[Speaker]既然**主張**大和解[NP Message]…

　　　Minjindang jiran zhuzhang dahejie…

　　　Democratic Progressive Party since assert the reconciliation principle…

　　　'Now that Democratic Progressive Party assert the principle of reconciliation...'

The other BP is associated with preposed Topic and Message, as illustrated in (52) below:

(52) 對於孩子的教養[Topic]，周先生[Speaker]**主張**讓孩子思想多方面發展 [Message]

　　duiyu haizi de jiaoyang, zhou xiansheng zhuzhang rang haizi sixiang duo fangmian fazhan

　　Regarding child's education, Mr. *Zhou* asserts let the child's thought various development

　　'Regarding the issue of child education, Mr. *Zhou* asserts that one should let the child have various kinds of developments.'

Verbs in this subframe have a higher percentage of nominalization. The deverbal nouns can occur with the light verbs *zuo* and *tichu*.

Table 31. BP of the nominalized Expressing verbs

Func.	BP
Head noun	Modification Phrase: 作/做/提出 ＋(modifier(＋的)) ＜ ＊[+nom]

This finding points to the conclusion that both the portion of expressing activity and the portion of verbal product can be extracted. Thus, the conceptual schema capturing the event focuses of the nominalized Expressing verbs can be represented below:

Figure 6. Conceptual schema of the event focuses of nominalization of the Express subframe
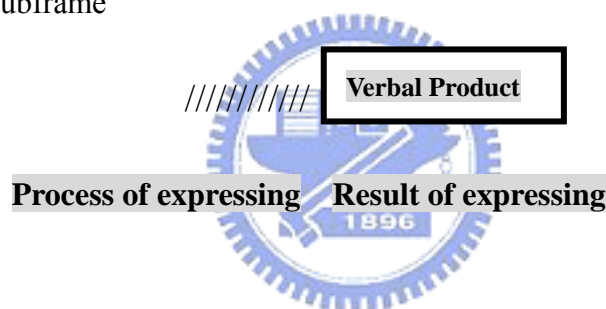
The event focus of the Expressing verbs is interrelated with the event type of the verbs. The Expressing verbs can be used with progressive marker such as *zhe* and endpoint markers such as *wan* and *le*. Therefore, the event type of the Expressing verbs is process with a semantically implicated endpoint. Both the process and result of the expressing activity can be referred. The former is emphasized in terms of the co-occurrence with the light verb *zuo* and the latter is projected by means of the collocate with *tichu* and the determiner, used to modify verbal products such as 這項 *zhexiang* 'an item'.

Table 32. Collocational Associations of the Expressing subframe

	CA
1	Aspectual modification：＊ ＜Aspectual Marker[著/過/完/了]
2	Determiner and Measurement: Determiner[這項] ＜ ＊ [+nom]
3	Speaker role: 1) Inanimate Subject[民進黨/央行/公司] ＜ ＊
	2) Official/Professional Speaker[官員/議員/領袖] ＜ ＊

(53)a. 宜蘭縣警局長謝銀黨在初步調查後做上述的**表示**[+nom]

    Yilan xian jingjuzhang xie yindang zai chubu diaocha hou zuo shangshu de biaoshi

    Yilan County police bureau chief after a preliminary investigation, do the above expression

    'The chief of the police bureau in Yilan County made the above expression after a preliminary investigation.'

    b. 提出大和解及大聯合政府的**主張**[+nom]

    tichu dahejie ji ddalianhe zhengfu de zhuzhang

    Propose big reconciliation and the united government DE assertion

    'Propose the assertion of big reconciliation and the united government.'

(54) 陳嘉和這項**主張**[+nom]已與新竹警方進行協調

    Chen Jiahe zhe xiang zhuzhang yi yu Hsinchu jingfang jinxing xietiao

    Chen Jiahe the item of assertion already and Hsinchu police proceed negotiation

    'The assertion of *Chen Jiahe* has undergone negotiation with the polices in Hsinchu.'

The Expressing verbs also prefer the use of inanimate subject or official/professional Speaker. This application is correlated with the formal register and topic of the verbs. Also, the Speaker of the Expressing verbs is prone to have a certain authority over the expressed Message. The Semantic Attributes used to characterize the Expressing verbs are summarized below:

(55) Semantic Attributes of the Express subframe

Semantic Attributes: [Event type: process with a semantically implicated endpoint]

        [Register: formal]

        [Speaker: authority]

[Topic: formal]

[Purpose: unspecified]

More verbs that conform to all these syntactic properties and can be defined by the same set of Semantic Attributes are listed below:

(56) Lemmas belonging to the Express subframe

Representative Lemmas: *biaoshi* 表示 and *zhuzhang* 主張 (Selected as representative lemmas for most frequent usage)

Other lemmas: 發表,宣佈,聲明,陳述,宣稱,堅稱,宣告,聲稱,表達,表達,表露

5.4 Subframe with Multiple Inheritances

5.4.1 Explain Subframe 說明類

In the Statement frame, only the Explain subframe highlights a whole set of core FEs and thus, exhibits the most complicated BPs. The following provides frame-based information including the definition, inherited and foregrounded FEs, BP, CA, lemmas, and Semantic Attributes for characterizing verbs belong to this subframe:

(57) Definition and Inherited/Highlighted FEs of the Suggest subframe

Definition: A speaker provides more message/information on a Topic to make the information easier and clearer by means of using an analogy Means.

Inherited and Foregrounded FEs: Speaker, Addressee, Message-Question, Means

The Explain subframe is different from other subframes in having more BPs (9 vs. 4) and highlighting the use of ALL FEs. The Explaining verbs are used to clarify or explicate some information in order to make it easier for the Addressee to comprehend.

There are a total of nine Basic Patterns specific to verbs in this subframe. Firstly, the Explaining verbs foreground the use of Analogy Means which is a linguistic device used to help people understand the information better or figure out the cause or reason of a happened event or a given topic. This rhetoric strategy is normally realized as 以/藉/藉由/舉/用 ＋NP Means, as shown in the first and second BP in table 30 and illustrated in the following examples:

(58)a. 我們可以用一個譬喻[Means]來說明：譬如我們去訪問一個朋友…[Message]。
　　　women keyi yong yige piyu lai shuoming:piru wo men qu fangwen yige
　　　　pengyou....
　　　We may use a analogy to explicate: For example we go visit a friend…
　　　'We may use an analogy to explicate, for example, we go to visit a friend…'
　　b. 陳君毅[Speaker]一直沒有舉出具體的緣由[Means]來解釋這項決定[Topic]
　　　Chen Junyi yizhi meiyou juchu juti de yuanyou lai jieshi zhe xiang jueding
　　　Chen Junyi all the time not point out concrete reason to explicate this decision.
　　　'*Junyi Chen* never pointed out a concrete reason to explain this decision.'

By using an analogy or comparison as the Means, the Message or Topic provided or talked about is easier for the Addressee to access. This highlighted BP may be related to the communicative purpose unique to the explaining event: to explicate or make things easier to understand.

The BPs of verbs in this subframe are presented as follows:

Table 33. Basic Patterns with Frame Elements of verbs of Explaining

No	Core FEs	BP
1.	[+Speaker] [+Message] [+Means]	Speaker[NP] ＜ 以/舉 ＋ Means[NP] ＜ ＊ ＜ (Message[CL])
2.	[+Speaker] [+Topic] [+Means]	Speaker[NP] ＜ 以/舉/用 ＋ Means[NP] ＜ ＊ ＜ Topic[NP]
3.	[+Speaker] [+Message-Question]	Speaker[NP]＜ ＊ ＜ Message-Question[CL]
4.	[+Speaker] [+Means] [+Message-Question]	Speaker[NP] ＜ 以/舉＋ Means[NP] ＜ ＊ ＜ Message-Question[CL]
5.	[+Speaker] [+Message]	Speaker[NP] ＜ ＊ (說：＋/：＋) ＜ Message[CL/NP]
6.	[+Speaker] [+Addressee] [+Message]	Speaker[NP] ＜ 向/跟 ＜ Addressee[NP] ＜ ＊ ＜ (Message[CL/NP])
7.	[+Speaker] [+Addressee] [+Topic]	Speaker[NP] ＜ 向 ＜ Addressee[NP] ＜ ＊ ＜ Topic[NP]
8.	[+Speaker] [+Topic]	Speaker[NP]＜ ＊ ＜ Topic[NP]
9.	[+Speaker]	Speaker[NP] ＜ ＊

Secondly, it is Significant to find out that the Message of the Explaining verbs can be presented as a WH Question (Who, What, How, When, Where) as shown below:

(59)a. 她[Speaker]無從**解釋**自己怎麼竟搖身變成學校的頭痛對象[Message]。

　　ta wucong jieshi ziji zeme jing yaoshen biancheng xuexiao de toutong duixiang.

　　She cannot explain herself why to one's surprise become school DE headache
　　　target

　　'She cannot explain why to one's surprise she becomes the big trouble of the
　　　school.'

　b. 並舉例[Means]**說明**在院區要如何運用以及使用ＡＳＰＡＣＫ[Message]。

　　Juli shuoming zai yuanqu yao ruhe yunyong yiji shiyong　ＡＳＰＡＣＫ。

　　Use examples explicate in institute area need how apply and use ASPACK

'Give an illustration to explicate how to make use of ASPACK in the institute.'

According to the principle of semantic inheritance pointed out by Liu *et al.* (2004), the different syntactic manifestations of Message of the Explaining verbs may be attributed to multiple inheritance. Verbs in the Explain subframe inherit the element 'Message' from the Statement frame as well as the feature 'Question' from the Explaining_the_facts frame. According to FrameNet, the Frame Element—Question used to define the Explaining_the_facts frame is usually understood as the cause, reason, or the way that may bring about some events. The Question is usually realized as an indirect question marked by WH words such as why or how. The example from FrameNet is used to illustrate this:

(60) The fact that this remained in Pandora's box EXPLAINS why men have hope[Question].

In the Explain subframe, the unique Message realization can be accounted for by multiple inheritances from these two Frames. The foregrounded FE— Message-Question of the Explain subframe can be seen from the following Figure:
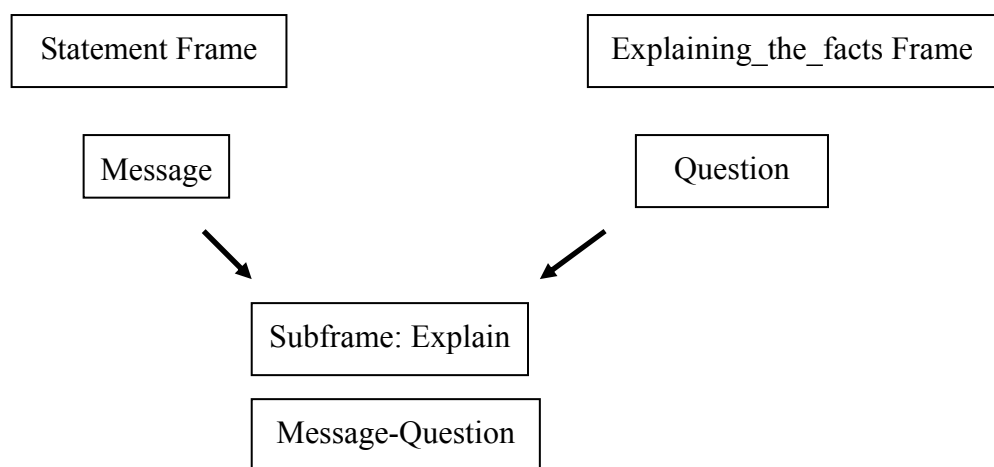
Figure 7. Multiple inheritance of the Explain subframe

This BP has been summarized in BP 3 and 4 in table 30. It is especially important to note that the Message of the Explain subframe is *presuppositional* in nature (Levinson 1983, Strawson 1950). That is, the question exists before the explaining event, therefore it needs someone to answer or further explicate it.

