Serial Verb Constructions (SVCs) in Mandarin Chinese

by

Miaomiao Zhang

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Norwegian University of Science and Technology

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ABSTRACT

SVC in Mandarin Chinese is a controversial phenomenon partially due to its conflicting definitions and classifications. As a data-driven project, this thesis focuses on 118 “true” SVCs and classifies them into four groups. The data can be freely accessed on the online multi-lingual database TypeCraft. In this thesis we mainly discuss the semantic feature of Mandarin SVCs, and explore the semantic relationship between V₁ and V₂. In addition, we try to outline the internal semantic structure of our data, in order to develop a general semantic classification of Mandarin SVC.
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CHAPTER 1: INTRODUCTION

1.1 Background

Cross-linguistically, two or more predicates of a single clause may share a subject. Such a construction may take the form of a verb particle construction, or a verb plus noun construction, light verb construction (Butt 2003), and in the African context, multi verb construction (MVC)\(^1\). MVC consists of verbs in series that can function as independent verbs in simple sentences, with at least one shared argument and no marking of syntactic dependency (Ameka 2005: 2). According to Hellan & Dakubu (2010), MVC falls into four construction types for West African languages: Serial Verb Construction (SVC), Extended Verb Complexes, Auxiliary Verb Constructions and Verbids. Among them, SVC is considered to be a superficially similar construction not only cross languages but also within a single language (Lord 1993). That is to say, SVCs in different languages may have similar syntactic feature but different semantic features, and within the same language, SVC can be divided into several sub-types according to their semantic differences.

Kröger (2004: 229-230) has proposed several characteristic features of serial verbs in “true” SVCs, which specifically contains: two verbs may share at least one semantic argument, but only one grammatical subject. Li & Thompson’s (1989) Subject/Object Clauses, Pivotal Construction (equal to Lü’s Transmittable Predicate Construction) and Descriptive Clauses are according to Kröger’s list of SVC properties not prototypical SVCs.

1.2 Objective of the research

Based on a comparison between the classification of Mandarin SVCs by four Chinese linguists-Chao (1968), Li& Thompson (1989), Lü (2006) and Zhu (1982) and following Kröger’s (2004) proposal about the characteristics of prototypical SVCs cross languages given above, the thesis divides 118 SVC-examples into 4 sub-groups: the Vector SVC, the Anchoring SVC, the Chaining SVC and the Aspectual SVC. These SVC classes are then subdivided into smaller groups. Based on this classification, the thesis explores the relationship between \(V_1\) and \(V_2\) to suggest a semantic structure of SVCs. The theoretical support comes from Vendler (1957, 1967), Dowty (1979, 1981), Smith (1997) and Jackendooff (1972), as well as from Gruber (1976) and Fillmore (1968).

\(^1\) [http://www.ling.hf.ntnu.no/tross/TROSS03-toc.html](http://www.ling.hf.ntnu.no/tross/TROSS03-toc.html)
1.3 Methodology

The thesis is a data-driven project using primary and secondary data. Using the online multilingual database TypeCraft, the data are re-annotated and re-grouped into a small Mandarin SVC corpus which contains 118 examples. Its theoretical focus is to develop a syntactic and semantic taxonomy of serial verb constructions which reflects traditional Chinese approaches and Western approaches alike. In addition, the phrase structure and feature structure (HPSG) of Mandarin SVC will be described. Further, to generalize the semantic relation between serial verbs, the theories about events and thematic roles are will be involved in this thesis.

1.4 Outline

The thesis is organized as follows: In Chapter 1, the background of the phenomenon, the objective of the research, the methodology of the study as well as the structure of the thesis are outlined. Chapter 2 refers to the literature review related to defining and classifying Mandarin SVC. Besides, the author of this work provides her approach in classifying Mandarin SVC. Chapter 3 as the core chapter of the thesis focuses on the description of the relationship between $V_1$ and $V_2$ through the representation of their semantic structures. Chapter 4 refers to the summary and conclusions.
CHAPTER 2: SERIAL VERB CONSTRUCTIONS (SVCS) IN MANDARIN CHINESE

Serializing languages are spoken in West Africa, Oceania, Central America and South-East Asia. Many of these serializing languages are isolating languages and lack well-developed prepositional and inflectional systems (Lipenkova & Müller 2009). SVC is a very common phenomenon in Chinese grammar, however, sinologists in the West and in China neither agree on its definition nor its classification. In this chapter we will do some literature review about the definition and classification of Mandarin SVC first, and then the approach in this thesis will be determined.

2.1 Literature Review

Internationally, Kröger (2004: 229-230) has proposed several characteristic features of “true” SVCs, which provides an important reference for the study of Mandarin SVC. Focusing on syntactic features, Li & Thompson (1981, 1989) define a Mandarin SVC as a sentence with two or more juxtaposed verb phrases or clauses without any marker indicating their relationship. Yin (2007) writes: “SVC refers to a sequence of verbs or verb phrases in a sentence in which there is no intervening conjunction.” Lipenkova & Müller (2009) consider SVC as “a complex predicate structure formed by two or more verbal phrases which select for the same subject”. More concretely, Tao (2009) formulates that an SVC refers to “a syntactic structure in which two or more verbs are juxtaposed to form a complex predicate to express series of related actions within a single clause”.

Chinese linguists began to study this phenomenon around 1950’s (Wang 1954, Chao 1968, Zhu 1982, Wu 1990, Ding 2004 and Lü 2006, etc.). Among them, Wang and Zhu advocate a broad view of SVC, where an SVC is constituted by a group of consequentive verbal strings, divided into several sub-groups, e.g.: Coverb, Compound, Pivotal Construction, Subject/Object-clause, Existential sentence and Sentence for emphasis, etc. Other linguists have narrower definition of SVC which focuses only on one type of serial verb construction which can easily be distinguished from other syntactic phenomena. That is Kröger’s (2004) “true” SVCs where verbs share the subject. In the teaching materials and text books (Hu 1995), Huang & Liao 2002) for universities in China, the “true” SVC is most accepted.

2.1.1 Kröger (2004)

As one of the influential linguists in the West, Kröger has summarized a list of properties of “true” SVCs cross-linguistically:
a. A prototypical SVC contains two or more morphologically independent verbs within the same clause, neither of which is an AUX.
b. There are no conjunctions or other overt markers of subordination or coordination separating the two verbs.
c. The serial verbs belong to a single intonation contour, with no pause separating them.
d. A true SVC may contain only one specification for tense, aspect, modality, negation, etc., though these features are sometimes redundantly marked on both verbs.
e. The two verbs in the SVC may share at least one semantic argument.
f. Obligatory non-coreference: a true SVC will not contain two overt NPs, which refer to the same argument.
g. A prototypical SVC contains only one grammatical subject.

2.1.2 Chao (1968), Li & Thompson (1989), Lü (2006) and Zhu (1982)

Among the analysis mentioned above, Chao’s and Li & Thompson’s work is well known internationally, while Lü and Zhu are leading sinologists in China. Chao (1968) states that SVCs are V-V series which have the following properties:

a. The order of the serial verbs affects the overall interpretation of the sentence.
b. No subordinate particle is inserted between the serial verbs in an SVC.
c. The serial verbs share a subject.
d. The serial verbs encode two or more separate events occurring consecutively or simultaneously.

Li & Thompson’ (1989) claim that “the verb phrases in a serial verb construction always refer to events or states of affairs which are understood to be related as parts of one overall event or state of affair.” (1989: 594) Based on this description, Li & Thompson divide Mandarin SVC into four sub-groups:

I. Separate events

II. Subject/Object Clauses

III. Pivotal Construction (PC)

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2 The term “simultaneous” events are not mentioned by Li & Thompson (1989), but appear in Paul (2008).
IV. Descriptive Clauses

Among the four classes of SVC, only a group aligns subject-sharing SVC, which is Group I. While Group I corresponds to Chao’s (1968) V-V series, Group II corresponds to the S-P Subject of the latter, which doesn’t belong to SVC according to Chao (1968: 325-328). Li & Thompson’s Group II has a sub-group Object Clauses which exists also in Chao’s system where it is called Clause Object. In addition, there is no corresponding phenomenon of Descriptive Clauses in Chao (1968). Compared to Kröger’s proposal, Li & Thompson’s (1989) Subject/Object Clauses, Pivotal Construction (equal to Lü’s Transmittable Predicate Construction mentioned below) and Descriptive Clauses are not prototypical SVCs.

In traditional Mandarin grammars and textbooks it is observed that the word order of the serial verbs cannot be changed, and that each verb can build a Subject-Predicate relation with the subject of the whole phrase. In addition, there is no pause and connecting word between the verbs. Lü (2006:66) distinguishes between SVC Lián Dòng Shì and Dì Wèi Shì “Transmittable Predicate Construction” or Pivotal Construction. He classifies the latter as Complex Predicate.

Zhu (1982) identifies SVC as a sub-class of Lián Wèi Jié Gòu “Serial Predicate Construction” (SPC), which consists of V-V, P(reposition) -V, P(reposition) -A(djective) and V-A(djective) patterns. Also, Zhu assumes that SVCs have a different syntactic structure than Coordination Structure, Verbal Object and Complement Construction. Verbal Objects (Wèi Cí Xìng B ī n Yū) refer to verbs or verbal phrases serving as the object of the whole sentence (corresponding to Chao’s Clause Object). In a Complement Construction (Bū Yū Jié Gòu), there are two predicative components: V₁ and V₂, or a verb and an adjective. The two verbs V₁ and V₂ can serve as one united transitive or intransitive verb, but may have different subjects.

Despite of the different definitions, the four Chinese sinologists have reached a consensus on one pattern V₁ (+ADV/N)+V₂ (N) where V₁ and V₂ share the same subject, there is no conjunction or other syntactic marker between them. In addition, the semantic relation between V₁ and V₂ varies depending on the context.

2.2 Classifying the Corpus of Mandarin SVC on TypeCraft

2.2.1 Corpus Creation

As a data-driven project, this thesis uses the primary and secondary data which are re-annotated through the TC-editor of TypeCraft. All data are freely accessible and can be used for further
research. The primary data come from the recorded text “Simon’s cat”, and the secondary data are
collected from different literature in the form of Interlinear Glossed Text that are displayed on
a TypeCraft wikipage. Except for some data from literature written in Chinese, all the secondary
data have original annotation in English. Through clicking the link of the Chinese sentences on the
Original Interlinear Glossed Text, one can access a more in-depth annotated version of the data. Re-
annotations in order to make already existing data more accessible was part of the author's thesis
project. However, according to the author, only 118 examples of the primary and secondary data
belong to “true” SVCs, which constitute the small corpus of SVC in Mandarin Chinese on
TypeCraft.

2.2.2 Linguistic Tools
To make the data of Mandarin SVC more accessible and direct-viewing, we use TypeCraft editor
(TC-editor) to generalize the interlinear glossed target text. We also utilize the phrase structure tree
and HPSG grammar to analyze the syntactic and semantic structure of some Mandarin SVCs. In
addition, to formalize the relationship between serial verbs and their arguments, the semantic
theories about argument structure, thematic roles, aspect as well as event are also involved.

2.2.3 Classification of the Corpus
According to standard convention, we use the capital letter E or S to indicate an event (E) or a state
(S), and the capital words PATH, DEIXIS, COMPLETIVE, INCEPTIVE, STATIVE,
PERFECTIVE and NOT refer to semantic categories. The subscript numbers of these capitals
correspond to the number of the relevant verb in a sentence. In addition, the subscript labels of the
capital letter E represent different event classes (activity, achievement and accomplishment). The
combination between two situations is expressed by a square bracket, the subscript of which
indicates the new derived situation (events or states) type. Besides, the descriptive word with two
short strings inserted between two independent situations demonstrates the relationship between
serial verbs. Table 1 below is the summary of what will be studied in 3.2.
<table>
<thead>
<tr>
<th>Group</th>
<th>Semantic Structure</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I</strong></td>
<td><strong>Vector SVC</strong></td>
<td><strong>II</strong></td>
</tr>
<tr>
<td>a. Directional</td>
<td>([E_1-activity + PATH_2 + DEIXIS_1]) directed motion</td>
<td><strong>a. Circumstantial</strong></td>
</tr>
<tr>
<td></td>
<td>“fly (&lt;Agent_i&gt;)” + “across (&lt;\text{Theme}_i&gt;)” + “come (&lt;\text{Theme}_i&gt;)”</td>
<td><strong>b. Purposive</strong></td>
</tr>
<tr>
<td></td>
<td>“come (&lt;\text{Agent}_i&gt;)” + “play (&lt;\text{Agent}_i&gt;)”</td>
<td><strong>c. Manner or Instrumental</strong></td>
</tr>
<tr>
<td></td>
<td>“fly to”</td>
<td><strong>d. Supplemental</strong></td>
</tr>
<tr>
<td></td>
<td>“come to play”</td>
<td></td>
</tr>
</tbody>
</table>

3 Conative construction refers to the “verb-at” construction in English (Perek & Lemmens 2010, Kim 2008a & 2008b). Nakano & Oya extends the scope of the conative construction to other prepositional obliques, for example “with NP” where the NP refers to the person or thing that accompanies to the event a verb denotes. That NP is given the thematic role: conative.
<table>
<thead>
<tr>
<th>III</th>
<th>Chaining SVC</th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 60) | yǒu bīng bùnèng lái | “cannot come because of sickness”

<table>
<thead>
<tr>
<th>IV</th>
<th>Aspectual SVC</th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 63) | yǒu shì zhào láowáng | “if you have problem, just call Laowang”

<table>
<thead>
<tr>
<th>g)</th>
<th>presenting</th>
<th>E₁-activity + E₂-achievement</th>
<th>“send &lt;Presenter, Theme, (Recipient)&gt;, &quot;give &lt;(Presenter), (Theme), Recipient&gt;”</th>
</tr>
</thead>
</table>
| 64) | sòng yīběn shū gěi tā | “send him a book”
| 65) | sòng gěi tā yīběn shū | “send him a book”
| 66) | zhī yǐjiàn máo yī gěi tā | “knit a sweater and give it to him”
| 67) | gěi tā zhī le yī jiān máoyī | “have knitted a sweater for him”

<table>
<thead>
<tr>
<th>j)</th>
<th>Conditional</th>
<th>S₁-conditional- E₂-activity</th>
<th>“have &lt;Possessor, Theme&gt;”, “call &lt;(Agent), Patient&gt;”</th>
</tr>
</thead>
</table>
| 61) | yǒu shì zhào láowáng | “if you have problem, just call Laowang”

<table>
<thead>
<tr>
<th>e)</th>
<th>Causal</th>
<th>S₁- causal- NOT E₂-achievement</th>
<th>“have &lt;Possessor, Theme&gt;”, “cannot come &lt;(Agent)&gt;”</th>
</tr>
</thead>
</table>
| 60) | yǒu bīng bùnèng lái | “cannot come because of sickness”

<table>
<thead>
<tr>
<th>a)</th>
<th>Aspectual SVC</th>
<th>E₁-activity -resultative-</th>
<th>“drink &lt;Agent, Patient&gt;”</th>
</tr>
</thead>
</table>
| 85) | zuò zhe kàn bāo | “read a newspaper sitting”
| 97) | hé jù lè | “be happy”

<table>
<thead>
<tr>
<th>b)</th>
<th>Aspectual SVC</th>
<th>E₁-activity -resultative-</th>
<th>“drink &lt;Agent, Patient&gt;”</th>
</tr>
</thead>
</table>
| 97) | hé jù lè | “be happy”

### III: Chaining SVC

- **t₁ > t₂ > t₃ > ... > tₙ > t₀**
- **E₁-activity -consecutive- E₂-activity**
- **“get <Agent, Theme>”, “bathe <Agent>”**
- **“read <(Agent), Theme>”**

### IV: Aspectual SVC

#### a) -zhe
- **[E₁-activity]_{state} -manner- E₂-activity**
- **“sit-ting <Agent>”, “read <(Agent), Theme>”**

#### b) -le
- **E₁-activity -resultative-**
- **“drink <Agent, Patient>”**
CHAPTER 3: THE SEMANTIC STRUCTURE OF SVCS IN MANDARIN CHINESE

This work focuses on the investigation of prototypical SVCs in Mandarin Chinese where V₁ and V₂ share the same subject, and there is no pause, conjunctions or other overt markers of subordination or coordination separating the two verbs. We will concentrate on representing the semantic relationship between serial verbs and their argument structure in this chapter.

