AN INTEGRATED ACCOUNT OF MANDARIN VERBS IN SERIALIZATION [*]

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1. Introduction

Mandarin is classified as an isolating and non-inflecting language. What English achieves by changing verb forms, Mandarin Chinese expresses by means of additional adverbs, other independent morphemes, etc. For example, in Mandarin *lai* 'come' remains the same morphologically no matter when the action happened or happens or will happen since Mandarin does not inflect its verbs for tenses (Lin 2001). In syntax, Mandarin has very few overt morphosyntactic expressions of tense or aspect and has no subject-verb agreement, in contrast to inflectional languages. The lack of affixational morphology and syntactic markers in Chinese often makes a string of words highly ambiguous syntactically and, thus, a Mandarin expression with two or more verbs in a sequence could be associated with more than one construction type. For example, a multi-verb sequence in Mandarin could be analyzed as coordination (not unlike the English expression *eat* [and] *drink*), subordination (as in the English *I want* [to] *go*), or causation (such as *I made him leave*).

Traditionally, the term "serial verb" refers to a sequence of verbs or verb phrases in a sentence in which there is no intervening conjunction. The English expression *go eat*, for example, might be considered as a kind of 'serial verb construction' since there is no infinitive or other morphosyntactic marker present to indicate a coordinating or subordinating relationship between the two verbs *go* and *eat* as in *go to eat* or *go for eating*. In English, *come look* and *go figure* are a relatively rare type of combination and seem to belong primarily to the colloquial layer of the language. In Mandarin Chinese, such sequences are very common and are not restricted to any one register and, thus, Mandarin Chinese is a good language for linguists to study in order to explore this phenomenon in detail. There are some interesting ways in which serial verbs are used in Mandarin, as the case of the verb 'kill' illustrates. In Mandarin, the sense of English 'kill' is conveyed not by just a single verb, but instead, speakers often use a serial verb construction (SVC) *sha-si*, literally 'kill-die', on par with an English expression such as *stab to death*. If a speaker just uses the simple verb *sha* 'kill', it does not necessarily mean that anyone died, so the serial verb construction *sha-si* 'kill-die' is needed to make it clear that the killing event is telic and resulted in death. In this paper, I am investigating verb sequences such as 'kill-die' and other types of SVCs in Mandarin.

2. Past Treatments of Mandarin Verbs in Serialization

Constructions which involve a [NP V (NP) V …] sequence in Mandarin Chinese are many ways ambiguous. For lack of agreed-upon criteria, different linguists have given different classifications to these structurally similar multi-verb sequences in Mandarin. As will hopefully be apparent from the subsequent literature review, within the whole spectrum of multi-verb sequences the range of constructions called serial verb constructions varies considerably from one linguist to another. Some linguists include most kinds of multi-verb sequences in their SVC classification, while others insist that only one or two types of multi-verb sequences are rightfully called SVCs. In fact, various accounts of SVCs in the literature are basically descriptions of a certain construction type or, at best, a narrow range in what I am calling a continuum of multi-verb sequences. However, little attempt has been made to provide a unified account of the whole range of multi-verb sequences in Mandarin as most previous analyses have been content to focus on one or two types only.

Chao (1968) proposes that SVCs in Mandarin Chinese form an intermediate type between coordinate and subordinate constructions, but are nearer to the latter than the former. According to him, a V-V series is like a subordinate construction in that the second verb serves as the main verb of the construction, and thus, it is the head to which the first verbal expression is a modifier, often translatable by a prepositional or other modifying phrase. As such, by his definition, most of his SVC sentences involve coverbs as in (1). In this example, the coverb *cong* 'from' is no longer a lexical verb and its source meaning 'follow' as a verb has been completely bleached. As a coverb, it does not suggest any aspectualized event but simply indicates location (source of motion).

(1)   Ta   cong Zhongguo   lai.
       3SG   from China   come
       'S/he came from China.'

Li and Thompson (1981) define Mandarin serial verbs as "two or more verb phrases or clauses juxtaposed together without any marker indicating what relationship is between them (594)." According to Li and Thompson (ibid.: 595), Chinese serial verbs may be categorized as follows:
i.   Two or more separate events (alternating, consecutive, circumstance and purpose)
ii.   One verb phrase/clause serving as subject or direct object of another
iii.   Pivotal constructions, in which one NP serves as both the object of VP1 and the logical subject of VP2
iv.   Descriptive clauses

Li and Thompson's classification (1981) includes constructions with two or more clauses and largely discounts the nature of the interdependence between them. Consequently, their classification of Mandarin SVCs is rather broad and encompasses structures such as coordinate clauses as in (2), in which the two VPs do not bear any temporal or other interdependent relation.

(2)   Ta   tian   tian   chang ge   xie xin.
       3SG   day   day   sing song   write letter
       'S/he sings songs and writes letters every day.'