Moreover, the fifth BP which inherits from the Statement frame is used to assert a piece of new information, as exemplified in (61):

(61) 康德[Speaker]後來解釋說：「我想知道一個人主張無神論，怎麼還能主張愛？」 [Message]

Kangde houlai jieshi shuo:'wo xiang zhidao yige ren zhuzhang wushenlun,zeme hai neng zhuzhang ai?'

Kangde later explain say: I want to know a person asserts atheism how still can assert love?

'*Kangde* later explained and said, 'I want to know that if a person asserts atheism, how can he/she assert love?'

The sixth and seventh BPs suggest the importance of the target or goal of the explaining event, i.e., Addressee. The application 'A＋ 找/向/為/跟/給/對 ＋B＜ 解釋/說明' may suggest that the Explaining event must not be aimless. Thus, an overtly directed human goal or target is usually specified. As for the eighth BP, it reveals that the Explaining event may be carried out on a certain Topic. The example of the manipulation of Topic is as follows:

(62)a. 畫家[Speaker]試圖解釋生命存在的本意[Topic]

huajia shitu jieshi shengming cunzai de benyi

The painter attempts to explain life existence DE original meaning

'The painter attempts to explain the original meaning of life existence.'

Finally, the Explaining verbs can also be used in the pattern without any Message, as exemplified below:

(63) 我們外行人需要<u>有人</u>[Speaker]**說明**

women waihangren xuyao you ren shuoming

We unprofessional person need some people explain

'We unprofessional person need some people to explain.'

This usage simply profiles the part of verbal activity. Furthermore, the collocation of the nominalized Explaining verbs with the light verbs, 做/作 *zuo*, complies with this assumption, i.e., the activity skeleton is projected and emphasized, as schematized below :

Figure 8a. Conceptual schema for the activity focus of nominalization of the Explain subframe
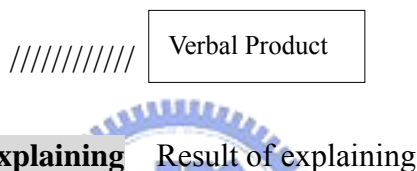
Table 34. BP of the nominalized Explaining verbs

Func.	BP
Head noun	Modification Phrase: 作/做/提出 ＋(modifier(+的)) < ＊[+nom]

(64)a. 可以根據莊子的「魚快不快樂」的故事稍<u>作</u>**解釋**[+nom]

　　genju zhuangzi de yu kui bu kuile de shaozuo jieshi

According to *Zhuang-zi* DE "The fish is not joyful" DE story slightly do
　　explanation

'According to the story of *Zhuang-zi* 'The fish is not joyful', someone slightly
　　make explanations.'

　b. 則將由農會自行<u>提出</u>**說明**[+nom]

　ze jiangyou nonghui zixing tichu shuoming

Then by Peasant Association voluntarily propose explanation

'Then let the Peasant Association propose the explanation voluntarily.'

However, the portion 'verbal product' derived from the explaining activity is also inferable from the collocate with the light verb 提出 '*tichu*', as shown in (61b).

The verbal product resembles the role of Incremental Theme (Dowty 1991) and can be schematized as shown below:

Figure 8b. Conceptual schema for the result focus of nominalization of the Explain subframe

/////////// | Verbal Product |
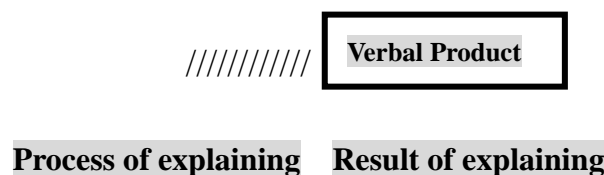
Process of explaining   **Result of explaining**
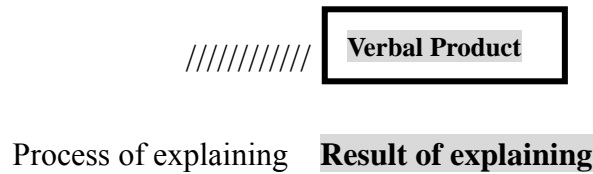
Overall, both the process of verbal activity and verbal product of the Explaining verbs can be extracted to form nominals, as illustrated in the following excerpted example:

(65) 經過熱切的**解釋**[Verbal Activity]，他給了一個令人滿意的**解釋**[Verbal Product] (Liu 2003)
jingguo reqie de jieshi, ta gei le yige ling ren manyi de jieshi
After enthusiastic explain, he give LE one satisfying explanation
'After enthusiastically explain, he gave a satisfying explanation.'

Liu (2003) asserted that nominalization of verbs of communication profile different 'event focuses' (Liu 2003). For the Explaining verbs, the two portions of event focuses can be projected and referred. This is diagrammed in Figure (8c):

Figure 8c. Conceptual schema for the event focuses of nominalization of the Explain subframe

/////////// | **Verbal Product** |

Process of explaining   **Result of explaining**

This complies with the event structure of the verbs in this subframe. The event type is process with a semantically implicated endpoint.

In additional to the above syntactic behaviors exhibited by verbs of Explaining, all these members share some similar Collocational Associations, as given below:

Table 35. Collocational Associations of the Explain subframe

	CA
1.	Preceding V[進行/加以]< ＊
2.	Speaker role: Inanimate Subject[各館/中心/民進黨]< ＊
3.	Preverbal Modification: modifier[加以]< ＊
4.	Aspectual Modification :＊ ＜aspect marker[在/著/了/完]
5.	Preverbal Frequency Modification: Frequency/Aspectual modifier[反覆/不斷/一再]
6.	Determiner and Measurement: Determiner[一個/這個]< ＊ [+nom]

First, the Explaining verbs can occur with the light verb, *jinxing* 進行 'proceed', indicating procedural process and formal register associated with members in this subframe.

(66) 廣州正式公佈自來水價改革方案並進行說明水錶改造不用市民掏一分錢
　　Guangzhou zhengshi gongbu zilaishui jia gaige fangan bing jinxing shuoming
　　　shuibiao gaizao buyong shimin tao yifen qian
　　Guangzhou official announce piped water reform plan and proceed water meter
　　　transform does not need the residents to spend cent money
　　'*Guangzhou* officially announced the reform plan of piped water and proceeded
　　　explaining that the transform of reconstructing the water meter need not the
　　　residents to spend ant money.'

The formal register profiled by verbs of Explaining is also revealed by the frequent use of inanimate subjects, including place and organization (9% vs. less than 2%), as provided in CA 2 in table 32.

(67) 各館/中心/民進黨[Inanimate Speaker]說明目前執行進度
　　geguan/zhongxin/minjindang shuoming muqian zhixing jindu
　　Various halls/center/Democratic Progressive Party explain present implement
　　　progress

'Various halls/center/ Democratic Progressive Party explained present progress of implementing.'

As discussed in Section 4.3.6, the preference of an inanimate Speaker implies not only the association with formal register but also a formal and non-personal topic.

Second, the distinctive Collocational Associations of the Explaining verbs with preverbal modifier 加以 *jiayi* 'treat/handle' has been pointed out in Section 4.3.10. In the Explain subframe, this application is highly (75%) associated with the overt coding of the Means, Topic, and Addressee, indicating that the Explaining event strongly correlates with an explicit target and salient purpose.

(68) 對現代人的塵勞根源[Topic]加以說明。
　　　Dui xiandairen de chenlao genyuan jiayi shuoming
　　　To modern people's dust fatigue root inflict to explain
　　　'Inflict on and explicate about the source of modern people's worldly fatigue.'

Next, the fourth and fifth CA shows that their event type is process because they can take progressive markers and frequency/aspectual markers, e.g., 不斷解釋 *buduan jieshi* or 說明著 *shuoming zhe*. Also, they demonstrate that there is a possible semantic boundary due to the co-occurrence with endpoint markers such as wan or le, e.g., 說明完 *shuoming wan*.

Finally, since the Explaining verbs can be nominalized and the deverbal nouns refer to the possible creation of a theme, i.e., verbal product of the explaining activity, the nominalized verbs can be modified by determiners such as 一個 *yige* or 這個 *zhege*, as shown in CA 6 in table 32. *Yige* or *zhege* is normally used to modify a measurable or referable entity. This pattern is associated with the event focus (Liu 2003) and event type of the Explaining verbs discussed above.

In addition to the representative lemmas, 說明 *shuoming* and 解釋 *jieshi*, there

are more lexical items that exhibit similar grammatical patterns, as given below:

(69) Lemmas belonging to the Explain subframe

Representative Lemmas: *shuoming* 說明 and *jieshi* 解釋 (Selected as representative

lemmas for most frequent usage)

Other lemmas: 說明、解釋、說清、闡明、闡述

According to the above-mentioned syntactic basis, the distinctive Semantic Attributes of the Explaining verbs are summarized below.

(70) Semantic Attributes of the Explain subframe

Semantic Attributes: [Event type: procedural process with a semantically implicated

endpoint]

[Register: formal]

[Speaker: unspecified]

[Message: Message-Question]

[Topic: formal]

[Purpose: to make the Message more precise and understandable]

[Medium: Analogy Means]

5.4.2 Suggest Subframe 建議類

Verbs in the Suggest subframe are normally used to give suggestions or warnings. The following provides frame-based information for defining Mandarin Suggesting verbs:

(71) Definition and Inherited/Highlighted FEs of the Suggest subframe

Definition: A speaker offers a Message-Act or Advice, as a solution to a problem, to an
   Addressee.

Inherited and Foregrounded FEs: Speaker, Topic, Message-Act

   In addition to reporting stative or factual events which are essentially the
prototypical type of a given Message of verbs in the Statement frame, the Suggesting
verbs have a higher percentage of conveying irrealis Messages, which profile an active
event or future-projecting action for someone[12] to carry out, as exemplified in (72a) and
(72b), respectively:

(72)a. 消基會**提醒**，國內信用卡年費偏高，[Stative event/Factual Message]
   xiaojihui tixing,guonei xinyongka nianfei piangao
   Consumer's Foundation remind domestic credit card annual fee spends slant for
      high
   'Consumer's Foundation reminded that the annual fee of the domestic credit
      card is slightly too high.'
   b. 早晨，營地的一個同志**提醒**要帶乾糧[Active event/Irrealis Message]
   Zaochen, yingdi de yige tongzhi tixing yao dai ganliang
   Morning, campsite DE one fellow remind must bring prepared food suitable for
      a journey
   'In the morning, a fellow in the campsite reminded (us) to bring some dried food.'

The foregrounded Message type of verbs of Suggesting also correlates with multiple

inheritances, a semantic phenomenon proposed by Liu *et al.* (2004). The Suggesting

verbs inherit the semantic feature, Message_Requested Act, from the Request frame in

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[12] Here, the use of the core FE 'Addressee' is avoided in order to distinguish the pattern that the verb
directly takes an Addressee object such as '**建議教局**[Addressee]應重視兒童教育' from the pattern that
the Addressee is introduced by a preposition. In the Statement frame, we only deal with the case in which
the Addressee is introduced by a preposition. The pattern that the verb takes a direct Addressee object is
dealt with in the Telling frame and Request frame. The various syntactic patterns of verbs of this type are
viewed as polysemous phenomenon.

which the Message is associated with irrealis active requested act for the Addressee to carry out, as illustrated below:

(73) 孔子叫弟子[Addressee]告訴孺悲[Requested_Act]
kongzi jiao dizi gaosu rubei
Kong Zi ask disciple tell *Rubei*
'*Kong Zi* asked his disciples to tell *Rubei*'

They also inherit the element, Message, from the Statement frame, thus emphasizing the packaging of the Message. The following Figure represents the multiple inheritance exhibited by verbs in the Suggest subframe:

Figure 9. Multiple inheritance of the Suggest subframe
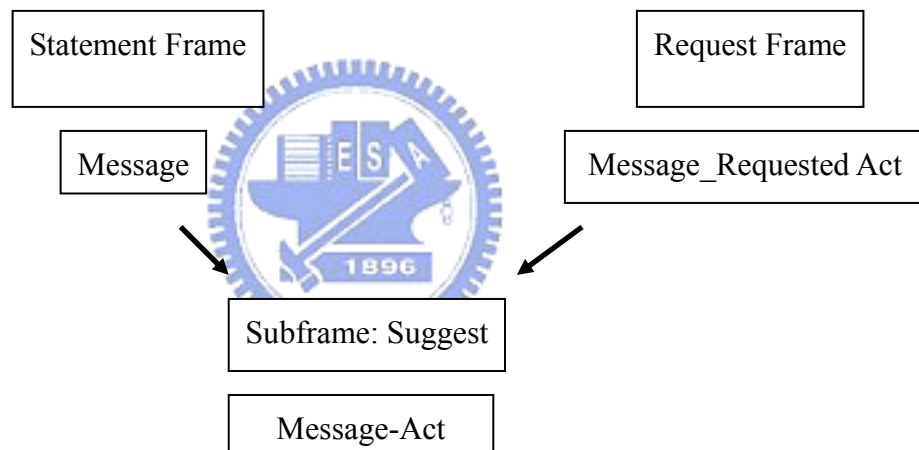
The irrealis Message-Act may be linked up with the purpose of the Suggesting events, namely, to provide a solution or plan for some future actions.