3.1 Event types and thematic roles

According to Vendler (1957, 1967) and Dowty (1979), the use of a verb involves the notion of time, so the verbs are divided into four types based on their aspectual properties: activity, accomplishment, achievement and state. Smith (1997: 3) proposes five situation types: States, Activity, Accomplishment, Semelfectives and Achievement. A summary of verb types and their features is given below:

Table 2

<table>
<thead>
<tr>
<th>Situation types</th>
<th>Temporal Features</th>
<th>Typical Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>States</td>
<td>static, durative</td>
<td>“know the answer”, “love Mary”</td>
</tr>
<tr>
<td>Activity</td>
<td>dynamic, durative, atelic</td>
<td>“laugh”, “stroll in the park”</td>
</tr>
<tr>
<td>Accomplishment</td>
<td>dynamic, durative, telic, consisting of process and outcome</td>
<td>“build a house”, “walk to school”, “learn Greek”</td>
</tr>
<tr>
<td>Semelfectives</td>
<td>dynamic, atelic, instantaneous</td>
<td>“tap”, “knock”</td>
</tr>
<tr>
<td>Achievement</td>
<td>dynamic, telic, instantaneous</td>
<td>“win a race”, “reach the top”</td>
</tr>
</tbody>
</table>
Next to lexical aspect, linguists recognize grammatical aspect, which refers to a viewpoint. Smith (1997: 3) proposes three viewpoints: perfective, imperfective and neutral. Perfective viewpoints focus on the whole situation “including both initial and final endpoints”, while imperfective viewpoints focus only on part of the situation without initial and final endpoints. Perfective, which is also called retrospective (Harrison 1996-2006), is considered to include completive, resultative (Smith 1997, Bao 2005), experiential and emphatic (Bao 2005). Some linguists divide imperfective into habitual and continuous, the latter of which contains two oppositions: progressive and non-progressive (Comire 1976: 25). In addition, stative, inceptive, inchoative and dynamic are also categorized into imperfective (Bao 2005, Smith 1997).

Situations are not only classified by the aspects but also by the argument structure (Bresnan 1995). In the mid-1960s and early 1970s (Gruber, 1976; Fillmore, 1968; Jackendoff, 1972), the term thematic relation was introduced. The participants play different thematic roles in their relation to the main verb. The recognized roles are: Predicate, Agent, Patient, Experiencer, Theme, Location, Goal (EAGLES, 1996a), Instrument, Recipient, etc.

An Agent is an active participant who intends to do something or cause something to happen. Patient refers to a participant that is affected by what happens. An Experiencer is aware of something. Theme is a participant that undergoes the action without changing its state, but it may change its position. Location refers to a place. Goal refers to the endpoint of a motion. Instruments are what the name implies. Recipient receives something in a situation. Other thematic roles are: Direction, Benefactor, Beneficiary, Conative, Possessor and Presenter.

### 3.2 Representing the Semantic Structure of Mandarin SVCs

The SVCs in Mandarin Chinese are sub-categorized into four groups based on the relations between events encoded by serial verbs. In Group I a) of Table 1, the main verb expressing the main event is combined with a verb (or verbs) indicating notions such as path, deixis or aspectual information. We name it the Vector SVC. In SVC, two or more juxtaposed verbs can express different types of semantic relations, we call it the Anchoring SVC; Group III consists of the Chaining SVC which must occur successively; The last group refers to the Aspectual SVC where an aspect marker follows one of the serial verbs and the semantic relation between these serial verbs is affected by the aspect marker.
Among them, the Vector SVC and the Aspectual SVC involve the derivation of new situation after the combination of the main verb and its vector verb or aspectual marker, while the Anchoring SVC and the Chaining SVC concern the relation between events encoded by serial verbs. This section will investigate the semantic structure for each group as well as their sub-groups in detail.

3.2.1 Vector SVC

In the Chinese phrase 飞过 来 "fly pass come" that means “fly here”, there are three successive verbs V1 飞 “fly”, V2 过 “pass” and V3 来 “come”. Chao (1968) and Li & Thompson (1981) consider V2 and V3 to be the directional verb complement of V1. Further, Smith (1997) believes that in the phrase 飞到 “fly reach”, V2 到 “reach” belongs to completive resultative verb complement of V1, while Chao and Li & Thompson name it as phase verb complement.

In linguistics, there is a term called vector verb which “serves as the second verb or light verb in a compound and encodes aspectual or directional information” (Doornenbal 2009), that is to say, vector verbs have “another contribution to the semantics of the whole” than main verbs. Borrowing this term, we categorize the SVC consisting of one main verb and one or more directional verbs into the Directional Vector SVC. We name the SVC composed of one main verb and one completive phase verb as the Completive Vector SVC. And an SVC with a vector verb indicating inceptive aspect and a main verb is called the Inceptive Vector SVC in this work.

3.2.1.1 Directional Vector SVC

There are two patterns in the Directional Vector SVC: E + PATH+ DEIXIS, and DEIXIS+ E. In the former, the sequential V1, V2 (and V3) encode different semantic meanings: the motional verb V1 expresses the main activity, V2 indicates the path and the deixis verb V3 indicates the direction of V1. Look at the example below.
1. 然后突然有一只苍蝇飞过来

"Then, suddenly, there flies a fly."

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The three serial verbs  

**fēi “fly” guò “pass” lái “come”**  

in sentence 1) express one whole event “fly here” whose core semantic meaning is expressed mainly by  

V₁  

fēi “fly”. V₂ guò “pass” indicates the path of  

fēi “fly” and the deixis V₃ lái “come” expresses the direction of  

fēi “fly”. From the viewpoint of situation aspect, the serial verb pattern consisting of V₁, V₂ and V₃ expresses a directed motion derived from the combination of an activity expressed by V₁, a path expressed by V₂ and a direction expressed by the deictic V₃. So the semantic structure for sentence 1) is represented as  

[E-activity+ PATH +DEIXIS]-directed motion. Since V₁ is an intransitive verb, its argument structure is labeled as  

<Agent₁>. V₁’s vectors are labeled as  

<Theme₁>, because their participants have changed positions due to the action of V₁. Similar examples are  

2) zǒu guò lái “walk pass come”, 3) pū guò qù “jump pass go”, 4) pū shèng qù “jump on/up go”, 6) guì xià lái “knee down come” and 7) zǒu guò qù “walk pass go”, which can be seen through the Appendix enclosed at the end of the work.

The table below shows the semantic structures for the Directional Vector SVC with the pattern  

[E + PATH+ DEIXIS]. As for the event relationship, all sentences involve the derivation of a directed motion after the combination of an activity encoded by the main verb and the path as well as the direction by the vectors.
Table 3

<table>
<thead>
<tr>
<th>E + PATH+ DEIXIS</th>
<th>Event Relationship</th>
<th>Argument Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) …fēi guó lái “…fly pass come”</td>
<td>[E-activity+ PATH +DEIXIS]-directed motion</td>
<td>V₁ &lt;Agent₁&gt; + V₂ &lt;(Theme₁)&gt; + V₃ &lt;(Theme₁)&gt;</td>
</tr>
<tr>
<td>2) …zhōu guó lái “…walk pass come”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) …pū guó qù “…jump pass go”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) …pū shàng qù “…jump on/up go”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) …zōu lái “…walk come” zōu qù “walk go”</td>
<td>[E₁-activity+DEIXIS]-directed motion alternating- [E₂-activity+DEIXIS]. directed motion</td>
<td>V₁&lt;Agent₁&gt;+V₂&lt;(Theme₁)&gt;+V₁&lt;(Agent₁)&gt;+V₁&lt;(Theme₁)&gt;</td>
</tr>
<tr>
<td>6) …guì xià lái “…knee down come”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Different from other sentences in Table 3, Example 5) seems to be a little complicated. zōu lái “walk come” zōu qù “walk go” is a coordination of two Directional Vector SVCs where the main verbs are both zōu, and the directional vectors are lái and qù. In addition, zōu lái and zōu qù are two verbal phrases between which there is no syntactic marker indicating their relationship. In the syntactic convention of Mandarin Chinese, the two juxtaposed verbal phrases function as two coordination clauses without the overt conjunction hé “and”, and semantically, the relationship between them is alternating, which means the events zōu lái “walk come” and zōu qù “walk go” happen alternatively, more importantly, their order cannot be changed, otherwise, the sentence or phrase will sound weird.

Comparing to the former Directional Vector SVC, the latter one has an opposite order between the main verb and the vector verb, which is reflected in the semantic structure: [DEIXIS₁+E₂-activity]. achievement-
Different from sentence 1) where the activity verb precedes the deixis verb, the activity verb follows the deixis verb in 9). In this case, the core event is expressed by the second verb $V_2$ \text{wán er} “play”, and the deixis verb $V_1$ \text{lái} “come” indicates the direction of the activity expressed by $V_2$. Then the combination of the deixis and the activity derives a new achievement. Since both verbs are intransitive, their argument structures are both <Agent>, which indicates that the argument structure for the whole construction is “come <Agent>” + “play <(Agent)>”.

Table 4 shows different event relationships and argument structures in the pattern \([\text{DEIXIS}_1+\text{E}_2\text{-activity}]\text{-activity}\) of the Directional Vector SVC:

### Table 4

<table>
<thead>
<tr>
<th>DEIXIS+E</th>
<th>Event Relationship</th>
<th>Argument Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>9) \ldots\text{lái wán er} \ldots “come play”</td>
<td>([\text{DEIXIS}_1+\text{E}_2\text{-activity}]\text{-achievement})</td>
<td>$V_1 &lt;\text{Agent},&gt; + V_2 &lt;\text{(Agent)&gt;,}$</td>
</tr>
<tr>
<td>10) \ldots\text{qù chī} \ldots “go eat…”</td>
<td>$V_1 &lt;\text{Agent},&gt; + V_2 &lt;\text{(Agent),}$, Patient $j&gt;$</td>
<td></td>
</tr>
<tr>
<td>12) \ldots\text{qù zuò} \ldots “go do…”</td>
<td>$V_1 &lt;\text{Agent},&gt; + V_2 &lt;\text{(Agent),}$, Patient $j&gt;$</td>
<td></td>
</tr>
<tr>
<td>13) \ldots\text{qù măi} \ldots “go buy…”</td>
<td>$V_1 &lt;\text{Agent},&gt; + V_2 &lt;\text{(Agent),}$, Patient $j&gt;$</td>
<td></td>
</tr>
<tr>
<td>11) \ldots\text{qù děng} \ldots “go wait…”</td>
<td>$V_1 &lt;\text{Agent},&gt; + V_2 &lt;\text{(Agent),}$, Time $t&gt;$</td>
<td></td>
</tr>
<tr>
<td>8) \ldots\text{qù dă}...\text{jiào}... “go make…reserve…”</td>
<td>([\text{DEIXIS}_1+\text{E}_2\text{-activity}]\text{-purposive}\text{-E}_3\text{-activity})</td>
<td>$V_1 &lt;\text{Agent},&gt; + V_2 &lt;\text{(Agent),}$, Theme $j&gt;$, $V_3 &lt;\text{(Agent),}$, Theme $j&gt;$</td>
</tr>
</tbody>
</table>
From 9) to 13), the event relationships are all labeled as \([\text{DEIXIS}_1 + E_2\text{-activity}]\)-achievement. Except for in 9) \(lái wán\) “come play” and 11) \(qù dē ng yī huì\) “go wait for a while”, \(V_2\)s in all sentences of Table 4 have complements, so their argument structures are either \(<\text{Agent}_i>, <\text{Agent}_i>, \text{Patient}_j>\) or \(<\text{Agent}_i>, <\text{Agent}_i>, \text{Time}_j>\). Among them, example 8) is a coordination of the Directional Vector SVC and the Purposive Anchoring SVC (which will be mentioned in the next section). The former is reflected in the relationship between the deixis verb \(V_1 \ “qù” \ “go”\), the main verbs \(V_2 \ “dā diàn huà” \ “make phone call”\) and \(V_3 \ “jiào chē” \ “reserve car”\), that is to say, \(V_1\) indicates the direction of \(V_2\) and \(V_3\). And the latter is indicated by the purposive semantic relationship between two events encoded by \(V_2\) and \(V_3\), the combination of which is interpreted as “make phone call in order to reserve a car”.

In addition, the modifier \(yī huì\) “a while” of \(V_2 \ “dēng” \ “wait”\) in example 11) indicates the temporal duration of the activity encoded by \(V_2\), so the thematic role that \(yī huì\) “a while” instantiates is \(\text{Time}_i\), and the argument structure of \(V_2\) is labeled as \(<\text{Agent}_i>, \text{Time}_i>\).

Different from the pattern \(E + \text{PATH} + \text{DEIXIS}\), the derived event type after the combination of the vector verb and the main verb in the pattern \(\text{DEIXIS} + E\) is achievement.

3.2.1.2 Completive Vector SVC

The Completive Vector SVC consists of \(V_1\) encoding the event activity and \(V_2\) encoding the completive aspect, and the combination of them derives a new event type, namely, achievement.

14) 苍蝇飞到茶杯上。

“The fly settles on a cup.”

cāngying  fēi  dào  chábēi  shàng
cāngying  fēi  dào  chábēi  shàng

\(\text{fly.SBJ.AGT} \ \text{fly.PRED reach.ENDORPNT} \ \text{teacup.OBJ.GOAL} \ \text{surface. OBJ.GOAL} \)

\(\text{Ncomm} \ V1 \ V2 \ \text{Ncomm} \ N\)

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V₁ *fēi* “fly” as an intransitive verb expresses an activity which has no telicity, while V₂ *dào* “reach” as a transitive verb indicates the final phase or goal of V₁ and has a completive reading. When they are combined together, the activity “fly” has a goal and the whole event becomes an achievement. In other words, V₁ and V₂ form a unit in the Completive Vector SVC, just as V₁ and V₂ in the Directional Vector SVC do. Other Completive Vector SVCs include 16) *pū dào* “rush reach”, 17) *fàng dào* “put reach”, 19) *tiào dào* “jump reach”, 22) *gē dào* “place reach” and etc.