(Li & Thompson 1981: 595)

Li and Thompson's classification of SVCs aims to be widely inclusive in order to cover major types of multi-verb sequences in Mandarin which they think possess characteristics of SVCs. However, Chang (1990) claims that their classification of SVCs includes all kinds of irrelevant structures as SVCs such as coordination, but leaves out relevant structures as non-SVCs such as the kind of the multi-verb sequence in which both verbs share a subject and an object as well.

Liu (1991) takes a narrow view of SVCs and treats them as a purely syntactic phenomenon involving nothing more than two verbs in the same clause which share an object and, thus, assign the same theta marking to it as in (3).

(3) Ta   zhong   cai   mai.
     3SG   plant   vegetable   sell
     'He plants vegetables to sell.'

Liu's SVC definition is based exclusively on the Shared Object Criterion and ignores any other criteria such as semantic interdependence between the two verbs. As such, his definition applies to one type of SVC and rules out other constructions that are called SVCs by others.

By contrast, Chang (1990) claims that true SVCs are of two types: double-headed constructions as in (4) and VV compounds as in (5).

(4) Ta   dao   le   san   bei   cha   he
     3SG   pour   PERF   three CL   tea   drink
     'S/he poured three cups of tea to drink.'   (Chang 1990: 293)

(5) Ta   tui   dao   le   wo.
     3SG   push   fall   PERF   me
     'S/he pushed me down.'   (Chang 1990: 300)

He proposes that compounding in Mandarin Chinese is an important sub-type of SVC, but it is entirely ignored in Baker's and Liu's accounts of SVCs. Both Baker (1989) and Liu (1991) insist that an SVC is a double-headed construction in which two heads (the verbs) share an internal argument, that is, an object. The sentence in (4) is a typical instance of Liu's true SVCs or object sharing structures. In (4), the two verbs *dao* 'pour' and *he* 'drink' share the same object, that is, *san bei sha* 'three cups of tea'. Chang (1990) claims that object-sharing is not a criterion for defining SVCs, but rather reference-sharing. He believes that verbal phrases in VV compounds do not share an object but share a referent or a participant. In (5), what the two verbs *tui* 'push' and *dao* 'fall' share is not the object but the same referent, the overlapping participant *wo* 'I'. Here, *wo* 'I' acts as both the object of the V1 *tui* 'push' and the subject of V2 *dao* 'fall'.

Chang (1990) modifies the shared object criterion of Baker (1989) and extends Baker's SVC classification to VV compounds. Based mainly on one syntactic criterion, his definition misses other SVCs, as does Baker's. In fact, both instrument constructions (e.g. *na dao ge rou* 'take a knife (to) cut meat') and object-sharing constructions display strong links between the participants and the events themselves. The difference between them is that, in object-

sharing constructions, the two verb phrases happen to share an internal argument. Apparently, both Baker's and Chang's definitions of SVCs are rather arbitrary and too restrictive and each fails to capture similarities in the nature and degree of event integration across a broad band of constructions that at one time or another have been called SVCs.

Paul (2004) points out that the term "serial verb construction" as currently used in Chinese linguistics simply refers to any surface string with more than one verb. It subsumes a multitude of different structures. According to Paul, since "Chinese SVC" in Chinese linguistics has served as a cover term for distinct constructions with different properties and it does not refer to a unique construction with a predictable set of properties, the term SVC in its current use in Chinese linguistics is shown to be too vague to be of any use. Therefore, he proposes to abandon it altogether and suggests making a fresh start. In order to make the SVC a unique construction he adopts a narrow definition of SVC as object-sharing in the sense of Collins (1997) and believes that the so-called directional verb compounds as shown in (6) are real SVCs in Chinese. Such compounds refer to verb sequences of the type '$V_{displacement}$ (-$V_{direction}$) -come/go' such as *song lai* 'send come – send over', which he believes have so far not received a satisfactory analysis. In this type of verb sequence, the first constituent is a displacement verb, the second one is a direction verb which is optional, and the last one is the motion verb *lai* 'come' or *qu* 'go'.

(6) Ta   song-lai-le   yi   ge   xiangzi.
     3SG   send-come-PERF   one   CL   suitcase
     'S/he sent a suitcase over here.'   (Paul 2004: 17)

From the above discussion about past treatments of SVCs, it is apparent that there is little consensus for either what is or is not an SVC or for sub-classifications within the SVC category as a whole. Most previous analyses focused on one or two types of multi-verb sequences but little effort has been made to account for the whole range of multi-verb sequences in Mandarin. This paper aims at providing an integrated and unified account for all types of SVCs. Such a goal can be achieved through the usage-based cognitive approach (Langacker 1987, 1991, 1999 & 2000). I will propose that degrees of event integration are the key idea to account for SVCs, an idea that takes its inspiration from the cognitive framework (Langacker 1987, 1991, 1999, 2000, 2008; Talmy 2000). By proposing that multi-verb sequences display degrees of event integration or independence, my analysis can provide an account for all types of SVCs in Mandarin.