The Basic Patterns exhibited by verbs of this subframe are summarized in the following table:

Table 36. Basic Patterns with Frame Elements of verbs of Suggesting

No	Core FEs	BP
1.	[+Speaker] [+Message]	Speaker[NP] < ＊ < (說：+/：+) Message-Act[CL] Speaker[NP] < ＊ < (說：+/：+) Message[CL]
2.	[+Speaker] [+Message] [+Preposed Topic]	在/針對 ＋Topic[NP] < Speaker[NP] < ＊ < Message[CL]
3.	[+Speaker]	Speaker[NP] < ＊

The highlighted BP that has been discussed above accounts for the vast majority of all

the Message occurrences (66.7%) in the Suggest subframe. Moreover, the Suggesting

verbs also inherit the prototypical BP from the Statement frame, as shown in example

(72a). The second BP of the Suggesting verbs is that the communicative event may be

about a specific Topic which is usually preposed.

(74) 會中決定針對事務人員培訓計劃[Topic]，建議增加法文。
　　　huizhong jueding zhendui shiwu renyuan peixun jihua,jianyi zengjia fawen
　　　Meeting middle decide aim at administrative matters personnel plan, suggest add
　　　　French.
　　　'In the meeting, someone decided to suggest adding French in the light of the plan
　　　　of training the personnel of administrative matters.'

Thirdly, the suggesting verbs can also be used to emphasize the verbal activity with the

Message not overtly realized, as exemplified below:

(75) 工作人員，只能口頭警告一番
　　　gongzuo renyuan,zhineng koutou jinggao yifan
　　　Staff only can verbal warn
　　　'Staffs can only warn verbally.'

　　　Verb of Suggesting is one of the subgroups in the Statement frame that the

deverbal nouns encode the verbal product of the speaking process. This can be seen

from the collocation with the preceding light verbs *tichu* and *zuo*, as presented in table

37:

Table 37. BP of the nominalized Evaluating verbs

Func.	BP
Head noun	Modification Phrase: 提出/作/做＋ (modifier(＋的)) ＜ ＊ [+nom]

(76) 龔自珍<u>提出</u>了一個大膽的政治**建議**[+nom]
   Gong Zizhen tichu le yige dadan de zhengzhi jianyi
   Gong Zizhen propose one bold political suggestion
   '*Gong Zizhen proposed a bold political suggestion.*'

Just like the Explaining verbs, the nominalized Suggesting verbs can refer to the activity skeleton as well as the end product of the verbal activity. The event type of the Suggesting event is process with a semantically implicated endpoint. The following figure illustrates the event focuses of the Suggesting verbs.

Figure 10. Conceptual schema for the event focuses of nominalization of the Suggesting subframe

///////////// **Verbal Product**
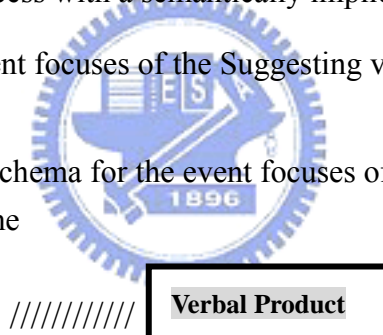
Process of suggesting   **Result of suggesting**

Consequently, the nominalized Suggesting verbs can be modified by determiners such as 一點 *yidian,* 一個 *yige,* or 一項 *yixiang* or quantifiers such as *yixie* 一些 or *xuduo* 許多, as listed in table 35 below.

In addition to BP, verbs in this subframe exhibit similar Collocational Associations, suggesting that they form the same subgroup differentiating from other subframes in the Statement frame. The CAs of the Suggest subframe are summarized below :

Table 38. Collocational Associations of the Suggest subframe

	CA
1	Aspectual modification:＊ ＜Aspectual Marker[著/過/完/了]
2	Preverbal modification: Preverbal Frequency/Aspectual modifier[一再/不斷]
3	Preverbal Modification: Well-intentioned Manner Modifier[好心/好意/善意] ＜ ＊
4	Speaker role: 1) Inanimate Subject[消基會/省府]＜ ＊ 　　　　　　　 2)Official/Professional Speaker[官員/專家/醫師]＜ ＊
5	Determiner and Measurement: Determiner[一點/一個/一項]＜ ＊ [+nom] 　　　　　　　　　　　　　 Quantifier[一些/許多]＜ ＊ [+nom]

All the Suggesting verbs can collocate with progressive markers and frequency

modifiers (Givón 1993) such as 一再 *yizai* or 不斷 *buduan*. They together denote that

the verbs' event type is process.

(77)a. 十五、六歲的女孩**提醒**著說。「要吃花了！」
    shiwu,liu sui de nuhai tixing zhe shuo.'yao chi hua le'
    Fifteen sixteen DE girl remind ZHENG say 'going to eat flowers'
    'A girl of fifteen or sixteen is reminding and saying, 'Someone is going to eat
        the flowers'.'

  b. 侍者於是<u>不斷地</u>**建議**，台灣觀光客像日本觀光客一般，比較喜歡 Say Yes
    *shizhe yushi buduan di jianyi,Taiwan guanguangke xiang riben guanguangke
        yiban,* bijiao xihuan Say Yes
    The waiter therefore constantly suggest, Taiwan tourist is like Japanese tourist
        generally, prefer Say Yes
    'The waiter therefore constantly suggests that Taiwan tourists are just like Japan
        tourists who prefer saying Say Yes.'

  c. 陸遜才**建議**<u>完</u>沒多久，曹操派人送印綬給丹陽豪帥費棧
    *luxun cai jianyi wan meiduojiu, Cao Cao pairen song yinshou gei danyang
        haoshuai feizhan*
    Luxun just suggest WAN soon, *Cao Cao* send person to deliver the seal to
        Danyang commander-in-chief *Feizhan*
    'Soon after *Luxun* suggested, *Cao Cao* sent a person to deliver the seal to the
        commander-in-chief of *Danyang*, *Feizhan*.'

As for the co-occurrence with the event boundary markers 了 *le* and 完 *wan*, it

suggests that the events may have a possible endpoint, as shown in (74c).

Interestingly, these verbs were found to frequently occur with well-intentioned manner modifiers such as 好心的 *haoxinde*, 好意的 *haoyide*, or 善意的 *shanyide* after nominalization.

(78) 給予對方<u>善意的</u><u>建議</u>！
  geiyu duifang shanyi de jianyi
  Gives opposite party well-intentioned suggestion!
  'Give the opposite party well-intentioned suggestion.'

This implies that the use of the Suggesting verbs is well-intentioned in nature. That is, the Speaker's use of the Suggesting verbs and the exploitation of the irrealis Message are basically for the sake of the Addressees' right or advantages. This finding also correlates with the Message type of the Suggest subframe: the Message is usually the suggested future act for the Addressee to carry out.

The last CA that needs to be mentioned is that the Suggesting verbs prefer the use of inanimate subject or official/professional Speaker subject. Verbs in this subframe are apt to take inanimate, official, or professional subject as their subjects, as illustrated below:

(79)a. <u>消基會/人事室/衛生局</u><u>建議</u>先向省府專案爭取增加人員編制
  xiaojihui/renshishi/weishengju jianyi xian xiang shengfu zhuanan zhengqu zengjia renyuan bianzhi
  Consumer's Foundation/personnel office/Sanitation Bureau suggest first to the Provincial Government special case strive for increases the personnel organization
  'Consumer's Foundation/personnel office/Sanitation Bureau suggested that someone first turns toward the Provincial Government special case to strive for the increase of personnel.'
  b. <u>醫師/專家</u><u>建議</u>要增加熱量與蛋白質
  yishi/zhuanjia jianyi yao zengjia reliang yu danbaizhi
  Doctor/the expert suggest must increase calorific capacity and protein

'The doctor/the expert suggests that someone must increase calorific capacity and
   protein.'

This usage may be associated with the formal register and formal topic required by the

verbs. Also, the Speaker is authoritative and has some sort of authority over the

expressed Message.

In the Suggest subframe, besides *jianyi* and *tixing*, more verbs can be added on

the basis of the syntactically-relevant criteria, BP and CA. More lexical items that

belong to the Suggest subframe are provided as follows:

(80) Lemmas belonging to the Suggest subframe

Representative Lemmas: *jianyi* 建議 and *tixing* 提醒 (Selected as representative

lemmas for most frequent usage)

Other lemmas: 提議、勸說、勸告、警告
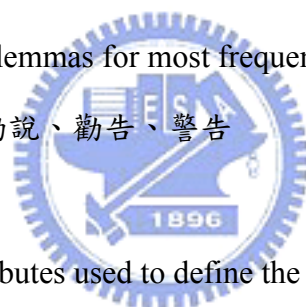
The Semantic Attributes used to define the Suggest subframe are summarized as

follows:

(81) Semantic Attributes of the Suggest subframe

Semantic Attributes: [Event type: process with a semantically implicated endpoint]

   [Register: formal]

   [Speaker: authority]

   [Message: Message-Act]

   [Topic: formal]

   [Purpose: to provide a solution or a suggested future act]

5.4.3 Evaluate Subframe 評價類

Another subframe which also exhibits multiple inheritances is the Evaluate subframe. Firstly, the following provides frame-based information for defining Mandarin Evaluating verbs:

(82) Definition and Inherited/Highlighted FEs of the Evaluate subframe

Definition: A Speaker utters a Message out of discontent to judge on a Topic or human Topic.

Inherited and Foregrounded FEs: Speaker, Message-Judgment, Topic-Human Evaluee

Secondly, their Basic Patterns are also summarized in the following table:

Table 39. Basic Patterns with Frame Elements of the Evaluate subframe

No	Core FEs	BP
1.	[+Speaker] [+Human Topic]	Speaker[NP] ＜＊＜ Topic-Human Evaluee[NP]
2.	[+Speaker] [+Message-Judgment]	Speaker[NP] ＜＊＜ (說：+/：+) Message-Judgment[CL]
3.	[+Speaker] [+Message] [+Preposed Topic]	Topic Preposing {有關/關於 ＋ Topic[NP] ＜ Speaker[NP] ＜＊＜ Message[CL], Speaker[NP] ＜＊ ＜ 就/挑+Topic ＜ (Message[CL])}
4.	[+Speaker]	Speaker[NP] ＜ ＊

In the Chinese Statement frame, the FE 'Topic' is highlighted in all the subframes except the Speak and Admit subframe. Among the Chinese Statement verbs, the evaluating verbs are unique in taking human objects as the topic of the stating events and thus, form syntactically complete sentences. The BP which highlights the use of Human Topic is shown in the first BP in the above table. However, this pattern is barely seen in verbs belong to other subframes, as illustrated in (83a) and (83b), respectively:

(83)a. 學生抱怨/評論/批評/讚美/稱讚政府[Topic]

　　　xuesheng baoyuan/pinglun/piping/zanmei/zhengfu

　　　Student complain/comment/criticize/admire/praise government

　　　'Students complain/comment/criticize/admire/praise the government.'

　b. 學生*說/*表示/*說明/*建議[13]/*透露/*承認/*交代政府[Topic]

　　　*xuesheng *shuo/*biaoshi/*shuoming/*jianyi/*toulu/*chengren/*jiaodai zhengfu*

　　　Student *say/*express/*explicate/*suggest/*reveal/*admit/*order government

　　　'Student *say/*express/*explicate/*suggest/*reveal/*admit/*order the

　　　　government.'