The Completive Vector SVC distinguishes from the Resultative Verbal Complement in the event type of V₂. Almost all the Resultative Verbal Complements, for example, *kànjiàn* “look perceive”, *chīwán* “eat finish”, *kūhóng* “cry is.red” and *hēzuì* “drink is.drunk” consist of an activity E₁ encoded by V₁ and a state S₂ encoded by the complement element (verb or adjective) of V₁, while in the Completive Vector SVC, the whole event is a combination of the activity E₁ expressed by V₁ and completive semantic information carried by V₂ that encodes an achievement when used separately, for example: *dào cháběi shàng* “reach cup surface”.

Further, the thematic roles assigned by V₁ and V₂ in the Completive Vector SVC are distinct from those in Resultative Verbal Complement: in the former, only an agent is required by V₁, a theme as well as a goal are required by V₂. In Resultative Verbal Complement, however, the thematic relations among the arguments of V₁ and V₂ are diverse: both V₁ *kàn* and V₂ *jiàn* in *kànjiàn* “look perceive” assign the same agent and theme, the agent of V₁ *chī* “eat” in *chīwán* “eat finish” is not the implicit subject of V₂ *wán* “finish” whose subject is however the object of V₁, which is similar to the example *kūhóng* “cry red”. V₁ and V₂ in *hēzuì* “drink drunk” share the same subject, but assign different thematic roles to it: agent and theme respectively. Look at the comparison of argument structures of the whole construction and individual verbs between the Completive Vector SVC and Resultative Verbal Complement through Table 5:
Table 5

<table>
<thead>
<tr>
<th>Type</th>
<th>Argument Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completive Vector SVC</td>
<td><em>fēi dào “fly reach”</em> &lt;Agentᵢ, Goalⱼ&gt; → <em>fēi “fly”</em> &lt;Agentᵢ&gt; + <em>dào “reach”</em> &lt;(Themeᵢ), Goalⱼ&gt;</td>
</tr>
<tr>
<td>Resultative Verbal Complement</td>
<td><em>kàn jiàn “look perceive”</em> &lt;Agentᵢ, Themeⱼ&gt; → <em>kàn “look”</em> &lt;Agentᵢ, (Themeⱼ)&gt; + <em>jiàn “perceive”</em> &lt;(Agentᵢ), Themeⱼ&gt;</td>
</tr>
<tr>
<td></td>
<td><em>chīwān “eat finish”</em> &lt;Agentᵢ, Themeⱼ&gt; → <em>chī “eat”</em> &lt;Agentᵢ, (Themeⱼ)&gt; + <em>wān “finish”</em> &lt;Themeⱼ&gt;</td>
</tr>
<tr>
<td></td>
<td><em>kūhóng “cry is.red”</em> &lt;Agentᵢ, Themeⱼ&gt; → <em>kū “cry”</em> &lt;Agentᵢ&gt; + <em>hóng “is red”</em> &lt;Experiencerⱼ&gt;</td>
</tr>
<tr>
<td></td>
<td><em>hēzuì “drink is.drunk”</em> &lt;Agentᵢ&gt; → <em>hē “drink”</em> &lt;Agentᵢ, (Themeⱼ)&gt; + <em>zuì “is drunk”</em> &lt;(Experiencerⱼ)&gt;</td>
</tr>
</tbody>
</table>

3.2.1.3 Inceptive Vector SVC

23) 开始工作

“begin to work”

kāishǐ  gōngzuò
kāishǐ  gōngzuò

*begin*.*PRED  work*.*PRED*

V₁   V₂

*Generated in TypeCraft.*

Similar to English verbs *begin, start, cease, resume, end, stop* (Dowty 1981), Mandarin kāishǐ “begin” belongs to the “super-lexical morpheme” which “gives a narrow view of a situation” (Smith 1997). That is to say, with the usage of kāishǐ “begin” in a “verbal constellation”, the speaker intends to focus on the starting point of a situation. In this case, the “super-lexical morpheme” kāishǐ is called inceptive verb (Smith 1997), according to which this work gives the third Vector SVC the name the Inceptive Vector SVC that consists of an inceptive verb V₁ and the main verb V₂.
Syntactically, $V_1$ *kāishī* “begin” plays a role of grammatical aspect referring to the beginning of an event, and semantically, it is “the integral part of the eventuality described by its complement” (Damova & Bergler 2000), here $V_2$ *gōngzuò* “work”. That means, $V_1V_2$ as one united predicate carries two following information: the temporal start implicated by $V_1$ and the “topical eventuality” encoded by $V_2$.

According to Damova & Bergler (2000), the “topical eventuality” can be either a process or a state. In Example 23), the complement $V_2$ *gōngzuò* “work” expresses a process whose endpoint needs to be lexically indicated or contextually inferred. Look at these Chinese sentences:

$tā$ kāishī gōngzuò. Xiàwū 2 diăn de shihou, tā wànc'héng le tā.
he.PRON begin. V1 work.V2. afternoon.ADV 2 o’clock PART time he.PRON finish.V PRF
it.PRON.
“He began to work. At 2 pm, he finished it.”

The pronoun $tā$ “it” refers to the eventuality “work” whose endpoint has arrived. In this case, $V_2$ expresses an accomplishment. If there is no other information added to the sentence “He began to work”, the verb “work” describes an activity. So this pattern is labeled as [INCEPTIVE + E-activity].

To sum up, the Vector SVC refers to a kind of SVC in Mandarin Chinese where there is only one core event expressed by the main verb, and the vector verb(s) encode(s) either the direction or aspect information of the main verb. There are three sup-groups: the Directional Vector SVC, the Completive Vector SVC and the Inceptive Vector SVC, whose event structures are demonstrated in Figure 1:
Figure 1

Directional:

\[ E_{\text{activity}} + \text{PATH} + \text{DEIXIS} \]-directed motion

\[ \text{DEIXIS} + E_{\text{activity}} \]-achievement

Compleative: \( E + \text{COMPLETIVE} \)-achievement

Inceptive: \( \text{INCEPTIVE} + E \)-achievement/accomplishment

The first pattern of the Directional Vector SVC \( E_{\text{activity}} + \text{PATH} + \text{DEIXIS} \)-achievement is distinguished from the second pattern \( \text{DEIXIS} + E_{\text{activity}} \)-achievement not only in their different orders of the main verbs and vectors, but also in the different event types the “verb constellation”’s encode. That is to say, the event type of \( V_1V_2 \) in the former becomes directed motion after the combination of the main verb and vector verb, while the event type of \( V_1V_2 \) in the latter is achievement, which resembles the Compleative Vector SVC. While the Directional Vector SVC concerns the direction of an event, the Compleative Vector SVC and the Inceptive Vector SVC refer to the temporal features of an event. Table 6 below shows the aspects and situation types the Compleative Vector SVC and the Inceptive Vector SVC carry:

Table 6

<table>
<thead>
<tr>
<th>SVC Types</th>
<th>Aspect</th>
<th>Situation Types</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compleative Vector SVC</td>
<td>completive perfective</td>
<td>Achievement</td>
<td>14) fēi dào “fly reach”</td>
</tr>
<tr>
<td>Inceptive Vector SVC</td>
<td>inceptive imperfective</td>
<td>Activity/Accomplishment</td>
<td>23) kāishī gōngzuò “begin work”</td>
</tr>
</tbody>
</table>
3.2.2 Anchoring SVC

This group is called the Anchoring SVC because the semantic relationship between VP₁ and VP₂ depends on the reader’s ‘anchoring’, which relies on the linguistic convention or pragmatic context. Different from the Vector SVC which semantically consists of one core event and its satellite with deictic or aspectual meaning, the Anchoring SVC is made up of two individual sub-events, one of which is anchored based upon the conventional and conversational reading of the sentence.

The Anchoring SVC is characterized by the fact that two verbs or verb phrases, VP₁ and VP₂, are juxtaposed, and there is neither a conjunction nor a government relation between them. Their interpretation often depends on the pragmatic context. The group of the Anchoring SVC consists of 7 sub-groups: Circumstantial-, Purposive-, Manner/Instrumental-, Supplemental-, Causal-, Conditional- and Gěi- Anchoring SVCs. The last sub-group Gěi is then divided into presenting Gěi and benefacting Gěi, whose semantic meanings depend on the position of gěi and the event type expressed by the verb(s) it combines with.

3.2.2.1 Circumstantial Anchoring SVC

The Circumstantial Anchoring SVC refers to an SVC where the event or state expressed by V(P)₁ is the circumstance when or where the event or state performed by V(P)₂ occurs or exists. When VP₁ is deleted, the completeness of the sentence will not be destroyed, for example:

24a)  
\[ \text{tā} \ [\text{wǎnshàng yīgèrén} \text{chūqù}] \ [\text{hàipà}] \]

\[ \text{VP₁} \quad \text{V₂} \]

“She is afraid to go out at night alone.”

24b)  
\[ \text{tā} \ [\text{hàipà}] \]

\[ \text{V₂} \]

“She is afraid.”

But if V(P)₂ is deleted, the hearer will expect to know what happens when VP₁ occurs, that is to say, V₂ provides supplemental information for VP₁. In this case, sentence 24) can also be seen as a Supplemental Anchoring SVC (in 3.2.2.4).

---

http://typecraft.org/tc2wiki/Circumstantial
24) 她晚上一个人出去害怕

“She is afraid to go out at night alone.”

tā wǎnshàng yīgèrén chūqù hàipà
tā wǎnshàng yī gè chūqù hàipà

She. SBJ.3SG.FEM at.night one CL go.out.PRED is.afraid.PRED

PN ADV.temp ADV V1 V2

Generated in TypeCraft.

The event relation between VP1 and VP2 in sentence 24) is represented as: E1-activity -circumstantial- S2. VP2 hàipà “is afraid” expresses the situation of a state, and VP1 chūqù “go out” encoding an activity provides the background or circumstance for such a state. In this sub-group, all VP1s refer to an activity, VP2s in all sentences, except for 28) qí mǎ chōu yān “ride horse pump smoke” where VP2 encodes an activity, describes a state.

In addition, both V1 and V2 in sentence 24) are intransitive verbs, which is to say, they have only one argument, that is, the subject. And V1 and V2 share the same subject tā “she”, despite of that, the thematic role of the subject for each verb is different. For V1 which expresses an activity, its subject plays an agent role, while for V2 whose event type is a state indicating one’s feeling or experience, its subject is considered as an experiencer. So the argument structure for sentence 24) is: “go out <Agenti> is afraid of <(Experienceri)>”. The other examples in this group have different argument structures, which depends on the different properties of lexical items, for example: 25) “talk <Agenti>…like <(Agenti), Themej>”, 26) “read <Agenti, Themej>…have <(Possessori), Resulti>” and 28) “ride <Agenti, Patienti>…smoke <Agenti, Themej>”. But if these observations were to be represented in HPSG AVMs, one could not co-index the INDX values of the subjects of V1 and V2, which is shown by Figure 3 and Figure 5 in the section 3.2.2.2, since their specifications are different, due to their different ROLES.

Table 7 shows the event relationships and argument structures for all examples in this sub-group:
Table 7

<table>
<thead>
<tr>
<th>Circumstantial Anchoring SVC</th>
<th>Event Relationship</th>
<th>Argument Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>24) 27)...chūqù hàipà “…go out is afraid”</td>
<td>E1-activity -circumstantial-S2</td>
<td>V1 &lt;Agenti&gt; + V2 &lt;(Experienceri)&gt;</td>
</tr>
<tr>
<td>25) ...shuòhuà àì... “…talk...like…”</td>
<td></td>
<td>V1 &lt;Agenti&gt; + V2 &lt;(Agenti), Themej&gt;</td>
</tr>
<tr>
<td>26) ...niàn...yōu... “...read...have…”</td>
<td></td>
<td>V1&lt;Agenti, Themej&gt; + V2 &lt;(Possessori), Resultk&gt;</td>
</tr>
<tr>
<td>28)...qi...chōu...“...ride …pump…”</td>
<td>E1-activity -circumstantial-E2-activity</td>
<td>V1 &lt;Agenti, Patientj&gt; + V2&lt;(Agenti), Themek&gt;</td>
</tr>
</tbody>
</table>

Different from the first four examples, whose VP2 encodes a state, example 28) refers to two verbal phrases expressing two activities, among which the first activity provides the circumstance for the second one. According to Li & Thompson (1989), the relationship between E1 and E2 in this example can be inferred as circumstantial, alternating, consecutive or purposive. However, in most cases, when one utters tā qí mǎ chōu yān “he ride horse pump smoke”, he expects the hearer to understand the utterance in such a way: “he smoked while riding”. Similar examples are shàng bān kàn xiǎoshuō “work read novel” and kǎoshi zuòbì “do exam cheat”, etc.

In a word, the relationship between the two situations expressed by two adjacent verb phrases VP1 and VP2 is circumstantial. More precisely, in the conversation context, the event encoded by VP1 expresses the circumstance where the situation encoded by VP2 happens.

3.2.2.2 Purposive Anchoring SVC

In the Purposive Anchoring SVC, the event expressed by the verbal phrase VP2 is usually interpreted as the purpose of the event or state expressed by VP1. Sentence 29) is an example consisting of three serial verbs V1, V2 and V3, and the purposive relationship exists between V1 and V2+V3:

---

5 [http://typecraft.org/tc2wiki/Purposive](http://typecraft.org/tc2wiki/Purposive)
“write a letter to say ‘happy new year’ to him”

The activity encoded by the serial verbal pattern \( \text{VP}_2 + \text{VP}_3 \) \( \text{gěi} \ tā \ bānián \) “give him greet New Year” (free translation: “say ‘happy new year’ to him”) is the purpose of the accomplishment event expressed by \( \text{VP}_1 \) \( \text{xīě} \ xīn \) “write a letter”. Among others, the activity is derived from one achievement event “give him” expressed by \( \text{VP}_2 \) and one activity event “greet New Year” encoded by \( \text{VP}_3 \). Hence, the event relationship of serial verbs in sentence 29) is represented as: \( E_1, \text{accomplishment} \Rightarrow \text{purposive} \Rightarrow [E_2, \text{achievement} E_3, \text{activity}] \Rightarrow \text{activity} \).