The human Topic corresponds to what Fillmore (1971) called the '*defendant*' when studying English verbs of judging. The '*defendant*' or what we called 'Human Topic' is the individual who is responsible for the blameworthy or praiseworthy situations (cf. Fillmore 1971) and also the one about whom the judgment or evaluation is made.

　　In addition to this subframe-specific BP, Chinese Evaluating verbs have three more BPs. The second BP is the default usage inherited from the Statement frame. Nevertheless, it should be pointed out that the Message of the Evaluating verbs is different from that of other subframes. The former highlights its Message as a judgment or evaluation, as exemplified below:

(84)a. 有部份攤販趨前抱怨蔡鎮長不通人情[Evalutative Message]

　　　you bufen tanfan quqian baoyuan Cai zhenzhang bu tong renqing

　　　Has partial stallmen hasten complain Mayor *Cai* unreasonable

　　　'Some part of the stallmen hastened to complain that Mayor *Cai* is unreasonable.'

　　The judgment may be either positive, e.g., 讚美 *zanmei* 'to praise' or negative, e.g., 批評 *piping* 'criticize'. Significantly, the Message of verbs of evaluating may be formed by a Human Topic together with the evaluation toward this human entity. The evaluation is usually realized as adjectival phrases, as illustrated below:

---

13 The example '學生建議/交代政府' is unacceptable for the human object is the Addressee rather than the Topic.

(84) b. 有部份攤販趨前**抱怨**{<u>蔡鎮長</u>[Human Topic]<u>不通人情</u>[Comment]}[Message]

     you bufen tanfan quqian baoyuan Cai zhenzhang bu tong renqing

     Has partial stallmen hasten complain Mayor *Cai* unreasonable

     'Some part of the stallmen hastened to complain that Mayor *Cai* is

          unreasonable.'

    c. 別人**批評**{<u>你</u>[Human Topic]<u>不好</u>[Comment]} [Message]

     bieren piping ni buhao

     The others criticize you not good

     'The others criticized that you are not good.'

BP1 and BP3 might suggest that the function of Mandarin verbs of Evaluating is to profile various types of interpersonal and public evaluative relationships of worth and responsibility in the interactive real world. Also, the Message type in the Evaluate subframe is correlated with the communicative purpose as pointed out in Section 4.3.7: to judge on events or human.

The Message type along with the variation of Topic in the Evaluate subframe may suggest that the verbs exhibit multiple inheritances just like the Explaining and Suggesting verbs. In FrameNet (Baker *et al*. 2003), verbs that relate to judgment are defined and dealt with in the 'Judgment frame'. They stated that the person or thing about whom/which the judgment is made is the Evaluee. This suggests that on one hand, the Evaluating verbs may inherit the element 'Topic' from the Statement frame as well as the element 'Evaluee' (event or human Evaluee) from the Judgment frame. On the other hand, they inherit 'Message' from the Statement frame, and also inherit 'Judgment' from the Judgment frame, where a Judgment is normally specified. The phenomenon of multiple inheritances shown by verbs of Evaluating is presented as follows:

Figure 11. Multiple inheritance of the Evaluate subframe
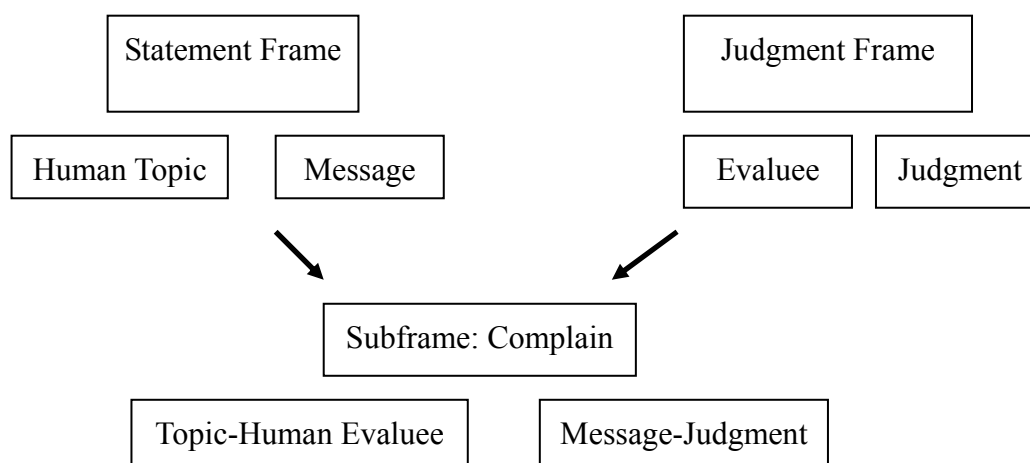
The Evaluate subframe is the place where multiple inheritances happens. From this figure, we can see that the FEs of the Evaluating verbs are frequently highlighted as Topic-Human Evaluee and Message-Judgment.

Thirdly, a prototypical Topic, namely, event rather than human topic may be used by the Evaluating verbs. Different from Topic-Human Evaluee, the protoypical Topic is often preposed, as exemplified below:

(85) 對於吳健雄在科學上的成就[Topic]也評論說,「吳博士…」[Message]
duiyu Wu Jianxiong zai kexue shang de chengjiu ye pinglun shuo, 'wu boshi...'
As for *Wu Jianxiong* in science DE achievement also comment say, 'Dr. Wu…
As for the scientific achievement of *Jianxiong*, someone commented and said, 'Dr. Wu
'Lastly, verbs in this subframe can also be used to describe the evaluating activity only without overtly expressing the Message.'

(86) 幾乎天天有人打電話來抱怨
jihu tiantian you ren da dianhua lai baoyuan
Almost everyday someone call to complain
'Almost everyday, someone calls to complain.'

After looking at the verbs' Basic Patterns, one thing that should be pointed out is the pattern of the nominalized Evaluating verbs. In our corpus data, about 33% of all the

occurrences of Evaluating verbs can be nominalized. Similar to the majority of verbs of

Statement that can be nominalized, the deverbal nouns can be modified by the two light

verbs *zuo* and *tichu*, as presented below:

Table 40. BP of the nominalized Evaluating verbs

Func.	BP
Head noun	Modification Phrase: 提出/作/做+ (modifier +的) < ＊ [+nom]

(87)a. 沒看到你<u>提出</u>**抱怨**

     mei kandao ni tichu baoyuan

     No see you propose complaint

     'Not seeing you propose any complaint.'

  b. 盡力<u>作</u>應有的**評論**

     jinli zuo yingyou de pinglun

     Try one's best do proper comment

     'Try one's best to make proper comments.'

Just like the two subframes discussed in the same sub-section, namely, the Explain and

Suggest subframe, the verbs have two different event focuses. The first portion is the

activity skeleton and the second portion is the end product, as represented below:

Figure 12. Conceptual schema for the event focuses of nominalization of the Evaluate
        subframe

                 ///////////   **Verbal Product**

Process of evaluating   **Result of evaluating**
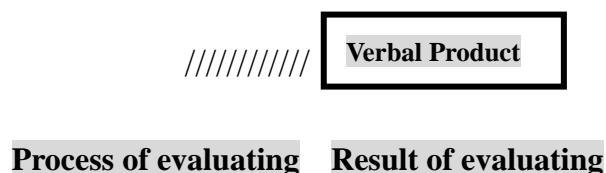
The event focuses of the Evaluating verbs are correlated with their event type: process

with a semantically implicated endpoint. The event focus of semantic endpoint complies

with the modification of the deverbal Evaluating verbs. The nominalized verbs usually

function as the head of the relative clauses modifying by possessor pronouns or

quantifiers, as illustrated in example (88) and listed in table 41.

(88)a. 他的**抱怨**

 ta de baoyuan

 His complaint

 'His complaint'

 b. 刊登了<u>不少</u>**評論**

 kandeng le bushao pinglun

 Publish LE many commentaries

 'Published many commentaries'

Table 41. Collocational Associations of the Evaluate subframe

	CA
1	Aspectual modification：＊ ＜Aspectual Marker[著/過/完/了]
2	Preverbal modification: Preverbal Frequency/Aspectual modifier[常/頻頻/經常/一再]＜ ＊
3	Determiner and Measurement: Quantifier[許多/一些/不少]＜ ＊ [+nom]

The last grammatical evidence used to define verbs in this subframe is the Collocational Associations, as summarized in table 38. Similar to the Suggesting verbs, the Evaluating verbs can occur with progressive markers and endpoint markers. The collocations with frequency/aspectual (Givón 1993) adverbs and progressive markers further suggest that the event type of the Evaluating verbs is durative process with possible semantically implied event boundary. The examples of the collocation with frequency/aspectual modifiers with the Evaluating verbs are given as follows:

(89)a. 實在太慢，造成同學<u>一再</u>**抱怨**

 shizai tai man, zaocheng tongxue yizai baoyuan

 Indeed too slow, cause schoolmate repeat complain

 'It's indeed to slow, and thus, schoolmates complain repeatedly.'

 b. 我們<u>常</u>**評論**某人的品性有多好

 women chang pinglun mouren de pinxing you duohao

 We often comment some people DE moral character have good

 'We often comment how good is someone's moral conduct.'

Based on all these syntactically-relevant observations, the Semantic Attributes of the Evaluating verbs can be derived. The characterization of the Semantic Attributes is provided below:

(90) Semantic Attributes of the Evaluate subframe

Semantic Attribute: [Event type: process with a semantically implicated endpoint]

        [Register: unspecified]

        [Speaker: unspecified]

        [Topic: event or human Topic]

        [Purpose: to judge on events or human]

Other than the representative lemmas, more lemmas should be included in this subframe, as shown below:

(91) Lemmas belonging to the Evaluate subframe

Representative Lemmas: *baoyuan* 抱怨 and *pinglun* 評論 (Selected as representative

               lemmas for most frequent usage)

Other lemmas: 埋怨, 批評, 讚美, 稱讚

5.5 Subframe Highlighting a Specific Core Frame Element
5.5.1 Reveal Subframe 透露類

The Reveal subframe in the Statement frame is in fact the Reveal_secret frame in FrameNet II. In FrameNet II, the Reveal_secret frame is separated from the Statement frame, but the inheritance relation with the Statement frame (the Reveal_secret frame is inherited from the Statement frame) is specified. In Mandarin, the Revealing verbs such as 透露 *toulu*, 揭露 *jielu*, or 吐露 *tulu* are still characterized in the Statement frame
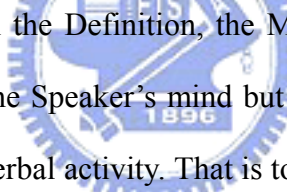
to emphasize the Message-encoding portion of the communicative event. The definition and core FEs of the Revealing verbs are given as follows:

(92) Definition and Inherited/Highlighted FEs of the Reveal subframe

Def.: A speaker conveys a presumably unknown Message to an Addressee on a Topic. The presumably unknown Message is defined from the perspective of the Addressee. That is, the Message is unknown to the Addressee. But the Speaker may have already been confronted with the Message. The identity of the Speaker tends to be unspecified to eliminate the responsibility of disclosing an unknown Message.

Inherited and Foregrounded FEs: Speaker, Topic, Message

As has been put in the Definition, the Message that the Speaker disclosed may have already existed in the Speaker's mind but is inaccessible to the Addressee before the manipulation of the verbal activity. That is to say, when verbs of Revealing are used, the ordinary language notion of presupposition (Levinson 1983, Strawson 1950) has been established. The Speaker is confronted with the already existent event, which was previously known only to the Speaker or a few people, which the Speaker then makes known to the public. This complies with the distinctive Message type of the Revealing verbs—Message as secretive matters which are frequently realized as NP Message, as illustrated in (93a):

(93)a. 她[Speaker]揭露秘密/內幕/真相/事實[Presumably unknown NP Message]
  ta jielu mimi/neimu/zhenxiang/shishi
  She disclose secret/privacy/truth/fact
  'She disclose the secret/privacy/truth/fact.'

The presumably unknown Message becomes one of the distinctive BP of the Revealing

verbs, as presented in the first BP of the following table:

Table 42. Basic Patterns with Frame Elements of the Reveal subframe

No	Core FEs	BP
1.	[+Speaker] [+Message]	Speaker[NP]< ＊ < Presumably unknown Message[NP]
2.	[+Speaker] [+Message]	Speaker[NP]< ＊ < ： + Message[CL]
3.	[+Speaker] [+Topic]	Speaker[NP]< ＊ < Topic[NP]
4.	[+Speaker]	Speaker[NP] < ＊

The marked content of the Message, i.e., secretive or presumably unknown Message complies with the special communicative purpose of the Revealing event: to disclose the presumably unknown Message. Verbs in this subframe also inherit the prototypical BP exhibited by verbs belonging to the Statement frame: a Speaker conveys a clausal Message, as shown in table (39) and illustrated in example (90b):

(93)b. 玉管處[Speaker]於昨日**透露**決定在國家公園建立緊急醫療網[CL Message]
    yuguanchu zuori toulu jueding zai guojia gongyuan jianli jinji yiliaowang
    Administer of Jade National Park on yesterday disclose the decision in the
        country park establish urgent medical service network
    'Administer of Jade National Park disclosed the decision to found urgent
        medical service network in the national park yesterday.'

Moreover, verbs in this subframe also highlight the use of Topic. Slightly different from other subframes, the Topic tends to directly follow the verb rather than be introduced by a Topic marker, which is usually a preposition, as illustrated by the contrived sentences (94a) and (94b), respectively:

(94)a. 羅根太太**揭露**她致病的原因[Topic]。 (光華雜誌)
    luogen taitai jielu ta zhibing de yuanyin. (guanghua zazhi)
    Mrs. Rogan disclose her pathogenesis cause

'Mrs. Rogan disclosed her pathogenic reason.'

b. **對於**[Topic marker]吳健雄在科學上的成就[Topic]也評論說,「吳博士…」

ta wei shixian toulu

He not in advance reveal

'He didn't reveal in advance.'

The last BP is the same as the Explaining, Suggesting, and Evaluating verbs that have been thoroughly investigated. The Revealing verbs can be used to simply profile the verbal activity with the Message unexpressed.

(95) 海軍陸戰隊與海軍工程營的單位[Speaker]也未事先**透露**

ju toulu,taiwan de fanduipai renshi daiduo jizhong quanli yu zhengzhi kangzheng

According to reveal, Taiwan DE oppositional party people mostly concentrates on with all one's strength to political resistance

'It is revealed that the people of Taiwan's oppositional party concentrates on the political resistance with all their strength.'

As have been mentioned in Section 4.3.1, the Revealing verbs are one of the groups that cannot be nominalized. Grammatical nominalization of verbs may be attributed to the event type of the verbs. Their event type is punctual (Chang *et al.* 2000) for the verbs cannot co-occur with progressive markers and durative phrases but can occur with endpoint markers.

Table 43. Collocational Associations of the Reveal subframe

	CA
1	Aspectual modification:＊ ＜Aspectual Marker[過/完/了]
2	Speaker role: Official/Professional Speaker[官員/專家/醫師]＜ ＊

That is, since the event is punctual, neither the portion of verbal activity nor the portion of the verbal product can be inferred.

Another CA shown in table 40 indicates that the verbs in this subframe may require the use of formal Topic and a Speaker with the source of information. Since the

revealed Message is highly marked in this subframe, the Speaker with informaiton and unspecified Speaker (please refer to page 20) further verify the authority and responsibility possesed by the Speaker. That is, the Speaker of the Revealing verbs is inclined to posses the source of the reveal information. However, what is being disclosed may damage the reputation of the Speaker or the interpersonal relationship between other parties, and thus the co-occurrence pattern 據透露 *ju toulu* was frequently found in our corpus data, as exemplified below:

(96) 據**透露**，台灣的反對派人士大多集中全力於政治抗爭
　　　ju toulu,taiwan de fanduipai renshi daiduo jizhong quanli yu zhengzhi kangzheng
　　　According to reveal, Taiwan DE oppositional party people mostly concentrates on
　　　　　with all one's strength to political resistance
　　　'It is revealed that the people of Taiwan's oppositional party concentrates on the
　　　　　political resistance with all their strength.'

By means of using this pattern, the identity of the Speaker is concealed and protected.

　　　At last, the lemmas belonging to this subframe and Semantic Attributes of the Reveal subframe can be summarized as follows:

(97) Lemmas belonging to the Reveal subframe

Representative Lemmas: *toulu* 透露 and *jielu* 揭露 (Selected as representative

　　　　　　　　　　　　lemmas for most frequent usage)

Other lemmas: 透露, 揭露, 吐露, 披露, 洩露

(98) Semantic Attributes of the Reveal subframe

Semantic Attributes: [Event type: punctual]

　　　　　　　　　　　[Register: unspecified]

　　　　　　　　　　　[Speaker: with information source]

[Topic: formal]

[Purpose: to disclose presumably unknown message]

5.5.2 Admit Subframe 承認類

The next subframe that will be introduced is the Admit subframe. The essential frame-related information used for defining verbs in this subframe is provided as follows:

(99) Definition and Inherited/Foregrounded FEs of the Admit subframe

Definition: A Speaker utters a Message about a Topic in order to verify a presumably

known Message. In contrast to the Reveal subframe, the Message is known

to the Speaker and the Addressee. As a consequence, the term 'presumably

unknown' is adopted.

Inherited and Foregrounded FE: Speaker, Message
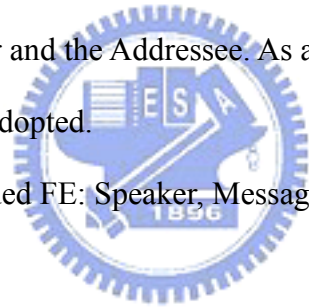
The Admitting verbs share four BPs. (100a) to (100c) are the examples used to illustrate the BP in table 43.

(100)a. 他[Speaker]就去官府證明父親偷羊[Message]

　　　 ta jiuqu guanfu zhengming fuqin touyang

　　　 He then go to the office of local government prove father steal sheep

　　　 'He then went to the office of local government to prove that his father steal
　　　　 sheeps.'

　　 b. 很多人喜歡你，你很有人緣[Message]，我[Speaker]承認。

　　　 hen duoren xihuan ni, ni henyou renyuan,wo chengren.

　　　 Many people like you, you very have interpersonal relationship, I admit

　　　 ''Many people like you and you have good interpersonal relationship' I admitted.'

　　 c. 勞委會官員[Speaker]不願正面承認，只說：「這是政府決定的事，…」

　　　 *laoweihui guanyuan buyuan zhengmian chengren, zhi shuo: 'zheshi zhengfu
　　　　 jueding de shi,...'*

The Fatigue Commission officials not willing to admit, only said: "This is
government decide DE matter
'Officials of the Fatigue Commission were not willing to admit, and only said,
"This is the matter decided by the government.'

Table 44. Basic Patterns with Frame Elements of the Admit subframe

No	Core FEs	BP
1.	[+Speaker] [+Message]	Speaker[NP]< ＊ < (： +) Message[CL]
2.	[+Speaker] [+Message]	Message[CL] < Speaker[NP] < ＊
3.	[+Speaker]	Speaker[NP] < ＊

The first one is inherited from the Statement frame, wherein the Message directly

follows the verb or is introduced by direct quotes. The second BP which is associated

with two core FEs—Speaker and Message is also inherited from the Statement frame.

What makes this BP differ from the previous one is the fact that the Message is

preposed, as exemplified in (97b). It is essential to point out that the Message of the

Admitting event is basically realis (please refer to Section 4.3.7). Some events have

occurred, for instance, 父親偷羊 *fuqin tou yang* 'Father stole sheep,' and some facts

have existed, for example, 自己也是台灣人 *ziji ye shi taiwanren* 'I am also

Taiwanese.' The Speaker is familiar with the situation, and then further verifies the truth

value of the pre-existed events. The pre-existed event or fact in (101a) and (102a) is the

Message complement of (101b) and (102b), respectively. The truth value of the

Message cannot be canceled under negation as (102c) and (102c) show:

(101)a. 父親偷羊[pre-existed event]
　　　　fuqin touyang
　　　　father stole sheep
　　　　'father stole sheep.'
　　b. 他就去官府**證明**父親偷羊[Message]
　　　　ta jiuqu guanfu zhengming fuqin touyang

92

He then go to the office of local government prove father steal sheep

'He then went to the office of local government to prove that his father steal sheep.'

c. 他**沒**去官府**證明**<u>父親偷羊</u>

ta mei guanfu zhengming fuqin touyang

He didn't go to the office of local government prove father steal sheep

'He didn't went to the office of local government to prove that his father steal sheep.'

(102)a. 自己也是台灣人[pre-existed fact]

ziji ye shi taiwan ren

Oneself also is Taiwanese

'Oneself is Taiwanese, too'

b. 他**承認**<u>自己也是台灣人</u>[Message]

ta chengren ziji ye shi taiwan ren

He admit he himself also is Taiwanese

'He admitted that he himself is Taiwanese, too.'

c. 他**沒承認**<u>自己也是台灣人</u>

ta mei chengren ziji ye shi taiwan ren

He not admit he himself also is Taiwanese

'He didn't admit that he himself is Taiwanese, too.'

In other words, the manipulation of the Admitting verbs involves presupposition (Levinson 1983, Strawson 1950). The application of this internal feature of core Frame Element can be linked up with the event purpose unique to the Admitting verbs: to verify the presumably known message.

However, since the Revealing event also involves presupposition and the pre-existence of some events, what are the differences between these two subframes? As discussed in the last sub-section, the Revealing verbs involve the disclosure of an already existed event which is known to the Speaker but unknown to the Addressee. The already existent event of the Admitting verbs is both known to the Speaker and Addressee or other people, and then the Speaker further testifies it. Therefore, the term 'presumably unknown' was used to characterize the internal feature of the Message of

the Admitting verbs.

The third BP that also manifests in other subframes is the pattern without any expressed Message, as illustrated in (100c). Similarly, this BP profiles or emphasizes the portion of verbal activity only. Like the Revealing verbs, the Admitting verbs cannot be nominalized. This can be attributed to the event type of the Admitting verbs, namely punctual. The unacceptability of progressive markers, frequency/aspectual markers, and duration phrases with the Admitting verbs further supports this point.

The last syntactically-relevant findings, namely Collocational Associations, are shown in the following table:

Table 45. Collocational Associations of the Reveal subframe

	CA
1	Aspectual modification: ＊ ＜Aspectual Marker[過/完/了]
2	Speaker role: Inanimate Subject[製作單位/各國/消防隊] ＜ ＊
3	The use of confirmation markers[的確/確實] in Message

The first CA complies with the event structure of the Admitting verbs mentioned above. The second CA suggests that the Admitting event may be associated with formal register and topic. As for the last CA, the use of confirmation markers complies with the assumption proposed above that the Message is realis.

(103) 我們是不是願意**承認**，它**確實**[Confirmation marker]阻礙了幾千年來人們的互愛和互信。

women shi bu shi yuanyi chengren, ta queshi zuai le jiqiannian lai renmen de huai han huohuxin.