Since \( \text{VP}_1 \) \( \text{xīě} \ “write” \) is a transitive verb which requires both a subject mapped onto Agent and an object mapped onto Patient, its argument structure is \( <(\text{Agent}_i), \text{Theme}_j> \). \( \text{Gěi}… \ bāi \ “give…greet” \) refers to a verbal combination consisting of \( \text{VP}_2 \) “give” and \( \text{VP}_3 \) “greet” whose argument structures are respectively \( <(\text{Benefactor}_i), \text{Beneficiary}_k> \) and \( <(\text{Agent}_i), \text{Theme}_j> \). The phenomenon regarding to “give” will be further discussed in the \( \text{Gěi}-\text{Anchoring SVC}. \) All examples in this subgroup cover the following event relationships and argument structures:
Table 8

<table>
<thead>
<tr>
<th>Purposive Anchoring SVC</th>
<th>Event Relationship</th>
<th>Argument Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Functional Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$V_1N_1V_2N_2$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29) $xīe... gēi... bāi“...write...give...greet”</td>
<td>$E_1$-accomplishment -purposive- $[E_2$-achievement $+ E_3$-activity].</td>
<td>$V_1 &lt;\text{Agent}_i, \text{Theme}_j&gt;$ + $V_2 &lt;\text{Beneficiary}_k&gt;$, $V_3 &lt;\text{Agent}_i, \text{Theme}_j&gt;$</td>
</tr>
<tr>
<td>35) $dā...jiào “...make ...reserve”</td>
<td>$E_1$-activity -purposive-$E_2$.</td>
<td>$V_1 &lt;\text{Agent}_i, \text{Theme}_j&gt;$ + $V_2 &lt;\text{Agent}_i, \text{Theme}_j&gt;$</td>
</tr>
<tr>
<td>37) $mài ...qiē “...buy ...cut”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38) $nā...chī “...take...eat”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40) $hē...zhuàng “...drink...strengthen”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41) $dā...zhēngqǐ “...make...ask for”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39) $zhù...gēn...dā “...live...is.with...do...”</td>
<td>$S_1$ -purposive- $[S_2+E_3]$-activity].activity</td>
<td>$V_1 &lt;\text{Theme}_i, \text{Location}_j&gt; + V_2 &lt;\text{Agent}_i, \text{Partner}_k&gt;$ + $V_3 &lt;\text{Agent}_i, \text{Patient}_l&gt;$</td>
</tr>
<tr>
<td>30) $huī...guò “...return ...spend”</td>
<td>$E_1$-achievement-purposive- $E_2$.</td>
<td>$V_1 &lt;\text{Agent}_i, \text{Goal}_j&gt;$ + $V_2 &lt;\text{Agent}_i, \text{Theme}_j&gt;$</td>
</tr>
<tr>
<td>36) $shàng...kāi “...go...attend”</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B. Functional Control &amp; Thematic Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$V_1N_2$</td>
<td>31) $zhòng...chì “...plant ...eat”</td>
<td>$E_1$-activity -purposive-$E_2$.</td>
</tr>
<tr>
<td>32) $zhāo...jiào “...search ...teach”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34) $mài...kăn “...buy ...read”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$V_1N_1V_2N_2$</td>
<td>42) $xuān...jiā “...need...break”</td>
<td>$S_1$-state -purposive-$E_2$-activity</td>
</tr>
</tbody>
</table>

In LFG, functional control refers to the control relationship where the controller and the controlee share some grammatical function. In representing Thai Sequential SVC, Sudmuk (2003) uses a term
“thematic control” to describe the thematic relation between the object of V1 and the object of V2. Similarly, in the Purposive Anchoring SVC of Mandarin Chinese, thematic control also occurs.

All situations encoded by VP2s in Table 8 belong to events which include activities and accomplishments, while situations encoded by VP1s cover both events and states. Borrowing the LFG term “functional control”, and following Sudmuk’s (2003a) proposal of “thematic control”, these examples are divided into two groups: A. Functional Control and B. Functional Control & Thematic Control.

In the first group with 9 examples, the implicit subject of V2 is anaphorically linked to the overt subject of V1. So they belong to functional control. V1 and V2 are two independent verbs whose semantic relationship is reflected on the relationship between the events E1 performed by VP1 and E2 performed by VP2, and such a relationship is interpreted as purposive. Sentence 35) tā dà diànhuà jiào cā hē “he makes phone call reserve car” is one of the examples:

**Figure 2**

Based on the computational implementation system LKB (Copestake 2002), Hellan (2011) has discussed the representation of SVCs in HPSG, in which the syntactic and semantic phenomena are interlinked. Here I borrow Hellan’s ideas in illustrating the feature structure or AVMs (attribute-value matrices) of Ga SVC (Hellan 2011: 15) to formalize the feature structure of sentence 35):
Inside the whole matrix, the italic $svc$ indicates the type of the construction, V1 and V2 are two attributes introduced by this type. The values of V1 and V2 are two smaller matrixes where the attributes HEAD, GF (grammatical function) and ACTNTS (actants) are declared by the type $phrase$. The specification of GF is realized in a small AVM where two attributes, SUBJ and OBJ, are introduced. For V1, the value of SUBJ, identified by the reentrancy box $[]$ here, is interlinked to the value of ACT1. And the value of OBJ is interlinked to the value of ACT2, which is pointed by the reentrancy box $[]$. The specifications of the SUBJ and OBJ are respectively $[ROLE \ agent]$ and $[ROLE \ theme]$, which means the subject of V1 plays an agent role and its object plays a theme role.
Similarly, the values of SUBJ and OBJ are also interlinked to the values of ACT1 and ACT2 respectively inside the AVM of V2. Besides of this, the value of SUBJ of V2 is also interlinked to the value of SUBJ of V1, that is to say, the subjects of V1 and V2 are identical (with the index number 1). Further, that the values of OBJ and ACT2 of V2 are pointed by the reentrancy box 3, rather than 2, means that the objects of V1 and V2 are different.

From the HPSG analysis in Figure 3, we can also see that the objects of V1 and V2 play the same thematic role, namely the theme, although they refer to different things (2 and 3). Similar examples are 35), 37), 38), 40) and 41). In other examples, however, the situation is diverse. 30) and 36) have the same argument structure where the object of V1 plays a goal role and the object of V2 plays as a theme. In addition, examples 30) and 36) have not only the same argument structure, but also the same event relationship between V1 and V2, which resembles the situation among 35), 37), 38), 40) and 41).

Sentences 29) and 39) are two special examples, because on the one hand, they are SVCs with three serial verbs V1, V2 and V3. On the other hand, they have complicated event relationships and argument structures. For example, 29) expresses two serial events with purposive relationship. The first event refers to an accomplishment E1-accomplishment and the second event refers to an activity that is derived from the combination of one achievement E2-achievement and one activity E3-activity. Besides, the implicit subjects of V2 and V3 are anaphorically linked to the overt subject of V1, so the subjects of the three verbs are functionally controlled. Further, the objects of V1 and V3 play the same thematic role: theme, while the object of V2 plays as beneficiary whose benefactor is played by the implicit subject of V2, namely, the overt subject of V1.

29) 写信给他拜年

"write a letter and say "happy new year" to him"

xǐé xín gěi tā bàinián
xié xín gěi tā bài nián
write.PRED letter.TH give he.BEN greet.PRED new.year.TH
V1 N V2 PN V3

Generated in TypeCraft.

Similarly, 39) expresses series of situations where the activity derived by a state S2 and an activity E3-activity is the purpose of the state S1. And the event-information carriers V1, V2 and V3 have the
same subject, that is, the overt subject of V1. The theme role is assigned by both V1 and V2 to their shared subject. The second participant of V1 plays a location role because of its locative property. V2 assigns a partner role to its second participant, since the NP following V2 is the partner of the NP preceding V2.

39) 我住在这跟他们打交道。

“I live here and have contact with them.”

wǒ zhù zài zhèi gēn tāmen dǎ jiāodào
wǒ zhù zài zhèi gēn tāmen dǎ jiāodào
I.SBJ.AGT.1SG live.PRED in.LOC here.LOC with they beat.PRED interaction.OBJ.PT
PN V1 PREP ADV PREP PN V2 Ncomm

The second group refers to both functional control and “thematic control”, which is then divided into two groups: V1NV2 and V1N1V2N2. Figure 4 shows the sentence structure of example 31)

wǒmen zhòng nèizhōng cài chī “we plant that vegetable eat”, which belongs to the pattern V1NV2:

31) 我们种那种菜吃

“We plant that kind of vegetable to eat.”

wǒmen zhòng nèizhōng cài chī
wǒmen zhòng nèi zhōng cài chī
we.SBJ.AGT.1PL plant.PRED that CL vegetable.OBJ.PT eat.PRED
PN V1 QUANT Ncomm V2

Generated in TypeCraft.
Syntactically, there is neither overt subject nor overt object for $V_2$ in sentence 31), but functionally, the implicit subject of $V_2$ (PRO$_i$) is anaphorically linked to the overt subject of $V_1$ $we_i$, and thematically, its syntactically empty object (represented as “$e_j$” in Figure 4) plays a patient role
(INDX in Figure 5) which is interlinked to the object of $V_1$ that vegetable. In other words, the overt object in this pattern is shared by serial verbs thematically.

Differently, in the pattern $V_1N_1V_2N_2$, $V_1$ and $V_2$ have different objects assigned different thematic roles: Theme$_j$ and Patient$_k$. Take the sentence 42) "tāmen xūyào jiāzi jiā hétáo “they need clamp break walnut.seed” below for example:

42)他们需要夹子夹核桃。

“They need a clamp to break walnut seeds.”

In sentence 42), $V_1$ and $V_2$ share the same subject they, the object clamp$_j$ of $V_1$ assigned with a theme role (Theme$_j$) serves as the instrument (Instrument$_j$) at the same time for $V_2$ whose object is walnut$_k$, playing a patient role. Between clamp$_j$ and walnut$_k$, there is a relationship of “thematic control”, since the instrument of the predicate break “break” is indexed to the theme of the predicate need.
need <Agenti, Themej>…break <(Agenti), Patientk, (Instrumentj)>

To sum up, in the Purposive Anchoring SVC, all the four situation types (state, activity, achievement and accomplishment) encoded by serial-verb patterns are covered. Inferred from the context, the situation performed by VP2 or VP2+VP3 is the purpose of the situation performed by VP1. In addition, most of Purposive Anchoring SVCs refer to the functional control, while for some Purposive Anchoring SVCs (Group B), the thematic control happens, which means that the object of V1 is thematically linked or related to the object of V2.

3.2.2.3 Manner or Instrumental Anchoring SVC

The manner or instrumental Anchoring SVC refers to VV patterns whose first sub-event serves as the manner or instrument of the second sub-event. In this group, V1 and V2 as the two predicates of the sentence share two arguments, one is the shared subject playing an agent role for both predicates through functional control, another one is the object of V1, which plays a patient role for the first predicate V1 and at the same time serves as the instrument or manner of the second predicate V2. The V1V2 patterns with such a “thematic control” in this group include 48)/50)/51)”…use…bet/buy/eat”, 49)/52)”…take…go/arrive”, 54)”…drink…strengthen”, 55)”…buy…enter” and 53)/56)”…hold…consider”. Sentence 48) is one of these examples.

48) 张三用一根香烟跟李四打赌下过雨。

"Zhangsan bets Lisi a cigarette that it has rained."

Generated in TypeCraft.
addition, V₂ assigns an agent role on its first participant or subject and a conative role on its second participant. Besides of the agent and instrument, there is also a conative (lîsî) required by V₃, because the event “betting” is supposed to have not only a “better” (Agentᵢ) and a gamble fund (Instrumentⱼ), but also other person(s) who accompanies/accompany to this event. So the argument structure of 48) is represented as:

V₁ yòng “use” <Agentᵢ, Themeⱼ> … V₂ gēn “is.with” <(Agentᵢ), (Conativeₖ)> V₃ dădŭ “bet” <(Agentᵢ), (Conativeₖ), (Instrumentⱼ)>

There are 9 examples in this group, which are shown in Table 9:

Table 9

<table>
<thead>
<tr>
<th>Manner/Instrumental Anchoring SVC</th>
<th>Event Relationship</th>
<th>Argument Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>48) ...yòng ...dădŭ “use…bet”</td>
<td>E₁-activity-instrumental-E₂-activity</td>
<td>&lt;Agentᵢ, Themeⱼ&gt; + &lt;(Agentᵢ), Conativeₖ&gt; + &lt;(Agentᵢ), (Conativeₖ), (Instrumentⱼ)&gt;</td>
</tr>
<tr>
<td>50) ...yòng ...mài “use…buy…”</td>
<td></td>
<td>&lt;Agentᵢ, Themeⱼ&gt; + &lt;Agentᵢ, Patientⱼ, Instrumentⱼ&gt;</td>
</tr>
<tr>
<td>51) ...yòng ...chǐ “use…eat…”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49) ...zuò…qù “take…go”</td>
<td>E₁-activity-manner-E₂-achievement</td>
<td>&lt;Agentᵢ, Instrumentⱼ&gt; + &lt;(Agentᵢ)&gt;</td>
</tr>
<tr>
<td>52) ...zuò…dào “take…arrive”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54) ...hē…zhàng “drink…strengthen…”</td>
<td>E₁-activity-manner-E₂-activity</td>
<td>&lt;Agentᵢ, Patientⱼ&gt; + &lt;Agentᵢ, Patientⱼ, (Mannerⱼ)&gt;</td>
</tr>
<tr>
<td>55) ...mài…jīngqù “buy…enter”</td>
<td>E₁-activity-manner-E₂-accomplishment</td>
<td>&lt;Agentᵢ, Patientⱼ&gt; + &lt;(Agentᵢ), (Mannerⱼ)&gt;</td>
</tr>
<tr>
<td>56) ...kāi…kăolû “hold…consider…”</td>
<td>E₁-activity -manner- E₂-activity</td>
<td>&lt;Agentᵢ, Patientⱼ&gt; + &lt;(Agentᵢ), (Mannerⱼ)&gt;</td>
</tr>
<tr>
<td>53) ...kāi…tăolùn “hold…discuss…”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All V₁s in Table 9 are transitive verbs, and the events encoded by V₁s together with their arguments are all activities. Except for VP₂s in sentences 49) zuò…qù “take…go”, 52) zuò…dào “take…arrive” and 55) mài…jīngqù “buy…enter”, all VP₂s in this table express activities. The situations encoded by VP₂s in 49) and 52) are achievements, while the VP₂ in 55) expresses an accomplishment. Overall, the VP₁s and VP₂s in all sentences encode events.
It is also observed that all V2s in sentences 50), 51), 53), 54) and 56) in Table 9 require an object. And between the objects of V1 and V2 in these examples, there is a “thematic control”, that is, the object of V1 is shared by V2 whose object plays certain role that is thematically related to the role the object of V1 plays.

3.2.2.4 Supplemental Anchoring SVC

In the Supplemental Anchoring SVC, the situation expressed by VP2 serves as the supplemental information for the situation expressed by VP1. Based on the observation of this sub-group, the situation encoded by VP1 is a state, and the situation expressed by VP2 or VP2+VP3 is an activity, which can be represented as: S1 -supplemental- E2-activity or S1 -supplemental- [E2-activity+ E2-activity]. activity. Sentence 57) is an example of the latter pattern:

57) 我没法子对老板交代。

“I don’t know how to explain it to my boss.”