We are or aren't willing to admit, it certainly hinder several millenniums people
DE mutual love with each other

'We are willing to admit or not that it certainly hindered people's mutual love with each other over several millenniums.'

This CA is unique to the Admitting verb and hardly seen in other subframes.

According to all these observations and exclusive patterns, more verbs in Mandarin can be grouped together, as listed below:

(104) Lemmas belonging to the Admit subframe

Representative Lemmas: *chengren* 承認 and *zhengming* 證明 (Selected as

representative lemmas for most frequent usage)

Other lemmas: 坦承, 否認, 證實, 證明

Finally, the Semantic Attributes that can be used to clearly define this subframe are provided as follows:
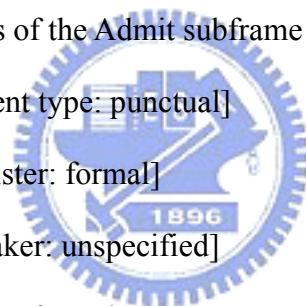
(105) Semantic Attributes of the Admit subframe

Semantic Attributes: [Event type: punctual]

[Register: formal]

[Speaker: unspecified]

[Topic: formal]

[Purpose: to verify the presumably known message]

5.5.3 Report Subframe 報告類

Among the nine subframes, only the Report subframe highlights the use of Addressee. Interestingly, this overtly specified FE was found to have some relation with the Speaker. The following provides the definition and inherited/foregrounded FEs of the Report subframe.

(106) Definition and Inherited/Backgrounded FEs of the Speak subframe

Definition: A Speaker gives an account Message on a Topic to an Addressee. The

Speaker tends to have status relation with the Addressee.

Inherited and Foregrounded FE: Speaker, Message, Addressee, Topic

Since the Addressee is foregrounded in the Report subframe, all syntactic manifestations associated with Addressee are realized[14].

(107)a. 他[Speaker]答應了老鄉要向毛主席[Addressee]報告，那就一定要報告的。

　　　ta daying le laoxiang yao xiang Mao zhuxi baogao, na jiu yiding yao baogao de.

　　　He promise LE the villager want to Chairman *Mao* report, then certainly have to report DE

　　　'He promised his villagers to report Chairman *Mao*, then he certainly had to report it.'

　　b. 他[Speaker]跟太太[Addressee]交代過，有一天自己如果往生，…[Message]

　　　ta gen taitai jiaodai guo, youyitian ziji ruguo wangsheng,...

　　　He to wife order GUO, one day himself if die…

　　　'He told his wife that if one day he dies…'

　　c. 這些主管與幕僚[Speaker]不斷的向其[Addressee]報告業務現況[Message]

　　　zhexie zhuguan yu muliao buduan de xiang qi baogao yewu xiankuang

　　　These managers and the staff constantly to it report business present situation.

　　　'These managers and the staffs constantly report the present situation of business to him/her.'

They are summarized in CA 1 to CA 3 in table 45.

---

[14] The BP in which the verb takes a direct Addressee object is excluded (please refer to Section 4.3.4). Once the verb allows the Addressee to be realized as the direct object, it will be dealt with in multiple frames with different senses highlighted in different frames.

Table 46. Basic Patterns with Frame Elements of verbs of Speaking

No	Core FEs	BP
1.	[+Speaker] [+Addressee]	Speaker[NP] ＜ 向/給 ＋Addressee ＜ ＊
2.	[+Speaker] [+Addressee] [+Message]	Speaker[NP] ＜ 向/給 ＋Addressee ＜ ＊ ＜ Message[NP/CL]
3.	[+Speaker] [+Addressee] [+Topic]	Speaker[NP] ＜ 向/給 ＋Addressee ＜ ＊ ＜ Topic[NP]
4.	[+Speaker] [+Message]	Speaker[NP] ＜ ＊ ＜(說：+/：+) Message[NP/CL]
5.	[+Speaker] [+Topic]	Speaker[NP] ＜ ＊ ＜ Topic[NP]
6.	[+Speaker]	Speaker[NP] ＜ ＊

It has been pointed out in Section 4.3.8 that the explicitly expressed Addressee is meant to indicate a particular relationship with the Speaker, be it single Speaker to collective Addressee or inferior Speaker to superior Addressee and *vice versa*. This application reveals that the verbs are inclined to profile public rather than interpersonal communicative events. More specifically, the Reporting events tend to ground on formal and public issues or topics.

The other three BPs are much like verbs in other subframes. The verbs can be used in the patterns with Message explicitly or implicitly expressed, as exemplified below:

(108) a. 母親[Speaker]立刻交代說：「女兒啊！等一下經過十字路口，...[Addressee]

muqin like jiaodai shuo: 'nuer a! dengyixia jingguo shizilukou,...

Mother immediately order say: 'Daughter! A moment later pass through intersection...

'Mother ordered and said immediately, 'Daughter! A moment later, you pass through the intersection…''

b. 邀外交部長錢復[Speaker]列席報告。

yao waijiao buzhang Qian Fu liexi baogao.

Invite Minister of Foreign Affairs *Qian Fu* attend report

'To invite Minister of Foreign Affairs *Qian Fu* to attend the meeting and

report'

Besides, the Reporting verbs also manifest the use of direct Topic object, as shown

below:

(109) 由系統、編目、採購及流通等小組召集人[Speaker]報告工作執行進度[Topic]
you xiaozu zhaojiren baogao gongzuo zhixing jindu
By group conveners report work implement progress
'Let group conveners report the implementing progress of the work.'

Parallel with the Explaining, Suggesting, and Evaluating verbs, verbs of

Reporting allow higher percentage of nominalization. The deverbal nouns can collocate

with the light verbs *zuo* and *tichu* after nominalization, indicating that the verbs have

different event focuses.
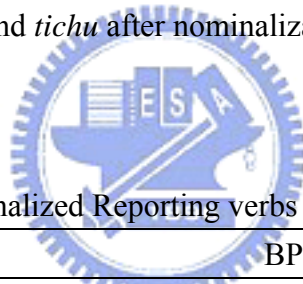
Table 47. BP of the nominalized Reporting verbs

Func.	BP
Head noun	Modification Phrase: 提出/作/做+ (modifier +的) < ＊ [+nom]

(110)a. 監獄一位女看守向人們展示了川島行刑後的照片算作了交代[+nom]
jianyu yi wei nukanshou xiang renmen zhanshi le chuandao xingxing hou de
zhaopian suan zuo le jiaodai
Jail one female guard to people demonstrate LE *Chuandao* execute after DE
picture might be considered as do LE account
'A jail female guard demonstrated to the people the picture taken after the
excute of *Chuandao* to consider it as an account.'
b. Ｄｒ・Ｂｒｏｍｌｅｙ於國會中提出報告[+nom]
Ｄｒ・Ｂｒｏｍｌｅｙ *yu guohui zhong tichu baogao*
Ｄr. Ｂrｏｍｌｅy in the Congress propose the report
'Ｄr. Ｂrｏｍｌｅy proposed the report in Congress.'

The event focuses of the Reporting verbs are schematized in the following figure.

Figure 13. Conceptual schema for the event focuses of nominalization of the Report
subframe

/////////// | **Verbal Product** |

Process of reporting   **Result of reporting**
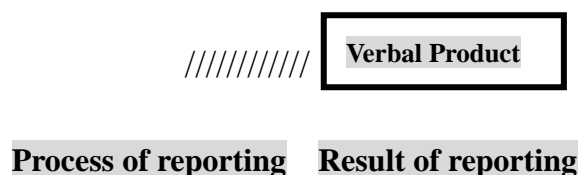
Similar to the former discussed subframe—Expressing, Explaining, and Suggesting, the
event type of Reporting verbs is process with a semantically implicated endpoint.

The verbal product of the Reporting event is derivable from the co-occurrence of
the nominalized Reporting verbs with the determiner 一個 *yige*, as listed in following
table.

(111)a. 我也不過是圖一個交代[+nom]
    wo ye buguo shi tu yige jiaodai
    I also only attempt an account
    'All I want is just an account.'

Table 48. Collocational Associations of the Evaluate subframe

	CA
1	Aspectual modification:＊＜Aspectual Marker[著/過/完/了]
2	Preverbal modification: Preverbal Frequency/Aspectual modifier[一直/不斷] ＜ ＊
3	Determiner and Measurement: Determiner[一個]＜ ＊ [+nom]
4	Preceding V[進行]＜ ＊

This observation complies with the event structure of the Reporting verbs—process
with endpoint. The verbs are process which can co-occur with progressive markers and
frequency/aspectual modifiers. The verbs also have a semantically implicated endpoint
because of the acceptability of collocation with endpoint markers, such as *wan* or *le*, and
the unacceptability of the use of duration phrases. Furthermore, the Reporting verbs can
be used with the light verb, *jinxing* 進行. This pattern reveals that the stating process is

procedural.

(112) 面對黃大洲<u>進行</u>口頭**報告**

  miandui huangdazhou jinxing koutou baogao

  Face *Huang Dazhou* proceed verbal report

  'Face *Dazhou Huang* to proceed verbal report.'

With these clear definitions of the BP and CA unique to verbs of Reporting, more verbs can be subsumed. More lemmas that can be categorized as belonging to this sub-set are listed as follows:

(113) Lemmas belonging to the Report subframe

Representative Lemmas: *baogao* 報告 and *jiaodai* 交代 (Selected as representative lemmas for most frequent usage)

Other lemmas: 報告, 稟報, 報導, 簡報, 交代, 吩咐

At last, the Semantic Attributes used to specify verbs in the Report subframe are given below:

(114) Semantic Attributes of the Report subframe

Semantic Attribute: [Event type: procedural process with a semantically endpoint]

  [Register: unspecified]

  [Speaker: marked]

  [Addressee: marked]

  [Topic: public]

  [Purpose: To present the Message to an Addressee who has some

    kind of a status relation with the Speaker]
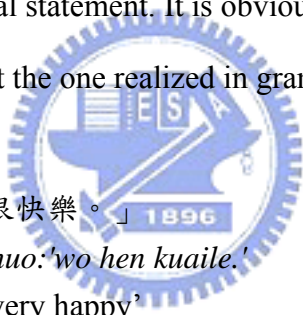
5.6 Summary

Last section provided the syntactically-based criteria, namely, Basic Patterns and Collocational Associations as well as frame-based information, i.e., Definition and foregrounded/backgrounded Frame Elements to clearly characterize each subframe. All their grammatical manifestations and differences can be ascribed to different Semantic Attributes and unique event types. The following table summarizes the event type, Semantic Attributes, and possible prepositions involved in each subframe:

Chapter 6 Information beyond Frame Semantics: The Nature of Verbs of Statement

6.1 Perspective: Internal Speaker vs. External Speaker

Up to this point, one thing that has been neglected and missing is exactly who is speaking, or making verbal statement. It is obvious that the one who is making the verbal the statement is not the one realized in grammatical patterns, as illustrated below:

(115)a. 周先生說：「我很快樂。」
　　　Zhou xiansheng shuo:'wo hen kuaile.'
　　　Zhou Mr. said, 'I very happy'
　　　'Mr. *Zhou* said, 'I am very happy'.'

Who is speaking, or more exactly 'reporting the speech event' is in fact, a third participant outside the communicative event. What we see is the 'internal' Speaker, 周先生 *zhou xiansheng* 'Mr. *Zhou*' who expresses the Message, 我很快樂 'I am very happy.' However, there should be an unrealized 'external' speaker who reports the communicative event, making this linguistic expression possible in the real world, as represented in (115b).

(115)b. [X $_{\text{unrealized external speaker}}$ Report [周先生 $_{\text{speaker}}$ 說：「我很快樂。」]]
　　　Zhou xiansheng shuo:'wo hen kuaile.'
　　　Zhou Mr. said, 'I very happy'
　　　'Mr. *Zhou* said, 'I am very happy'.'

Here, the term 'Reporter' (Zwicky 1971) is adopted to refer to the unrealized external speaker. In order to investigate the relationship between sentences and reports of sentences, Zwicky distinguishes between "speaker" and "reporter". The former refers to the original "speaker" who gives a "speech" which corresponds to "Speaker" in our framework, while the latter refers to the person who describes the content of this speech or who supplies a "report", i.e., external speaker as mentioned above. This is exemplified in (115c).

(115)c. [X $_{reporter}$ Report [周先生 $_{speaker}$ 說：「我很快樂。」]]
　　　Zhou xiansheng shuo:'wo hen kuaile.'
　　　Zhou Mr. said, 'I very happy'
　　　'Mr. *Zhou* said, 'I am very happy'.'

It means that the Message '我很快樂' is given by the Speaker 周先生, and then, the two linguistic expressions are verbalized by the Reporter by using one of the Statement verb, *shuo*.

　　　Since there are two entities (Reporter and Speaker) involved in the speech event, the next question being asked is whose perspective is taken in the addressing of the Message? It is interesting as well as fundamental to ask wheather the perspective is from the Speaker or from the reporter. The Reporter may choose to state the given Message faithfully or unfaithfully. The satisfactory or unsatisfactory reports of a given Message depend on the Reporter who is excluded from the Message-expressing event, i.e., scope of predication (Langacker 1983). That is, the linguistic expression [Speaker < Statement Verb < Message] is verbalized by the Reporter. This suggests that the relation between the Reporter and the chosen Statement verb, together with its Message complement, is subjective. The Reporter himself is not a participant in the Message-stating scene, thus, it is maximally subjective with reference to the scene

described (cf. Langacker 1983). Based on Langacker's model, this can be diagrammed in Figure 14:

Figure14. Perspective configuration of the Reporter and the Statement event
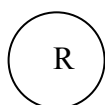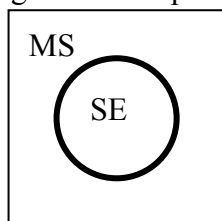
(R: Reporter; MS: maximal scope; SE: statement event)

The Reporter stands outside the maximal scope, represented as a box which involves a specific time-span and a particular place (Fillmore 1969). The bold circle represents statement event wherein the Speaker states out something in his mind. By means of the theater metaphor (cf. Langacker 1983), the Speaker's expression of self is just like the actors performing onstage and the Reporter is like the audience who watches the shows. The participation and interpretation of the Reporter is to a great degree subjective. For verbs of Statement, both the overtly realized Speaker and the covert Reporter are subjective. What the Speaker says or expresses is based on the Speaker's subjective belief state/attitude toward the outer world. Also, the Reporter's interpretation and report of Speaker's Message becomes increasingly based on the Reporter's subjective attitude (cf. Traugott 1989).

This configuration can be further modified to incorporate the cognitive schema of the Statement Frame, as shown below:

Figure 15. Modified model of the perspective configuration of the Reporter and the Statement event
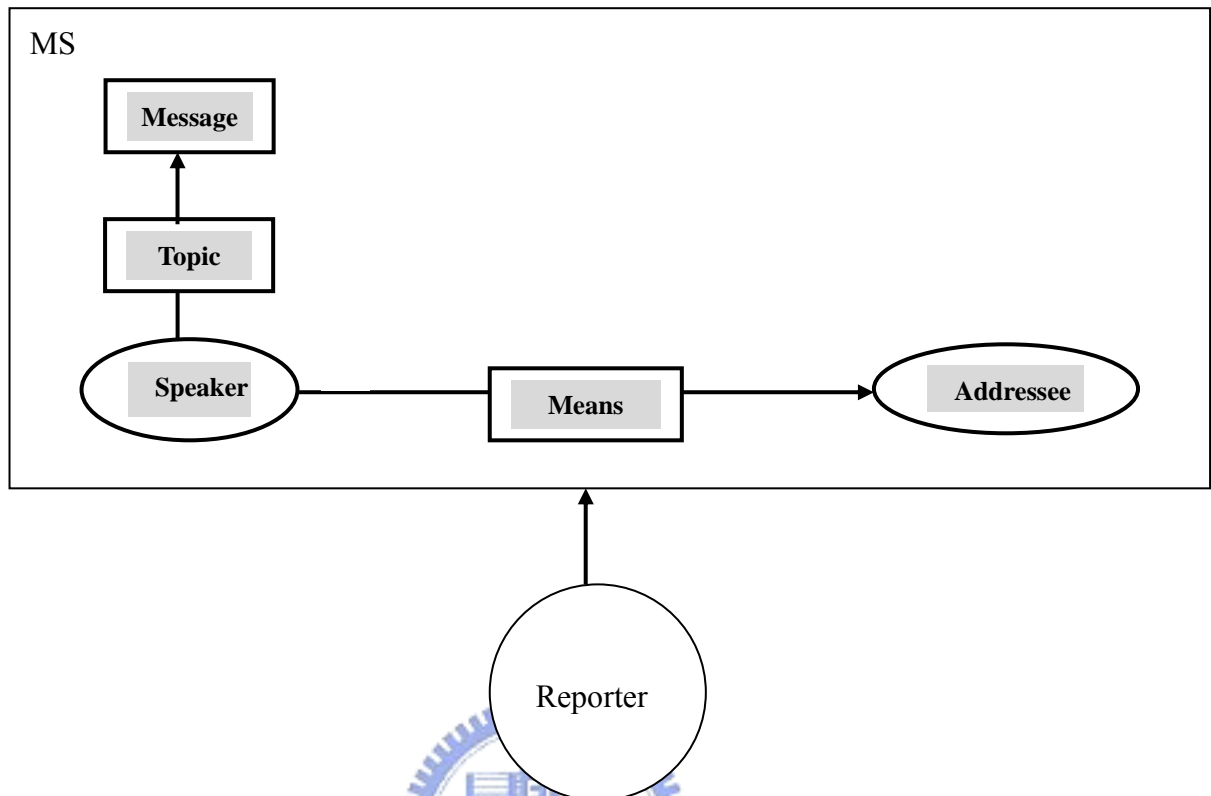
The Reporter himself does not participate in the statement event. Rather, he stands offstage to view the event and then subjectively recounts the one-way Message-packaging communicative events by a Speaker to an Addressee on a certain Topic. That is to say, the choosing among a large set of verbs of Statement and use of one specific verb is Reporter-orientated. It is the Reporter rather than the Speaker who is in charge of deciding which verb he is going to use to supply the "report" (cf. Zwicky 1971). Consequently, the use of verbs of Statement is from the perspective of the Reporter instead of the Speaker. Moreover, the addressing of the Message is also Reporter-oriented. That is, the manifestation of verbs of Statement and its relative Message is essentially subjective (Traugott 1989) since the indirect quote is heavily edited by the Reporter, and thus is mainly based on the interpretation of the Reporter (Givón 1993).

6.2 Interaction of Speaker and Reporter: Personal Pronouns

It is worth mentioning that the Speaker and Reporter rarely coincide except in the case that the first personal pronoun is used, as illustrated in (116a) and (116b), respectively:

(116)a. [Report [周先生說：「我很快樂。」]]
   Zhou xiansheng shuo:'wo hen kuaile.'
   Zhou Mr. said, 'I very happy'
   'Mr. *Zhou* said, 'I am very happy'.'

   b. 我 Speaker/Reporter 說：「這是活的藝術」。
   wo shuo: 'zheshi huo de yishu'.
   I say: 'This is live art'
   'I said, 'This is live art'.'

In example (114b), the Speaker is also the Reporter. The Reporter reports his own statement 這是活的藝術 *zheshi huo de yishu* 'This is live art' by using the first personal pronoun *wo* 'I'.

In our corpus data, it was found out that most of the verb tokens seldom take *wo* as its Speaker subject (less than 4% of all the occurrences). Interestingly, the Revealing verbs which are proposed to convey Messages with marked content CANNOT occur with *wo*. This finding corresponds to what has been suggested that the Revealing verbs are used to disclose a presumably unknown Message. Since the Reporter should be responsible for the stated Message, the unspecified Speaker is frequently used to change the focus, namely, it is a certain presumably unknown event that needs people to pay attention to but not to who discloses the event. Similarly, the first person subject *wo* is also dispreferred for neither the Speaker nor the Reporter would like to be responsible for the disclosing of the secretive event.

6.3 Semantic Specifications of the Statement Verbs Based on Perspective

As noted in Section 5.1, the Saying verbs have highest percentage of realizing their Message in direct quotes (26% vs. 5%). According to Givón (1993), the 'speaker-quoter', namely the Reporter in our framework, takes more responsibility and 'legal culpability' for the precise form of the quoted speech. Contrarily, the reporter of the indirect speech takes more responsibility for the 'interpretation' of the quoted information, but not the exact form of quoted speech. Since the quoted information is mainly edited by the Reporter, the presentation of the Message is rather subjective. Following this assumption, it is proposed that the Chinese Saying verbs are less subjective, while the other verbs which do not tend to use the direct quotation are more subjective. This conforms to the study of the English verb *say* (Zwicky 1971). Zwicky (1971) stated that a satisfactory report conveys only what is asserted by the Speaker, but not the presuppositions or inferences of a speech. He pointed out that the English *say* is used to purely report the assertions made by the Speaker. In the same vein, the Chinese Saying verbs are just like the English verb *say*, which is used to report what has been stated by the Speaker.

On the other hand, the use of verbs other than the Saying verbs is basically founded on the subjective evaluation of the Reporter. The Expressing verbs are associated with formality, while the Explaining, Suggesting, Evaluating, Revealing, and Admitting verbs are associated with presuppositions. The use of the Expressing verbs can be treated as Saying plus a specific Register and Purpose or a certain Manner. The semantic specifications of each subframe based on the basic-level lexical item, the Saying verbs, are provided as follows:

(117) Semantic specifications of each subframe

Express subframe: Saying + FORMAL MANNER

Explain subframe: Saying + CAREFUL MANNER + the PURPOSE of making the

Message more precise and understandable

Suggest subframe: Saying + WELL-INTENTIONED MANNER + the PURPOSE of

providing a solution or a suggested future act

Evaluate subframe: Saying + JUDGMENTAL MANNER + the PURPOSE of judging

on events or human

Reveal subframe: Saying + the PURPOSE of disclosing presumably unknown message

Admit subframe: Saying + CANDID MANNER + the PURPOSE of verifying the

presumably known message

Report subframe: Saying + the PURPOSE of presenting the information to an

Addressee who has some kind of a status relation over the Speaker
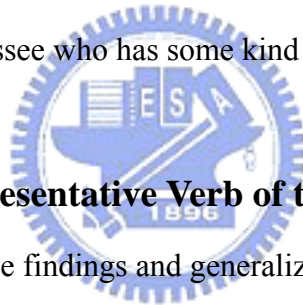
6.4 *Shuo* as the Representative Verb of the Communication Domain

Following the above findings and generalizations, it is shown that the Saying

subframe is the default subframe of the Chinese Statement Frame. Similarly, in the

domain level, there is a representative lemma used to define and correlate all other verbs

in the same domain. The verb '*shuo*' in the Saying subframe can be regarded as the

representative verb in the Chinese Communication Domain for *shuo* is a verb of

Conversation and Statement, as illustrated in (118a) and (118b), respectively: (Liu and

Chiang 2006)

(118)a. Verb of Conversation

我們說了很久

women shuo le henjiu

We talk LE very long

'We talked for a long time.'

　b. Verb of Statement

我對他說: 「我很快樂」
wo dui ta shuo: 'wo hen kuaile'
I to him say, 'I very happy'
'I said to him, 'I am happy'.'

In our corpus data, *shuo* was found to frequently collocate with other statement verbs (Liu and Chiang 2006).

(119) 他表示/解釋說: 當時氣氛很活潑
　　　*ta **biaoshi/jieshi** shuo*: [*dangshi qifen hen huopo*]CL
　　　He express/explain say, 'at that time atmosphere very lively'
　　　'He expresses/recalls that the atmosphere was lively at that time.'