When VP2 and VP3 are deleted, the addressee may raise such a question: “(you) don’t have method…to do what?”, so the situation encoded by VP2 +VP3 dui láobān jiāodài “explain to boss” supplements some information to the situation performed by VP1 méi fāzi “don’t have method”. As a stative verb, méi “don’t have” has such an argument structure: <Possessori, Themej>. V2 dui “face” requires both an agent and a goal, so its argument structure is <(Agenti), Goalk>. jiāodài “explain” requires not only an explainer and an explained, but also a targeted hearer, namely, a goal. Hence, the argument structure for sentence 57) is: V1<Possessori, Themej> + V2 <Agenti, Goalk > V3 <Agenti, (Goalk), Themei>. Besides of 57), Table 10 below illustrates the semantic properties of other sentences in this group:

7 http://typecraft.org/tc2wiki/Supplemental
Like all examples in Mandarin SVC, $V_1$ and $V_2$ in examples of Table 10 share the same subject. But different thematic roles are assigned to the subject: $\text{Possessor}_i$ and $\text{Agent}_i$. Example 59) resembles the sentence 42) "tāmen xūyào jiāzi jiā hétáo “they need clamp break walnut.seed” of Table 8 in the relation between the objects of the two serial verbs, that is, the object of $V_1$ serving as both a theme role for $V_1$ and a manner role for $V_2$. The difference between them is the different thematic roles that the subjects of $V_1$s play, that is, in 59) the subject of $V_1$ is assigned as a $\text{Possessor}_i$ and the implicated or covert subject of $V_2$ is an $\text{Agent}_i$, while in 42), both the overt subject of $V_1$ and the implicit subject of $V_2$ are assigned as the $\text{Agent}_i$.

59) 我有钱买书。

"I have money to buy books."

<table>
<thead>
<tr>
<th>Supplemental Anchoring SVC</th>
<th>Event Relationship</th>
<th>Argument Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>57) ...méi... jiāodài</td>
<td>S₁ -supplemental-</td>
<td>$V_1&lt;$Possessorᵢ, Themeᵢ$&gt;$ + $V_2&lt;$Agentᵢ, Goalᵢ$&gt;$</td>
</tr>
<tr>
<td>&quot;…don’t have…explain&quot;</td>
<td>E₂-activity+E₃-activity</td>
<td>V₂ &lt;(Agentᵢ), (Goalᵢ), (Themeᵢ)&gt;</td>
</tr>
<tr>
<td>58) ...yǒu...zuò “…have…do”</td>
<td>S₁ -supplemental-</td>
<td>$&lt;$Possessorᵢ, Themeᵢ$&gt;$ + $&lt;$Agentᵢ, (Patientᵢ)$&gt;$</td>
</tr>
<tr>
<td>“…have…do”</td>
<td>E₂-activity</td>
<td></td>
</tr>
<tr>
<td>59) ...yǒu...mǎi</td>
<td>S₁ -supplemental-</td>
<td>$&lt;$Possessorᵢ, Themeᵢ$&gt;$ + $&lt;$Agentᵢ, (Mannerᵢ), Themeᵢ$&gt;$</td>
</tr>
<tr>
<td>“…have…buy”</td>
<td>E₂-activity</td>
<td></td>
</tr>
</tbody>
</table>

In summary, the Supplemental Anchoring SVC concerns two adjacent serial verbal phrases $V_P₁$ expressing a state and $V_P₂$ expressing an event, whose relationship is inferred as supplemental pragamatically. That is to say, the event expressed by $V_P₂$ provides the supplemental information for the state expressed by $V_P₁$. $V_1$ and $V_2$ share the same subject functionally, but assign different thematic roles ($V_1$ assigns a possessor role and $V_2$ assigns an agent role) to their shared subject. In
some sentence, for example, (58), the overt object of V₁ is linked to the object of V₂ thematically, and in some sentence, for example, (59), the objects of V₁ and V₂ are thematically controlled.

3.2.2.5 Causal Anchoring SVC

The Causal Anchoring SVC has the same function as the causal clause. The difference between them is that the former doesn’t have overt causal conjunctions, while the latter does. For example, the sentence (60) can be rewritten as yīnwéi yŏu bìng, suōyī bùnéng lái “Because (she) have sickness, (she) cannot come.”

60) 有病 不能来

“cannot come because of the sickness”

yŏu  bìng  bùnéng  lái

have.PRED sickness.OBJ cannot  come.PRED

V₁  N  Vmod  V₂

Generated in TypeCraft.

This pattern consists of a stative verb V₁ yŏu “have” indicating the state, a modal verb bùnéng “cannot” expressing the modality of possibility and an intransitive verb V₂ lái “come” expressing an achievement. So the event relation between serial verbs in this sentence is: S₁ causes NOT E₂. achievement. Since V₁ expresses the meaning of possession, its subject is called the possessor, so the argument structure for V₁ is <Possessor, Theme>. There is only one preceding argument of V₂, namely: <Agent>, which is mapped onto the implicit subject of V₂. However, the situation about V₁ and V₂ in the sentence (61) is different:

---

8 http://typecraft.org/tc2wiki/Causal
“Zhangsan drank alcohol and then was drunk.”

The activity expressed by VP1 \( \text{hē jiǔ} \) “drink alcohol” causes the occurrence of the state “is drunk” encoded by VP2, so the event relationship between VP1 and VP2 is represented as \( E_1 \)-activity causes \( S_2 \). V1 \( \text{hē} \) “drink” as a transitive verb requires both an agent and a patient, so its argument structure is \(<\text{Agent}_i, \text{Patient}_j>\), and V2 \( \text{hēzuì} \) “is drunk” as a stative verb has an argument structure \(<\text{Theme}_i>\).

The same index attached to the agent of V1 and the theme of V2 tells that the serial verbs share the same subject.

### Table 11

<table>
<thead>
<tr>
<th>Causal Anchoring SVC</th>
<th>Event Relationship</th>
<th>Argument Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>60) ...yǒu ... bùnéng lái “...have…cannot come”</td>
<td>( S_1 )- causal- NOT ( E_2 )-activity</td>
<td>(&lt;\text{Possessor}_i, \text{Theme}_j&gt;) + &lt;(\text{Agent}_i)&gt;</td>
</tr>
<tr>
<td>61) ...hē ...hēzuì “...drink… is drunk”</td>
<td>( E_1 )-activity -causal- ( S_2 )</td>
<td>(&lt;\text{Agent}_i, \text{Theme}_j&gt;) + (&lt;\text{Agent}_i, \text{Patient}_j&gt;)</td>
</tr>
<tr>
<td>62) ...chàng-gē ănghā y “...sing make…hoarse”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In a word, based on the analysis of the data above, the Causal Anchoring SVC involves two adjacent serial verb phrases expressing two situations with a causal relationship, which means, the situation encoded by VP1 causes the situation encoded by VP2.

#### 3.2.2.6 Conditional Anchoring SVC

Syntactically, this subgroup is a covert conditional sub-clause which has a template “if…then…”. Without overt conjunctions \( rúguǒ “if” \) and \( nàme “then” \) indicating the conditional relationship

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9 [http://typecraft.org/tc2wiki/Conditional](http://typecraft.org/tc2wiki/Conditional)
between VP1 and VP2, the meaning of the sentence of the Conditional Anchoring SVC is implicated pragmatically. Sentence 63) is one example:

63) 有事找老王

“(If you) have problem, call Laowang”

```
yǒu  shī  zhāo  lāowáng
yǒu  shī  zhāo  lāowáng
```

*have.*PRED  *issue.*OBJ  *call.*PRED  *Laowang.*OBJ

V1  N  V2  Nbare

This sentence has an imperative force which is used in a discourse where the speaker suggests the hearer call Laowang if the hearer encounters a problem. Other similar examples are *yǒu wèntí gàosù wǒ “have problem tell me”, yǒu qián néng shǐ guǐ tuǐ mò “have money can make the ghost to mill”* (free translation: “money can make the mare go”), etc. The general property of this pattern is that VP1 as a stative verbal phrase provides the supposed premise of the occurrence or realization of the event expressed by VP2. The event relationship between VP1 and VP2 in sentence 63) is formalized as “if S1, then E2-activity” and the argument structure for this V1V2 pattern is “have <Possessor, Theme>…call <(Agent), Patient>”.

In other words, the Conditional Anchoring SVC refers to a serial verb construction where the semantic relationship between VP1 and VP2 is colored with a modality of condition.

3.2.2.7 Gěi Anchoring SVC

The verb *gěi* “give” appears as a special linguistic phenomenon in many Asian Languages, for example, the Thai verb *háj* “give” which is used as a preposition to “indicate intentional benefaction” (Lord 1993:44), and in Vietnamese *cho* “give” which “is used as main verb ‘give’ and as a benefactive preposition and postposition” (Matisoff 1991:429, 437).

10 http://typecraft.org/tc2wiki/G%C4%95i_%E2%80%9Cgive%E2%80%9D
Similarly, the verb *gēi* “give” in Mandarin Chinese has double grammatical functions: preposition and verb, based on which many grammarians in China name it as a “coverb” that serves as both a preposition and a verb. This work will not consider the prepositional “give”, rather focus on its verbal property.

In the single-verb sentence *wǒ gēi tā yīběn shū* “I give him a book”, the verb “give” indicates the meaning of “presenting” and expresses an achievement event. Its argument structure is <Presenteri, Recipientk, Themej>, that is to say, the verb “give”. However, in the group of *Gēi*-Anchoring SVC, “give” can have the meaning of either “presenting” or “benefacting”.

The *Gēi*-Anchoring SVC has two subgroups: presenting *gēi* with syntactic pattern *V*₁*V*₂-*give* and benefacting *gēi* with *V*₁-*give* *V*₂. Sentences 64), 65) and 66) belong to the former and sentence 67) belongs to the latter.

64) 送 一本书 给 他

“send a book to him”

送 yīběn shū 给 tā

send.PRED one CL book.OBJ.TH give.PRED he.OBJ.BEN.3SG.MASC

V₁ QUANT N V₂ PN

64a) 送 他 一本书

“send him a book”

送 tā yīběn shū

send.PRED he.OBJ.BEN.3SG.MASC one CL book.OBJ.TH

V₁ PN QUANT N

In sentence 64), *V₁ sòng* “send” as an activity verb requires a presenter *i*, and *V₂ gēi* “give” as an achievement verb also requires a presenter *i*. Besides, both of them require a theme and a recipient, however, the recipient of *V₁* and the theme of *V₂* are not syntactically displayed, rather thematically
implicated. So the argument structure for 64) is formalized as “send <Presenteri, Themej, (Recipientk)>…give <(Presenteri), (Themej), Recipientk>…” . That is to say, in sentence 64), the meaning of “presenting” is encoded by both V1 “send” and V2 “give” which are combined to form an SVC. The verb “send” in 64) has the same argument structure as the “send” in the single-verb sentence wǒ sòng yīběn shū “I send a book” where the recipient is implicit. But if there is a pronoun following the verb “send” in this sentence, for example, 64a) “send him a book”, the argument structure for “send” becomes <Presenteri, Recipientk, Themej>. The tree below shows the difference between 64) “send a book give him” and the sentence 64a) “send him a book”:

**Figure 7**

64)

```
S
  e_i  VP_1  VP_2
    V_1  NP    V_2  N
    send  one book_j  give  him_k
```

**Figure 8**

64a)

```
S
  e_i  V_1  N  NP
    send  him_k  one book_j
```
65) 送给他一本书

“give him a book (as a present)”

sòng  gěi  tā  yīběn  shū
send.PRED  give.PRED  he.OBJ.BEN.3SG.MASC  one  CL  book.OBJ.TH
V1  V2  PN  QUANT  N

Since V₁ and V₂ in 64) have the same argument structure, we can treat V₁V₂ as one unit, just like sentence 65) shows. In this case, V₁V₂ serves as one predicate whose presenter is played by their shared subject (omitted here), and the first NP following V₁V₂ is assigned the recipient role and the second following NP serves as the theme role, which can be represented as V₁V₂ <Presenterᵢ, Recipientᵢ, Themeᵢ>.

66) 织一件毛衣给他

“knit a sweater and give it to him”

zhī  yījiàn  máoyī  gěi  tā
knit.PRED  one  CL  sweater.OBJ.PT  give.PRED  he.OBJ.BEN.3SG.MASC
V1  QUANT  N  V2  PN

Despite of the same syntactic structure V₁NV₂N, sentences 64) and 66) can be distinguished in two aspects. One difference between them lies in the distinct event types of V₁Ns: V₁N in sentence 64) encodes an activity “send a book”, while V₁N in 66) encodes an accomplishment “knit a sweater”. Another difference refers to the different argument structures. Both V₁ and V₂ in 64) require a presenter, a theme and a recipient. However, in 66), V₁ and V₂ have different argument structures: V₁ <Agentᵢ, Patientᵢ> and V₂ <(Presenterᵢ), (Themeᵢ), Recipientᵢ>, which indicates V₁ and V₂ in 66) are two predicates that cannot be united.
64) **send** a book **give** him = (65) **send** **give** him a book

66) **knit** a sweater **give** him ≠ 66a) **knit** **give** him a sweater

66) **knit** a sweater **give** him = 67) **give** him **knit** a sweater

From the comparison above, we can see that 64) “send…give” pattern can be rewritten as 65) “send give…” , while 66a) “knit give…” is not the grammatical allotype of 66) “knit…give”. However, 66) can be rewritten as 67) “give…knit”:

**67)给**他**织**了一件毛衣

“(I) have knitted a sweater for him”

It is observed that 66) has the opposite word order to 67), that is to say, the second verbal phrase **gěi** tā in 66) becomes the first verbal phrase in 67). The change touches upon not only the position of the verb “give”, but also its argument structure. In 67), the actor of the action “knit” may intend to but not begin to give the knitted sweater to someone, so the pronoun tā “he” doesn’t play a role of recipient, rather beneficiary, which is introduced by the verb **gěi**. As a result, the argument structure for serial verbs in 67) is “give <Benefactor₁, Beneficiaryₖ>…knit <(Agentᵢ), Patientᵢ>”. This phenomenon can be shown through Figure 9:
Then what causes the fact that (64) is rewritten as (64a), while (66) cannot be rewritten as (66a), rather (67)? Borrowing Vendler’s (1957, 1967) ideas in distinguishing English activity and accomplishment, I suppose that the Mandarin verb phrase 送书 “send book” encodes an event without goal or duration, while 習毛衣 “knit sweater” indicates an event with a goal and duration. That is to say, V1N in (64) expresses an activity, while V1N in (66) is an accomplishment. So we can hypothesize that, for the group ე-ANCHORING SVC, V1N1 V2-give N2 can be rewritten as V1V2-give N2N1, only if V1N1 encodes an activity, the relevant verbs of which are mostly motion verbs with directional implication, for example, 送 “send”, 仍 “throw” or 递 “pass”; however, if V1N1 expresses an accomplishment, and the relevant verbs can encode events with a process, for example, 习 “knit”, 画 “paint” or 写 “write”, the V1V2-give N2N1 pattern for such a verb sounds unnatural or ungrammatical, the grammatical way, however, is V2-give N2 V1N1 where the beneficiary is introduced by V2-give which stands in the front of the sentence. Table 12 displays the event relationship and argument structure for examples (64)-67):

<table>
<thead>
<tr>
<th>ე-ANCHORING SVC</th>
<th>Event Relationship</th>
<th>Argument Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>(64)  სრდ… გერ… “send…give…”</td>
<td>E1-activity E2-achievement</td>
<td>V1 &lt;Presenter, Theme, (Recipient) &gt; + V2&lt; (Presenter, (Theme), Recipient) &gt;</td>
</tr>
<tr>
<td>(65) სრდ გერ… “send give…”</td>
<td>E1-activity E2-achievement</td>
<td>V1 V2 &lt;Presenter, Recipient, Theme&gt;</td>
</tr>
<tr>
<td>(66) ზჰი… გერ i… “knit…give…”</td>
<td>E1-accomplishment E2-achievement</td>
<td>V1 &lt;Agent, Patient&gt; + V2 &lt; (Presenter), (Theme), Recipient &gt;</td>
</tr>
<tr>
<td>(67) გერ…ზჰი… “give…knit…”</td>
<td>E1-accomplishment E2-accomplishment</td>
<td>V1 &lt;Benefactor, Beneficiary&gt; + V2&lt; (Agent), Patient &gt;</td>
</tr>
</tbody>
</table>
Overall, the Gēi -Anchoring SVC is a special SVC which refers to a construction formed by the verb gēi “give” encoding an achievement and another verb encoding different events, specifically, activities and accomplishments. The V₁s can be combined with V₂ gēi “give” as one unit, if the VP₁s encode activities and V₁s have motional and directional meanings; while the V₁s are not allowed to do this, if VP₁s encode accomplishments. However, in the latter, VP₁ and VP₂ (gēi) can change their word order without destroying the grammaticality of the sentence, where the thematic role assigned to the object of the second verb gēi may be changed from recipient to beneficiary.