A number of scholars have studied the complex lexical and grammatical manifestations of *shuo*. Huang (1982) pointed out that the frequent collocation of the saying verb, *shuo*, with mental verbs e.g., *renwei-shuo* 認為說 or *juede-shuo* 覺得說 can be attributed to the close relationship between speech and thought. Huang (1982) also stated that *shuo* exhibits both lexical and grammatical functions. Concerning the frequent co-occurrence of *shuo* with a saying or mental verbs, Cheng 1989, Chang 1998, Su 2002, Huang 1982 suggested that *shuo* has come to function as a complementizer. Among them, Su (2002) is a pioneering work on the Chinese saying verb *shuo*. She suggested that owing to grammaticalization, *shuo* 說 'say' is shown to have diverse meanings and grammatical functions. She also proposed a model for accounting the grammaticalization paths of *shuo*. But little attention has been paid to the semantic and grammatical characteristics of the verbs that may occur with *shuo*. Three fundamental questions are being asked in this study: 1) What kinds of verbs tend to co-occur with the complementizer *shuo*? 2) What is the grammatical status of the preceding verb in relation to *shuo*? 3) What motivates the co-occurrence of *shuo* with the preceding verb in taking a

complement?

Adopting the approach of frame semantics, it is found that ALL the verbs in the communication (saying verbs) and cognition (mental verbs) frames can occur in the 'V + *shuo*' pattern, confirming the observations in previous studies. However, what is significant and interesting is that verbs other than the saying and mental verbs were also found in the pattern. Verbs related to perception, causation, and a number of other frames may occur with *shuo*, as summarized below:

Table 49. Verb Types Preceding *shuo*

Communication verbs	*shanglian* 商量, *biaoshi* 表示, *fashi* 發誓, *xialing* 下令, *biaolu* 表露, *tingjian* 聽見, *lingting* 聆聽
Cognition verbs	*juede* 覺得, *xiang* 想, *renwei* 認為, *mingbai* 明白, *caixiang* 猜想, *zhidao,* 知道 *xinlai* 信賴
Perception verbs	*ganjue* 感覺, *gandao* 感到, *kandao* 看到, *wendao* 聞到, *pa* 怕, *mengdao* 夢到
Others	*zaocheng* 造成, *xuan* 選, *biancheng* 變成, *jie* 借, *guiding* 規定, *zhunbei* 準備, *qiang* 搶, *gan* 趕, etc.

(120)a. 你當初怎麼沒有**選說**試試當一壘手
   *ni dangchu zemo meiyou **xuan shuo** [shishi dang yileishou]*CL
   You at that time why no choose try be a first baseman
   'At that time, why didn't you choose trying to be a first baseman?'
   b. 醫生他處置不當**造成說**病人受苦
   *Yisheng ta chuzhi budang **zaocheng shuo** bingren shouku*
   Doctor he handle inappropriately cause say patients suffer
   'The doctor himself didn't handle it appropriately and thus caused the patients to suffer.'

Moreover, some of the verbs, which typically take a nominal object or theme, were found to take a clausal complement when occurring with *shuo.*

Table 50. Non-complement-taking verbs with *shuo*

	V + NP → V + *shuo* + CL
Communication and Cognition V	*fabiao* 發表, *zhici* 致詞, *jianghua* 講話, *chuandao* 傳道, *lingting* 聆聽, *biaolu* 表露, *xinlai* 信賴, *xinren* 信任, etc.
Non-communication and Non-cognition V	*qiang* 搶, *xuan* 選, *lingting* 聆聽, *biancheng* 變成, *che* 扯, etc.

(121a) and (121b) are the examples of communication verb and (122a) and (122b) are the examples of non-communication verb:

(121)a. 市長**傾聽**[各方意見]NP
　　　　shichang qingting gefang yijian
　　　　Mayor listen to everyone suggestion
　　　　'The mayor listened attentively to everyone's suggestion.'
　　　b.上人不襟駐腳**傾聽說**：『大里國中的孩子是一群最受關愛的孩子
　　　　shangren bujin zhujiao qingting shuo:"dali guozhong de haizi shi yiqun zui shou guanai de haizi
　　　　Master couldn't help say, '*Dali* Junior High School DE children are a group most concerned DE children'
　　　　'The master couldn't help but stop walking and listened attentively and said, 'The children at *Dali* Junior High School are the ones who are concerned and cared most.'
(122)a.他們**變成**[死黨]NP
　　　　tamen biancheng siding
　　　　They become good friends
　　　　'They became good friends.'
　　　b.他們會**變成說**,[覺得我好像很難相處喔]CL
　　　　tamen hui biancheng shuo,juede wo hoaxing hen nan xiangchu
　　　　They will come say feel I seem very hard get together
　　　　'They may become to feel that I seem to be difficult to get along with.'

Significantly, non-quotative verbs may take a quotative if occurring with *shuo*, as exemplified below:

(123) a. 發表論文/言論/演講

fabiao lunwen/yanlun/yanjiang

present paper/opinion/spech

'present a paper/opinions/a speech'

b. 他最後**發表說**：「太陽是像陀螺一樣旋轉著的 」

Ta zuihou fabiao shuo: taiyang shi xiang tuoluo yiyang xuanzhuan zhe

He finally announce say, 'sun is like top the same revolve'

'He finally announced and said, 'The sun revolves just like the top'.

The findings are analyzed from the perspective of Construction Grammar (Goldberg 1995, Jackendoff 1997) along with the insight from Frame Semantics (Fillmore and Atkins 1992). Given the diverse range of verbs that may precede *shuo*, the sequence [V+*shuo*+CL] may be considered as a unique construction, functioning as a message-creating device that may coerce a non-complement-taking verb into a complement-taking predicate (Liu and Chiang 2006). *Shuo* is the *constructional head* which signals and coerces the presence of a message-related complement, a mechanism triggered by the semantic property of information packaging in the Statement Frame defined with the salient element: Message. The construction allows a Message to be created and packaged in a non-statement event (Goldberg 1995). It can be represented via the definition with examples illustrated in (124) and Figure 16:

(124) The definition of 'V+*shuo*+CL' Construction:

Form: Verb + *shuo* + CL

Meaning: Speaker X conveys a Message (CL) concurring and complementing to the event (V)

Function: *Shuo* is taken as the *constructional head* that signals and coerces the presence of a message-related complement into a concurring event with a complement-taking or non-complement-taking predicate.
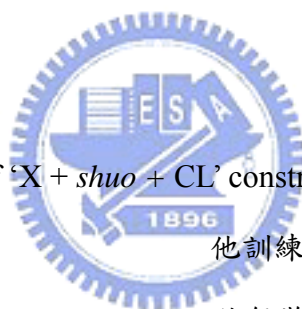
Possible Verb: P-C-U verbs and other verbs that may contextually be extended

111

with a Message-complement.

Figure 16. The Message-profiling 'V + *shuo* + CL' Construction
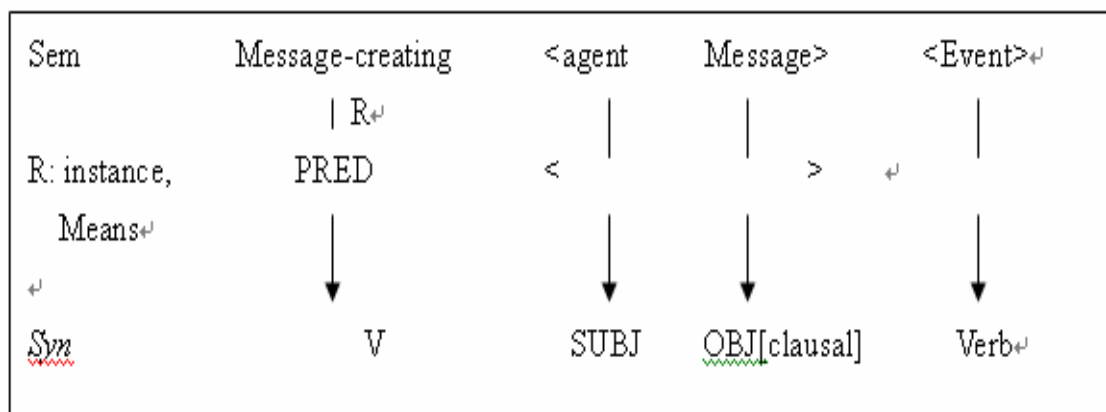
Furthermore, the construction can be extended to include other patterns with *shuo*, as listed above:

(125) Extended pattern of 'X + *shuo* + CL' construction

Active VO		他訓練學生說要拿第一
Adjectival State	+	他很難過說沒拿第一
Antecedent marker		就算說/因為說
Consequent marker		所以說/結果說

Therefore, the construction can be modified as : XP + *shuo* 說 + CL. It is worth mentioning that the Message-profiling sequence is emerging is emerging in spoken Mandarin.

In sum, *shuo* functions as the constructional head, profiling the expression of a Message (CL) in relation to an activity (active V), a state (stative V) or a propositional relation (subordinate vs. main predication). After thoroughly examination, it is found that *shuo* is not just a complementizer. It is a structure-extending device, adding a

Message-complement to the argument structure, even when the predicate is not subcategorized for a complement. With its unmarked verbal status and underspecified role-internal attributes, the Message-taking verb *shuo* is used with a variety of verbs to profile or extend the argument frame. This finding conforms to the view of Emergent Grammar proposed by Hopper (1987) and Thompson and Hopper (1997): grammar is a constantly evolving, dynamic, open-ended set of small sub-systems. Argument structure is locally determined under the force of discourse interaction. In Mandarin, the Message-profiling 'V + *shuo* + CL' Construction is emerging, as an evolving device for argument augmentation. It can be treated as an adjunct construction, taking various kinds of verbs and even various kinds of categories.

6.5 Summary

For verbs of Statement, it is extremely important but easy to neglect to investigate who is saying or presenting the Message. Only the direct quoted speech (however, only 5.6% of all the Message occurrences) is addressed by the Speaker. Indirect quoted Messages which account for the vast majority are shaped and edited by the Reporter who reports the speech according to what has been said by the Speaker. However, this phenomenon is hardly to be detected from the verbs' syntactic patterns. Incorporating vantage point (or viewpoint) pointed out by (Langacker 1999), namely perspective, we provide systematic and detailed of frame-internal, i.e., inter-subframe and subframe-individual characterizations. All the verbs involve the default and basic meaning 'Saying'. Verbs in the Say and Speak subframe are the default sets with meaning unrestricted, while verbs in other subframes are more restricted with specification on Manner, Register, and Purpose.

Chapter 7 Conclusions

7.1 Summary

With the goal of searching for the most effective and comprehensive way of exploring Mandarin verbal semantics, this paper adopts the five-layered model within the theoretical framework of Frame Semantics. Following this proposal, a large-scale and in-depth investigation of Mandarin statement verbs was done. As a preliminary study on Chinese verbal semantics, this study, nevertheless, has the following implications:

1) It is proposed that in this frame-based hierarchy, a wide range of verbs can be linked to a well-structured semantic ontology as well as be defined, categorized, and represented with detailed lexical information. This work is essential to the organization and representation of the semantic granularity of verb types in Mandarin.

3) This model can not only capture a fine-grained semantic representation (much as Pustejovsky (1995) has claimed—the semantic well-formedness) in Mandarin.

2) In the frame level, we can characterize the default member of each frame. The specification of each subframe is associated with the semantic characterization of the default member.

Ultimately, this framework can help to explore verbal semantics in Mandarin but also in a cross-linguistic perspective.

7.2 Further Implications

In the future study, near-synonym sets and individual can be categorized on the basis of the classification of subframes. It is closely at the subframe level that near-synonym sets and individual lemmas can be anchored. Besides, in addition to verbs in the Statement frame, more verbs need to be studied. Verbs other than Conversation and Statement in the Communication domain and other domains can be studied within this frame-based hierarchy.