In conclusion, the meaning of the Anchoring SVC not only relies on the cognitive bias and pragmatic inference, it also has something to do with the situation types of serial verbs and their argument structures. Moreover, the shared subject may play different thematic roles assigned by the serialized verbs. For example, in some cases of the Circumstantial Anchoring SVC, the shared subject is assigned an agent role by V₁ and an experiencer role by V₂, or an agent role for V₁ and a possessor role for V₂; in the Manner/Instrumental- and some of the Purposive Anchoring SVCs, the object of V₁ and the object of V₂ are thematically controlled; in the Supplemental-, Causal- and Conditional Anchoring SVCs, the two serial verbs assign their common subject a possessor role and an agent role respectively; in the Gēi-Anchoring SVC, the shared subject may be assigned the same thematic role by the two verbs (i.e. Presenter), sometimes however, it has different thematic roles: either an agent, a presenter or a benefactor. Ultimately, however, the relationship between the serial verbs must be inferred pragmatically.

3.2.3 Chaining SVC

The Chaining SVC refers to a sequence of adjacent verbs expressing actions occurring in a fixed temporal order. It is similar to the Consequential SVC in Edo (Ogie 2009) and the Sequential SVC in Thai (Sudmuk 2003a), the latter of which has a closer grammatical system to Mandarin Chinese than the former which has a rich inflectional system. If the order of V₁, V₂ (and V₃) of Chaining SVC is switched, the meaning of the sentence will be changed, which differs from the coordinate clauses mentioned by Chao (1968).

The Chaining SVC not only expresses the temporal order of the serial verbs, but also indicates the integrity of the whole event composed of several sub-events. Because of the temporal consecutivity between the serial verbs, this pattern is labeled as \( t_1 > t_2 > t_3 \ldots t_{n-1} > t_n \). Some of the Anchoring SVCs, for example, the Purposive-, Instrumental-, Causal- and Conditional-, also obey the strict word order to indicate the temporal consecutivity of serial verbs, but they have much more subtle internal
semantic relations between serial verbs than the Chaining SVC where \( V_1 \) and \( V_2 \) have no logical or some kind of necessary correlation based on the pragmatic inference. Besides, the Circumstantial Anchoring SVC can be easily distinguished from the Chaining SVC by the simultaneous temporal structure of its serial verbs.

Sentence 76) is a typical Chaining SVC because of the consecutive actions performed by \( V_1 \) and \( V_2 \). Look at the interlinear annotations for 76):

76) 打水洗澡

“get water and wash the body”

dă  shuǐ  xǐzǎo
dă  shuǐ  xǐzǎo

collect.PRED  water.TH  bathe.PRED

V1  N  V2

Generated in TypeCraft.

Both VP\(_1\) and VP\(_2\) encode an activity event, so the event relationship between them can be shown as: \( E_1\)-activity-consecutive-\( E_2\)-activity. The argument structure for the \( V_1V_2 \) pattern of 76) is “collect \(<\text{Agent}_i, \text{Theme}_j>\…\text{bathe }<(\text{Agent}_i)>\)”. However, the event relationships and argument structures of the Chaining SVC are not limited to this modal because of the variation of the verb types. There are 12 examples belonging to the Chaining SVC on TypeCraft, which are displayed in Table 13:
<table>
<thead>
<tr>
<th>Chaining SVC</th>
<th>Event Relationship</th>
<th>Argument Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>76) ăă...ăăăăăă “get...beath”</td>
<td>E₁-activity-consecutive-E₂-activity</td>
<td>V₁ &lt;Agentᵢ, Themeᵢ&gt; + V₂ &lt;(Agent)ᵢ&gt;</td>
</tr>
<tr>
<td>77) nă...śă... “take...kill...”</td>
<td></td>
<td>V₁ &lt;Agentᵢ, Themeᵢ&gt; + V₂ &lt;(Agent), Patientᵢ&gt;</td>
</tr>
<tr>
<td>78) nă...xiă “take...write...”</td>
<td></td>
<td>V₁ &lt;Agentᵢ, Themeᵢ&gt; + V₂ &lt;Agentᵢ, Themeᵢ&gt;</td>
</tr>
<tr>
<td>80) nă...chia... “take...eat...”</td>
<td></td>
<td>V₁ &lt;Agentᵢ, Themeᵢ&gt; + V₂ &lt;Agentᵢ, Patientᵢ&gt;</td>
</tr>
<tr>
<td>82) dăng... qū “wait...go”</td>
<td></td>
<td>V₁ &lt;Agentᵢ, Timeᵢ&gt; + V₂ &lt;(Agent)ᵢ&gt;</td>
</tr>
<tr>
<td>79) găo... zuō... hui...ăn sh g... “tell...sit...return...visit...”</td>
<td>E₁-activity-consecutive-E₂-activity</td>
<td>V₁ &lt;Agentᵢ, Themeᵢ&gt; + V₂ &lt;(Agent), Instrumentᵢ&gt; + V₃ &lt;(Agent), Goalᵢ&gt; + V₄ &lt;(Agent), Themeᵢ&gt;</td>
</tr>
<tr>
<td>73) gē dăo...zhā “put into...fry”</td>
<td>E₁-achievement-consecutive-E₂-activity</td>
<td>V₁ &lt;Agentᵢ, (Themeᵢ), Goalᵢ&gt; + V₂ &lt;(Agent), (Patient)ᵢ&gt;</td>
</tr>
<tr>
<td>75) zōu găo qū kāi... “walk over open...”</td>
<td></td>
<td>V₁ &lt;Agentᵢ&gt; + V₂ &lt;(Agent), Patientᵢ&gt;</td>
</tr>
<tr>
<td>81) gui xiă lāi qiă “kneel down beg...”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>74) tuō... gēi... xi “take off...give...wash...”</td>
<td>E₁-activity-consecutive-[E₂, achievement]</td>
<td>V₁ &lt;Agentᵢ, Themeᵢ&gt; + V₂ &lt;(Benefactor), Beneficiaryᵢ&gt; + V₃ &lt;(Agent), Themeᵢ&gt;</td>
</tr>
<tr>
<td>83) zhēteng... făxiăn “do over...find...”</td>
<td>E₁-activity-consecutive-S₂</td>
<td>V₁ &lt;Agentᵢ, Timeᵢ&gt; + V₂ &lt;Experiencerᵢ, Themeᵢ&gt;</td>
</tr>
<tr>
<td>84) kăn...făxiăn “watch...find...”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overall, VP₁s and VP₂s in some examples (76-80) in table 13 express activities. Some examples are different: in 73), 75) and 81), VP₁ encodes the meaning of achievement, VP₂ in 74) expresses an achievement, while VP₂ in 83) and 84) encodes a state. All examples except for 74), 83) and 84) demonstrate the fact that V₁ and V₂ not only share the subject functionally, they also assign the
shared subject the same thematic role- Agent. In sentences 83) and 84), the shared subject is assigned an agent role by V1 and an experiencer role by V2. Example 74) refers to a situation where the Gěi-Anchoring SVC is embedded to the Chaining SVC. In the embedding Gěi-Anchoring SVC, the achievement encoded by VP2 and activity encoded by VP3 are combined together as one activity, which builds a consecutive relationship with the achievement expressed by VP1.

3.2.4 Aspectual SVC

The Aspectual SVC refers to an SVC consisting of V1 + aspect marker and V2 or V1 and V2+aspect marker. V1 together with its aspect marker may express the status of V2, or the events encoded by V1 + aspect marker and V2 happen consecutively, like a Chaining SVC, or V2+aspect marker describes the result of V1. In this group, the “viewpoint morphemes” -zhe and -le are the main targets of the research.

3.2.4.1 -zhe

85)坐着看报

“read a newspaper while sitting”

zuò zhe kàn bào

sit.PRED  PRED read.PRED newspaper.TH

V1 PART V2 N

Generated in TypeCraft.

According to Smith (1997), Mandarin Chinese has three perfectives (-le, -guò and RVC\textsuperscript{11}), three imperfectives (-zài, -zhe and stative sentences) and a neutral viewpoint, which are syntactically optional. -zhe has a stative meaning, so it is labeled as STATIVE in Table 1. As a result, in sentence 85), a state is derived from the combination of the activity zuò “sit” encoded by V1 and the imperfective -zhe, which is formalized as: [E\textsubscript{1}-activity+STATIVE]state. In addition, VP2 kàn bào “read newspaper” expresses an activity, and the state expressed by VP1 provides a manner for the

\textsuperscript{11} Part of RVC, namely, the completive, is categorized into the Vector SVC in this work.
activity expressed by VP₂, so the event relation in this Aspectual SVC can be formalized as \([E₁-activity^{+STATIVE}]_{state} -manner- E₂-activity\).

3.2.4.2 -le

There are two distinctive patterns referring to the perfective -le: \([E₁-activity-resultative-[S₂^{+PERFECTIVE}]_{state}\) and \([E₁-activity^{+PERFECTIVE}]_{achievement-consecutive-E₂-activity}\).

97) 张三喝酒喝醉了。

“Zhangsan drank alcohol and then was drunk.”

zāngsān  hē  jiǔ  hēzuì  le
zhāngsān  hē  jiǔ  hēzuì  le

Zhangsan.SBJ.AGT  drink.PRED  alcohol.OBJ.PT  is.drunken.PRED  PRF
Nbare  V₁  Ncomm  V₂  PART

Generated in TypeCraft.

VP₂ in sentence 97) is a resultative RVC that has stative meaning. Generally, perfective -le suggests completion in Mandarin Chinese, but the viewpoint of the “verb constellation” hēzuì-le “is drunk” needs to be discussed. Smith (1997) states that when “stative verb constellations occur with -le, they have dynamic, shifted interpretation. The derived situation type may be inchoative, presenting the coming about of a state.” (Smith 1997: 265) In this case, the “verb constellation” hēzuì (VP₂) -le “is drunk” indicates that the undrunk state of the agent begins to change to the drunk state after the activity “drink alcohol” encoded by VP₁. That is to say, the endpoint of “drink alcohol” is at the same time the start point of “become drunk”. According to this, the viewpoint of the “verb constellation” VP₂-le should be inceptive. However, according to Bybee (1994), a “resultative denotes a state that was brought about by some action in the past”, which is also the case in this example where the viewpoint encoded by VP₂ is resultative.

Both approaches analyze the same situation, namely, the state, in two different points of view: the former focuses on the start point of the state changing, while the latter considers the current state as the result caused by certain action. Despite of that, the semantic relationship between VP₁ and VP₂ has no ambiguity, that is, resultative.
112) 煮了吃

“eat (it) after boiling (it)”

zhǔ le chī
zhǔ le chī

boil.PRED PRF eat.PRED

V1 PART V2

Generated in TypeCraft.

Another example relating to the perfective -le has a different interpretation because of the consecutive semantic relationship between V1 and V2. While VP1 and VP2 in 97) have a close causal semantic relationship, VP1 and VP2 in 112) is related temporally, that is to say, the action chī “eat” encoded by VP2 and the action zhǔ “boil” encoded by VP1 happen consecutively. In addition, only after finishing the activity “boil”, the action “eat” can occur, so the viewpoint of the “verb constellation” zhǔ-le is supposed to be completive.

With terms regarding to aspects proposed by Bybee (1994), Smith (1997) and Vendler (1957, 1967), I draw a table to show the aspectual viewpoints and aspectual situations for the “verb constellations” where the imperfective -zhe and the perfective -le are involved:

Table 14

<table>
<thead>
<tr>
<th>verb constellations</th>
<th>Viewpoint</th>
<th>Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>85) zuò-zhe IMPERFECTIVE</td>
<td>stative imperfective</td>
<td>State</td>
</tr>
<tr>
<td>97) hēzui-le PERFECTIVE</td>
<td>inceptive imperfective/resultative perfective</td>
<td>State</td>
</tr>
<tr>
<td>112) zhǔ-le PERFECTIVE</td>
<td>completive perfective</td>
<td>Accomplishment</td>
</tr>
</tbody>
</table>

Table 14 indicates that when a verb and an aspect marker are combined to a “verb constellation”, the aspect marker may affect or not affect the viewpoint of that “verb constellation”. For example, a verb plus an imperfective aspect marker -zhe in 85) still expresses an imperfective viewpoint, and a verb plus a perfective marker in 112) still expresses a perfective viewpoint. However, the “verb
constellation” hēzuī-le in 97) can be inchoative imperfective, even though the aspect marker -le indicates perfective.

Further, the situation type of one “verb constellation” is closely related to the viewpoint of that “verb constellation”, for instance, 85) zuò-zhe with a stative viewpoint expresses a state, and 112) zhū-le with a completive viewpoint encodes an accomplishment. Lastly, an activity expressed by a verb may change into a state when an imperfective aspect marker is attached to that verb, for example, 85) zuò-zhe “sit-ting”.

CHAPTER 4: SUMMARY AND CONCLUSIONS

4.1 Summary

The SVC in Mandarin Chinese is a controversial phenomenon. There is no agreement on its definition and classification between linguists and sinologists from both China and Western. Comparing different hypotheses about the definition and classification of Mandarin SVC, this thesis takes the “true” SVC as the objective of the research. That is to say, Mandarin SVC in this work is characterized by the fact that two subject-sharing verbs, \( V_1 \) and \( V_2 \), are juxtaposed, and there is neither a conjunction nor a government relation between them.

Based on these properties of “true” Mandarin SVC, primary and secondary data are collected, annotated and regrouped to build a small corpus which can be freely accessed through the online multi-lingual database TypeCraft. The small corpus of the Mandarin SVC is then divided into four groups: the Vector SVC, the Anchoring SVC, the Chaining SVC and the Aspectual SVC, which possess different semantic structures.

4.2 Conclusions

The Vector SVC refers to a kind of Mandarin SVC where there is only one core event expressed by the main verb, and the vector verb(s) encode(s) either the direction or aspect information of the main verb. The meaning of an Anchoring SVC not only relies on the pragmatic inference, but also has something to do with the situation types of serial verbs and their argument structures. Moreover, the shared subject may play different thematic roles relative to the serialized verbs. Similar to the Consequential SVC in Edo (Ogie 2009) and the Sequential SVC in Thai (Sudmuk 2003a), the Chaining SVC in Mandarin Chinese concerns a sequence of adjacent verbs expressing actions occurring in fixed temporal order and the sequence of verbs indicate the integrity of the whole event composed of several sub events.

Similar to the completive and Inceptive Vector SVC, the Aspectual SVC refers to a VV pattern where \( V_1 \) or \( V_2 \) carries the aspektual information and the relationship between \( V_1 \) and \( V_2 \) is influenced by the viewpoint aspect and situation aspect the “verb constellation” encodes. However, the aspektual information in the former is carried by a vector verb, while in the latter, the aspektual meaning is encoded by the aspect marker.
Further, the analysis of the data on TypeCraft shows that Mandarin SVC processes rich event patterns (e.g. event-event, event-state and state-event) and argument structures. For all Mandarin SVCs, the shared subject may play different thematic roles assigned by the serialized verbs. Hence, conflict will arise when the feature structure of some Mandarin SVCs, where $V_1$ and $V_2$ have functionally shared subject with different thematic roles, is represented in HPSG, because one could not co-index the INDX values of the subjects of $V_1$ and $V_2$, since their specifications are different, due to their different ROLES.

In some cases, the situation type encoded by a verb may determine the thematic roles of the arguments required by that verb (i.e. state: have, <Possessor>; activity: drink, <Agent, Theme>; achievement: reach, <Theme, Goal>; accomplishment: write letter, <Agent, Theme>). Moreover, lexical meanings may determine the event type of “verb constellation” and the argument structure of verbs: “send a letter” and “knit a sweater”, for example. Further, the situation type of one “verb constellation” is also closely related to the viewpoint of that “verb constellation”.

The generalizations in this thesis may have some limitation due to the limited data and the restricted linguistic knowledge. So the collection of larger data and more detailed and intensive analysis need to be done in the future work.
APPENDIX

The 118 SVC examples in the appendix below are classified into four groups, which can be also available on-line: http://typecraft.org/tc2wiki/Classifying_SVC_Mandarin_Chinese

1) 然后突然有一只苍蝇飞过来。

“Then, suddenly, there flies a fly.”

```
ránhòu  tūrán  yǒu  yi  zhī  cāngyìng  fēi  guò  lái
```

2) (它)就大胆地走过来。

“(It) then comes here boldly.”

```
(tā)  jiù  dàdàn  de  zǒu  guò  lái
```

3) 小猫就扑过去。

“Then the little cat rushes to it.”

```
xiǎo  māo  jiù  pū  guò  qu
```
4) 然后小猫就扑上去

“Then the little cat jumps onto it.”

ránhòu  xiǎo māo  jiù  pū  shàng  qù
ránhòu  xiǎo māo  jiù  pū  shàng  qù
then  little  cat.SBJ  jump.PRED  on.PATH  go.DIR
ADV.temp  ADJ  Ncomm  PART  V1  PREP  V2

5) 他走来走去。

“He is walking up and down.”

tā  zǒu  lái  zǒu  qù
tā  zǒu  lái  zǒu  qù
he.SBJ.SIG.3.AGT.MASC  walk.PRED  come.DIR  walk.PRED  go.DIR
PN  V1  V2  V3  V4

6) 他跪下来求我。

“He knelt down to beg me.”

tā  guì  xià  lái  qiú  wǒ
tā  guì  xià  lái  qiú  wǒ
he.SBJ.SIG.3.AGT.MASC  kneel.PRED  down.PATH  come.DIR  beg.PRED  I.OBJ.PT.1SG
PN  V1  ADV  ADV  V2  PN

7) 他走过去开门

“He walked over and opened the door”

tā  zǒuguóqù  kāi  mén
tā  zǒuguóqù  kāi  mén
he.SBJ.AGT.3.SG.MASC  walk.over.PRED  open.PRED  door.OBJ.TH
PN  V1  V2  N
8) 左先生去打电话叫车了。

“Mr. Zuo has called to reserve the car.”

zuǒxiānshēng qù dǎ diànhuà jiào chē le
Mr.Zuo.SBJ.AGT go.PRED beat.PRED phone.OBJ.PT reserve.PRED car.OBJ.PT PRF
Nbare V1 V2 Ncomm V3 Ncomm PART

9) 来玩儿

“come to play”

lái wánér
come.PRED play.PRED
V1 V2

10) 去吃饭

“go to eat”

qù chī fàn
go.PRED eat.PRED food.OBJ.PT
V1 V2 N

11) 去等一会儿

“Go and wait for a while!”

qù děng yīhuìér
go.PRED wait.PRED a.while.MOD
V1 V2 ADV
12) 去做事
“go to do something”

qiù zuò shì
go.PRED do.PRED issue.PT
V1 V2 N

13) 我去买菜
“I go to buy vegetables”

wǒ qù mǎi cài
I.SBJ.AGT.1SG go.PRED buy.PRED vegetable.OBJ
PN V1 V2 N

14) 苍蝇飞到茶杯上。
“The fly settles on a cup.”

cāngying fēi dào chábēi shàng
fly.SBJ fly.PRED reach.ENDPNT teacup.OBJ on.LOC
Ncomm V1 V2 Ncomm PREP

15) 然后苍蝇又飞到了台灯上。
“Then the fly flies onto the lamp”

ránhòu cāngying yòu fēi dào le táidēng shàng
then.DM fly.SBJ then fly.PRED reach.DIR.ENDPNT PFV lamp on.LOC
ADVtemp Ncomm V1 V2 PART Ncomm PREP
16) The little cat jumps onto the lamp, too.

“The little cat jumps onto the lamp, too.”

17) Then (it) puts the fly on the chest of its master.

“Then (it) puts the fly on the chest of its master.”

18) Later, that fly flies on the floor.

“Later, that fly flies on the floor.”

19) Then it jumps onto the sofa.

“Then it jumps onto the sofa.”
20)小猫跳到窗帘上想把它抓住。

“The little cat jumps onto the curtain and wants to catch the fly.”

xiǎo māo tiào dào chuānglián shàng xiǎng bǎ tā zhuā zhù
little cat.SBJ jumps.PRED reach.DIR curtain on.LOC want it.OBJ catch.ACTV

21)然后苍蝇又飞到台灯上。

“Then the fly flies onto the lamp”

ránhòu cāngying yòu fēi dāo le táidēng shàng
then.DM fly.SBJ then fly.PRED reach.DIR.ENDPNT PFV lamp on.LOC
ADVtemp Ncomm V1 V2 Ncomm PREP V3 PART PN Vvector PART

22)搁到锅里炸了吗?

“Have you put (it) into the pot and fired (it)?”

gē dào guō lǐ zhà le ma?
place.PRED to.DIR pot.GOAL inside.GOAL fry.PRED PFV INTR
V1 PREP Ncomm PREP V3 PART PART
23) 开始工作

“begin to work”

kāishǐ  gōngzuò
begin.PRED  work.PRED
V1  V2

24) 她晚上一个人出去害怕

“She is afraid to go out at night alone.”

tā  wǎnshàng  yīgèrén  chūqù  hàipà
tā  wǎnshàng  yī  gè  rén  chūqù  hàipà
she.SBJ.3SG.FEM  at.night  one  CL  person  go.out.PRED  is.afraid.PRED
PN  ADVtemp  ADV  V1  V2

25) 那个老师说话爱转文。

“That teacher likes to misuse literary words when he talks.”

nèigè  lăoshī  shuōhuà  ài  zhuǎn
nèi  gè  lāoshī  shuōhuà  ài  zhuǎn
that  CL  teacher.SBJ.AGT  talk.PRED  like.PRED  misuse.PRED
QUANT  Ncomm  V1  V2  V3

wén
wén
literary.words.OBJ.PT
Ncomm
26) 你念书很有成就吧？
“Is your studying going very well?”

nǐ niàn shū hěn yōu
you.SBJ.AGT.2SG read.PRED book.OBJ.PT very have.PRED
PN V1 Ncomm ADV V2

chéngjiù ba?
success.OBJ.PT INTR
N PART

27) 我一个人晚上出去很害怕。
“I am very afraid of going out at night alone.”

wō yīgè rén wānshàng chū qù hěn hàipà
I.SBJ.AGT.1SG one CL person at.night.TEMP exit.PRED go.DIR fear.PRED
PN QUANT N ADV V1 V2 ADV V3

28) 他/她骑马抽烟。
“S/He smokes while riding a horse.”

tā qí mǎ chōu yān
s/he.SBJ.AGT.3SG.FEM.MASC ride.PRED horse.OBJ.PT pump.PRED smoke.OBJ.PT
PN V1 Ncomm V2 Ncomm
29)写信给他拜年

“write a letter and say "happy new year" to him”

xiě  xìn  gěi  tā  bàinián
write.PRED  letter.TH  give  he.BEN  greet.PRED  new.year.TH
V1  N  V2  PN  V3

30)她会回娘家过节去的。

“She will return to her mother's home to spend the holiday.”

tā  huì  huí  niángjiā  guò  jié  qù  de
tā  huì  huí  niángjiā  guò  jié  qù  de
she.SBJ.AGT.3SG.F  return.PRED  mother's.home.OBJ.G  spend.PRED  holiday.OBJ.PT  go.DI
EM  AU  V1  N  V2  Ncomm  V3  PAR

31)我们种那种菜吃

“We plant that kind of vegetable to eat.”

wōmen  zhòng  nèizhōng  cài  chī
wōmen  zhòng  nèizhōng  cài  chī
we.SBJ.AGT.1PL  plant.PRED  that  CL  vegetable.OBJ.PT  eat.PRED
PN  V1  QUANT  Ncomm  V2

32)我找学生教。

“I'm looking for students to teach.”

wō  zhăo  xuéshēng  jiào
wō  zhăo  xuéshēng  jiào
I.SBJ.AGT.1SG  look.for.PRED  students.OBJ.PT  teach.PRED
PN  V1  Ncomm  V2
33)他买那本书给你看。

“He bought that book for you to read.”

tā mǎi nèiběn shū gěi nǐ kàn
he.SBJ.AGT.3SG.MASC buy.PRED that CL book.OBJ.PT you.OBJ.2SG read.PRED

34)买一份报纸看

“buy a newspaper to read”

mǎi yī fèn báo kàn
buy.PRED one piece.CL newspaper.OBJ.PT read.PRED

35)他打电话叫车。

“He calls to reserve the car.”

tā dǎ diànhuà jiào chē
tā beat.PRED phone.OBJ.PT call.PRED car.OBJ.PT

36)上北京开会

“go to Beijing to attend meeting”

shàng běijīng kāi huì
shàng go.PRED Beijing.OBJ.GOAL attend.PRED meeting.OBJ.TH
37) 买把刀切菜

“buy a knife and cut vegetables”

mǎi bā dāo qiè cài

38) 他拿一双筷子吃饭。

“He eats food with a pair of chopsticks.”

tā ná yīshuāng kuàizi chīfàn

39) 我住在这跟他们打交道。

“I live here and have contact with them.”

wǒ zhù zài zhè gēn tāmen dǎ jiāodào

40) 喝点酒壮壮胆子

“Drink a little wine, and it will give you courage.”

hē diǎn jiǔ zhuàngzhuàng dānzi
41) 我没打电话征求李四的意见
“I didn’t call Lisi to ask for suggestions.”

wŏ měi dă diànhuà zhēngqiú līsì de yījiān
I.SBJ.AGT.1SG not.NEG call.PRED phone.OBJ.PT ask.for.PRED Lisi POSS suggestion.OBJ

42) 他们需要夹子夹核桃。
“They need a clamp to break walnut seeds.”

tāmen xūyào jiāzi jiā hētáo
they.SBJ.AGT.3PL need.PRED clamp.OBJ.PT break.PRED walnut.seed.OBJ.PT

43) 他上楼睡觉。
“He went upstairs to sleep.”

tā shàng lóu shuìjiào
he.SBJ.AGT.3SG.MASC ascend.PRED stairs.OBJ.PT sleep.PRED

44) 左先生去打电话叫车了。
“Mr Zuo has called to reserve the car.”

zuŏxiānshēng qù dă diànhuà jiăo chē le
Mr.Zuo.SBJ.AGT go.PRED beat.PRED phone.OBJ.PT reserve.PRED car.OBJ.PT PRF

45)他脱袜子洗脚。
“He took off his socks and washed his feet.”

tā tuō wàzi xī jiǎo
he.SBJ.SG.3.AGT.MASC take.off.PRED socks.OBJ.PT wash.PRED feet.OBJ.PT
PN V1 Ncomm V2 Ncomm

46)他去学校打篮球。
“He goes to school to play basketball.”

tā qù xuéxiào dǎ lánqiú
he.SBJ.SG.3.AGT.MASC go.PRED school.OBJ.PT play.PRED basketball.OBJ.PT
PN V1 Ncomm V2 Ncomm

47)我买份儿礼送人。
“I bought a present to give to someone.”

wǒ mǎi fèn rì sòng rén
I.SBJ.AGT.1SG buy.PRED CL present.OBJ.PT give.PRED someone.OBJ.GOAL
PN V1 QUANT Ncomm V2 PN
48) 张三用一根香烟跟李四打赌下过雨。
“Zhangsan bets Lisi a cigarette that it has rained.”

zhāngsān yòng yī gèn xiāng yān gēn lǐsì
zhāngsān.SBJ.AGT use.PRED one CL scented.MOD cigarette.TH follow lǐsì

Nbare V1 NUM QUANT Ncomm V2 Nbare

dàdū xià guò yǔ
dàdū xià guò yǔ
bet.PRED fall.down.PRED PRF rain.
V3 V4 PART N

49) 我们坐火车去好吗?
“Shall we go by train?”

wǒmen zuò huǒchē qù hǎo ma?
we.SBJ.AGT.1PL take.PRED train.OBJ.PT go.PRED good.PRED INTR
PN V1 Ncomm V2 ADJ PART

50) 我用钱买书。
“I buy books with money.”

wǒ yòng qián mǎi shū
wǒ yòng qián mǎi shū
I.SBJ.AGT.1SG use.PRED money.OBJ.PT buy.PRED book.OBJ.PT
PN V1 Ncomm V2 Ncomm
51) 他们用手吃饭。

“They eat food with hands.”

tāmen yòng shǒu chī fàn
tāmen yòng shǒu chī fàn

52) 张三坐汽车到了。

“Zhangsan has arrived with the car.”

zhāngsān zuò qìchē dào le zhāngsān zuò qìchē dào le

53) 我们开会讨论了那个问题。

“We have discussed that problem through holding the meeting.”

wǒmen kāihuì tāolùn le nèigè wèntí wǒmen kāihuì tāolùn le nèi gè wèntí

54) 喝点酒壮壮胆子

“Drink a little wine, and it will give you courage.”

hē diǎn jiǔ zhuāngzhuàng dānzi hē diǎn jiǔ zhuāngzhuàng dānzi

55) 我买票进去。

“I bought a ticket and went in.”

wǒ mǎi piào jìn qù
I.SBJ.1SG.AGT buy.PRED ticket.OBJ.TH enter.PRED go.DIR
PN V1 Ncomm V2 V3

56) 我们开会考虑那个问题。

“We will hold a meeting to consider that question.”

wǒmen kāi-huì kǎolǜ nèi-gè wèntí
we.SBJ.AGT.1PL hold.meeting.PRED consider.PRED that question.OBJ.PT
PN V1 V2 DET Ncomm

57) 我没法子对老板交代。

“I don't know how to explain it to my boss.”

wǒ méi fāzì dui láobān jiāodài
I.SBJ.1SG have.not.PRED method.OBJ.PT face.PRED boss.OBJ.GOAL explain.PRED
PN V1 N V2 Ncomm V3

58) 有事情做

“have something to do”

yǒu shìqíng zuò
have.PRED issue.OBJ.TH do.PRED
V1 N V2
59) 我有钱买书。
“I have money to buy books.”

wǒ yǒu qián mǎi shū
I.SBJ.AGT.1SG have.PRED money.OBJ.PT buy.PRED book.OBJ.PT

60) 有病不能来
“cannot come because of the sickness”

yǒu bìng bùnéng lái
have.PRED sickness.OBJ cannot come.PRED

61) 张三喝酒喝醉了。
“Zhangsan drank alcohol and then was drunk.”

zhāngsān hē jiǔ hē zuì le
Zhangsan.SBJ.AGT drink.PRED alcohol.OBJ.PT drink.PRED be.drunk.PRED PRF

62) 张三唱歌唱哑了嗓子。
“Zhangsan sang songs and became hoarse after that.”

zhāngsān chàng-gē chàngyā le sāngzi
Zhangsan.SBJ.AGT sing.song.PRED sing hoarse PRF throat.OBJ.PT

63) 有事找老王

“(If you) have problem, call Laowang”

yǒu shì zhǎo lǎowáng  

64) 送一本书给他

“send a book to him”

sòng yīběn shū gěi tā  

64a) 送他一本书

“send him a book”

sòng tā yīběn shū  

65) 送给他一本书

“give him a book (as s present)”

sòng gěi tā yīběn shū
66) 织一件毛衣给他

"knit a sweater for him"

zhī yījiàn máoyī gěi tā
knit.PRED one CL sweater.OBJ.PT give.PRED he.OBJ.BEN.3SG.MASC
V1 QUANT N V2 PN

67) 给他织了一件毛衣

“(I) have knitted a sweater for him”

gěi tā zhī le yījiàn máoyī
give.PRED he.OBJ.BEN.3SG.MASC knit.PRED PRF one CL sweater.OBJ.PT
V1 PN V2 PART QUANT N

68) 写信给他拜年

“write a letter and say "happy new year" to him”

xiě xìn jī tā bāinián
write.PRED letter.TH give he.BEN greet.PRED new.year.TH
V1 N V2 PN V3

69) 他买那本书给你看。

“He bought that book for you to read.”

tā mǎi nèibèn shū gěi nǐ kàn
tā mǎi nèi bèn shū nǐ kàn
he.SBJ.AGT.3SG.MASC buy.PRED that CL book.OBJ.PT you.OBJ.2SG read.PRED
PN V1 QUANT Ncomm V2 PN V3
70) 他脱袜子给我们洗脚。  
“*He took off his socks and washed our feet.*”

tā tuō wàzi gěi wōmen xǐ  
he.SBJ.SG.3.AGT.MASC take.PRED socks.OBJ.PT give.PRED we.OBJ.2PL wash.PRED

jiăo  
feet.OBJ.PT

Ncomm

71) 我不懂外国话，请你给（我）翻译  
“I don't understand the foreign language, please translate (it) for me.”

wŏ bù dòng wàiguó huà, qīng nǐ  
I.TH.SBJ.1SG not.NEG understand.PRED foreign.country language. please.MOD you.AGT.SBJ.2 SG

PN ADV V1 N N PN

gěi （wŏ） fānyì  
gěi （wŏ） fānyì  
give 1.BEN translate.PRED
V2 PN V3
72) 我倒杯茶给你喝

“I make a cup of tea for you to drink”

wǒ dào bēi chá gěi nǐ hē

73) 搁到锅里炸了吗?

“Have you put (it) into the pot and fired (it)?”

gē dào guō lǐ zhà le ma?

74) 他脱袜子给我们洗脚。

“He took off his socks and washed our feet.”

tā tuō wàzi gěi wōmen xǐ

jiăo

jiăo

feet.OBJ.PT

Ncomm
75) 他走过去开门

“He walked over and opened the door”

tā zǒuguòqù kāi mén
he.SBJ.AGT.3SG.MASC walk.over.PRED open.PRED door.OBJ.TH
PN V1 V2 N

76) 打水洗澡

“get water and wash the body”

dǎ shuǐ xīzāo
collect.PRED water.TH wash.body.PRED
V1 N V2

77) 他拿刀杀一只猪。

“He takes a knife to kill a pig.”

tā ná dāo shā yīzhī zhū
ta.SBJ.SG.3.AGT.MASC take.PRED knife.OBJ.PT kill.PRED one CL pig.OBJ.PT
PN V1 Ncomm V2 QUANT Ncomm

78) 拿笔写字

“write with a pen.”

ná bǐ xiě zì
take.PRED pen.OBJ.PT write.PRED characters.OBJ.PT
V1 Ncomm V2 Ncomm
79) 告假坐飞机回国省亲
“ask for leave and return to homeland taking a plane and visit relatives.”

gào jià zuò fēijī huí guó xīng qīn
tell.PRED leave.TH sit.PRED plane.INSTR return.PRED country.GOAL visit.PRED relatives.TH

80) 拿筷子吃饭
“eat food with chopsticks”

ná kuàizi chī fàn
take.PRED chopsticks.INSTR eat.PRED food.PT

81) 他跪下来求我。
“He knelt down to beg me.”

tā guì xià lái qiú wǒ
he.SBJ.SG.3.AGT.MASC kneel.PRED down.PATH come.DIR beg.PRED I.OBJ.PT.1SG

82) 等一会儿去!
“(We should) wait for a while (before we) go!”

děng yīhuíér qù
wait.PRED a.while.MOD go.PRED

V1 ADV V2
83) (它)折腾了半天发现那支苍蝇好像是死了。

“After doing over it repeatedly, (it) finds that the fly seems to be dead”

(tā) zhēteng le bāntiān fāxiàn nàzhī cāngying hǎoxiàng shì

84) (它)看了半天发现苍蝇还是死的

“(it) has watched for a long time and finds that the fly is still dead.”

(tā) kàn le bān tiān fāxiàn cāngying hái shì

85) 坐着看报

“read a newspaper while sitting”

zuò zhe kàn báo

75
86) 开着窗户睡觉

“sleep with opened windows”

kāi zhe chuānghù shuìjué

87) 她织着毛衣看书。

“She reads while knitting.”

tā zhī zhe máoyī kàn shū

88) 他拍着手笑

“He laughs while clapping hands.”

tā pāi zhe shǒu xiào

89) 跟着唱

“sing along”

gēn zhe chāng
90) 他脱下鞋，走着进去。
“He took off his shoes and entered with walking.”

91) 他跟着我回家。
“He is following me home.”

92) 跟着他走
“follow him to go”

93) 他跟着我回了家
“He has gone home following me.”
94)你是客，坐着喝了水再谈。

“You are the guest, drink some water while sitting before we discuss.”

nǐ shì kè, zuò zhe hē le shuǐ zài
you.SBJ.AGT.2SG are.PRED guest.OBJ sit.PRED PROG drink.PRED PFV water.OBJ.PT then

95)他对着我说了实话。

“He has told me the truth facing me.”

tā duì zhe wǒ shuō le shíhuà
he.SBJ.AGT.3SG.MASC face.PRED PROG I.OBJ.1SG tell.PRED PFV truth.OBJ.PT

96)你是客，坐着喝水吧。

“You are the guest, please drink some water while sitting.”

nǐ shì kè, zuò zhe hē shuǐ ba
you.SBJ.AGT.2SG are.PRED guest.OBJ sit.PRED PROG drink.PRED water.OBJ.PT

97) 张三喝酒喝醉了。

“Zhangsan drank alcohol and then was drunk.”

zhāngsān hē jiǔ hē zui le
zhāngsān hē jiǔ hē zui le
Zhangsan.SBJ.AGT drink.PRED alcohol.OBJ.PT drink.PRED be.drunk.PRED PRF
Nbare V1 Ncomm V2 V3 PART

98) 张三唱歌唱歌哑了嗓子。

“Zhangsan sang songs and became hoarse after that.”

zhāngsān chàng-gē chàng yā le sāngzì
zhāngsān chàng-gē chàng yā le sāngzì
Zhangsan.SBJ.AGT sing.song.PRED sing.PRED hoarse.PRED PRF throat.OBJ.PT
Nbare V1 V2 V3 PART Ncomm

99) 张三追赶猫打扰了李四。

“Zhangsan interrupted Lisi when he was chasing a cat.”

zhāngsān zhuīgān māo dārāo le lìsì
zhāngsān zhuīgān māo dārāo le lìsì
Zhangsan.SBJ.AGT chase.PRED cat.OBJ.PT interrupt.PRED PRF Lisi.OBJ.PT
Nbare V1 Ncomm V2 PART Nbare

100) 后来，苍蝇飞到了窗帘上。

“Later, the fly flies onto the curtain.”

hòulái cāngying fēi dào le chuānglián shàng
hòulái cāngying fēi dào le chuānglián shàng
later fly.SBJ fly.PRED reach.ENDPNT PFV curtain on.LOC
ADV Ncomm V1 V2 PART Ncomm PREP
101) 后来那个苍蝇飞到了地板上。

“Later, that fly flies on the floor.”

hòulái nàge cāngying fēi dào le dìbǎn shāng

102) 左先生去打电话叫车了。

“Mr. Zuo has called to reserve the car.”

zuǒxiānshēng qù dǎ diànhuà jiào chē le

103) 搁到锅里炸了吗?

“Have you put (it) into the pot and fired (it)?”

gē dào guō lǐ zhá le ma?

104) 他跟我回了家。

“He has followed me home.”

tā gēn wǒ huí le jiā
105) 他跟着我回了家

“He has gone home following me.”

tā gēn zhe wǒ huí le jiā

he.SBJ.AGT.3SG.MASC follow.PRED I.OBJ.1SG return.PRED PFV home.OBJ.GOAL
PN V1 PART PN V2 PART Ncomm

106) 他对着我说了实话。

“He has told me the truth facing me.”

tā duì zhe wǒ shuō le shíhuà
tā duì zhe wǒ shuō le shíhuà

he.SBJ.AGT.3SG.MASC face.PRED PROG I.OBJ.1SG tell.PRED PFV truth.OBJ.PT
PN V1 PART PN V2 PART Ncomm

107) 他拿刀杀死了一只猪。

“He has killed a pig with a knife.”

tā ná dāo shā sǐ le yīzhī zhū
tā ná dāo shā sǐ le yī zhú

he.SBJ.SG.3.AGT.MASC take.PRED knife.OBJ.PT kill.PRED die.PRED PFV one CL
PN V1 Ncomm V2 V3 PART QUANT Ncomm

108) 我们开会讨论了那个问题。

“We have discussed that problem through holding the meeting.”

wǒmen kāihuì tāolùn le nèigè wèntí
wǒmen kāihuì tāolùn le nèi gè wèntí

we.SBJ.AGT.1PL hold.meeting.PRED discuss.PRED PFV that CL problem.OBJ.PT
PN V1 V2 PART QUANT Ncomm
109) 他开车走了。
“*He has driven away.*”

```
tā kāi chē zǒu le
tā SG.3.AGT.MASC drive car go go.PRED PRF
```

110) 张三坐汽车到了。
“*Zhangsan has arrived with the car.*”

```
zhāngsān zuò qìchē dào le
zhāngsan SBJ.AGT take car arrive arrive.PRED PRF
```

111) 我弟弟开车出事了。
“*My younger brother had an accident when driving.*”

```
wǒ dìdì kāi chē chū shì le
wǒ MOD younger.brother SBJ.AGT drive car exit accident PRF
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112) 煮了吃
“*eat (it) after boiling (it)*”

```
zhǔ le chī
zhǔ le eat
boil.PRED PRF eat.PRED
```

82
113)睡完了起来
“get up after finishing sleeping”

shuì wán le qǐ lái
sleep.PRED finish.COMPL PRF get.up.PRED
V1 PART V2

114)他脱了鞋走进房去。
“He took off his shoes and went into the house.”

tā tuō le xié zǒu jìn fāng qù
he.SBJ.SG.3.AGT.MAS take.off.PRED D shoes.OBJ.PT walk.PRE enter.PRED room.GOAL go.DIR
PN V1 PART Ncomm V2 V3 Ncomm V4

115)他脱了鞋走了进去。
“He has taken off his shoes and went in.”

tā tuō le xié zǒu le jìn qù
he.SBJ.AGT.3SG.MAS take.off.PRED D shoes.OBJ.PT walk.PRE enter.DIR go.DIR
PN V1 PART Ncomm V2 PART V3 V4
折腾了半天发现那支苍蝇好像是死了。

"After doing over it repeatedly, (it) finds that the fly seems to be dead"

(tā) zhēteng le bàn tiān fāxiàn nāzhī cāngying hǎoxiàng shì

(it).SBJ repeatedly.do over PFV a.half.day find.PRED that fly seemingly is.COP.PRED
PN V1 PART ADV temp V2 DET Ncomm ADV V1

sǐ le
dsǐ le
die PFV
V2 PART

它）看了半天发现苍蝇还是死的

“(it) has watched for a long time and finds that the fly is still dead.”

(tā) kàn le bàn tiān fāxiàn cāngying hái shì sǐ

(it).SBJ.1 watch.PRED PFV half.ADJ>ADV day find.PRED fly.SBJ.2 still is.COP dead
PN V1 PART ADJ Ncomm V2 Ncomm ADV V ADJ

de de
de.STAT
你是客，坐着喝了水再说。

“You are the guest, drink some water while sitting before we discuss.”
REFERENCES


Hellan, Lars. 2011. TypeGram- an HPSG ‘pan-grammar’ companion for multilingual construction comparison and grammar construction. Manuscript for HPSG part of LING 3302, Fall 2011, NTNU.


Kim, Yong-Taek. 2008b. Conative and Its Related Constructions: An Extended Semantic Map Approach, paper presented at the 5th ICCG (International Conference on Construction Grammar), Austin, University of Texas.