3.   Event Structure

Since my approach proposes that there are degrees of event integration which involves complex events, it would be helpful to define simple and complex events. Events can be simple or complex depending on how many temporal phases they contain and on how the speaker conceptualizes the event as a whole. Simple events will be defined as being construed as having a single phase, while complex events will be assumed to be construed as containing more than one

phase (c.f. Van Valin & LaPolla 1997; Langacker 2008). Whether simple or complex, all events have a core component—the main activity—which is usually highlighted and salient (Grimshaw 1990). If an event is only composed of a core verbal component and is construed to have one phase, it is deemed a simple event, as in (7):

(7) Zhe   tiao   du   she   **si**   le.
     This   CL   poisonous   snake **die**   PERF
     'This poisonous snake died.'

However, in addition to the main element (the activity phase), an event could be construed to have an inception phase and/or termination phase, with the former serving as a preparatory stage and the latter usually signaling a resultative stage of the main activity. Thus, one verb can signal the core phase of an event while another verb can allude to an onset or outcome phase. If more than one phase is involved and expressed in the event, it necessarily becomes a complex event.

An action or an activity can cause a termination, fulfillment, or change of state—that is, a result. An action and its result can form a macro event (Talmy 2000). For example, the death of a poisonous snake could be the result of some action. People could kill a snake by taking some action such as beating or striking it. Speakers can choose sentence forms to reflect the construal of the event as having one or multiple phases that they wish to communicate. The death of the snake could be construed to be a result phase for the action phase of striking, as the example in (8) conveys:

(8) Ta   **ta si**   le   yi   tiao   du   she.
     3SG   **strike die** PERF   one   CL   poisonous   snake.
     'S/he stroke a poisonous snake dead.'

The sentence in (8) is an expression of the speaker's construal of the event as having multiple phases. The expression is chosen by the speaker to present the event as having two purposively related phases or stages for the purposes of communication.

In the action of killing a snake, people could take a weapon such as a stick and then use it to strike the snake. Thus, the event of taking a stick can be construed as a preparatory stage (inception phase) for the purpose of striking the snake as in (9):

(9) Ta   **na**   bang   **da**   du   she.
     3SG   **take** stick   **strike** poisonous   snake.
     'S/he took a stick to strike a poisonous snake.'

In addition to the core component, a description of an event could include both an inception phase and a termination phase as (10) illustrates:

(10) Ta   **na**   bang   **da si**   le   du   she.
     3SG   **take** stick   **strike die** PERF   poisonous   snake.
     'S/he took a stick to strike a poisonous snake dead.'

A complex event consisting of more than one phase usually displays, to varying degrees, situational interdependence or semantic relatedness between its component phases. Means and aims or cause and effect are two common types of situational interdependence phenomena conveyed in a complex event. Event integration refers to the integration of two or more component events into a complex event with two or more corresponding phases (Talmy 2000). Such integration is closely related to situational interdependence. The notion of situational interdependence is scalar and it involves a continuum linking two extremes: one in which the two events are wholly independent as in (11) and the other in which the two events have coalesced into a single event as in (12).

(11) Ta   meitian   **xie**   xin   **hui**   ke.
      3SG   everyday   write letter receive   visitor
      'S/he writes letters (and) receives visitors everyday.'

(12) Ta   **sha**   **si**   le   zhu.
      3SG   perform the action of killing   die   PERF   pig
      'S/he killed the pig.'

In fact, some multi-verb sequences express a single event with multiple phases (two sub-events) under an umbrella of one macro event (Talmy 2000), while others do not, expressing instead two events each being construed to have only one phase. Table 1 illustrates the correspondence between different phases and types of event.

Phases	Type of events
core phase	simple event
inception phase + core phase	complex event
core phase + termination phase	complex event
inception phase + core phase + termination phase	complex event
core phase + core phase	2 separate events

Table 1   Correspondence between different phases and types of events

However, most multi-verb sequences in Mandarin occupy the conceptual space between complete event autonomy and complete event integration. The two sub-events in many of these multi-verb sequences are integrated semantically in some way to form a complex event and they are causally or consequentially related to various degrees. Like many other linguistic units—all of which are graded phenomena (e.g., Langacker 1987, 1991, 2008), multi-verb sequences display a continuum of event integration/independence. By analyzing such so-called troublesome and ill-understood sequences from the perspective of event integration/independence, all types of multi-verb sequences can be reasonably accounted for.

In the next two sections, I will discuss multi-verb sequences which were obtained from the Lancaster Corpus of Mandarin Chinese. I will define a broad range of serial verb constructions which are treated as form-meaning pairs in the

present analysis. I will also localize the different types of SVCs on a continuum of event integration.

4. Types of Serial Verb Constructions

To date, most of the published analyses of Mandarin Chinese SVCs have relied on constructed examples or on the intuition of speakers/linguists. Unfortunately, there has been little or no systematic exploration of actual data of Mandarin multi-verb sequences from Mandarin Chinese corpora. One of the major objectives of this study is to fill in this gap. Instead of recycling old examples from previous analyses, this study mined actual examples from the Lancaster Corpus of Mandarin Chinese to explore what constructions consisting of multiple verbs emerge. The Lancaster Corpus of Mandarin Chinese (LCMC), a publicly available balanced corpus, was designed as a Chinese match for the FLOB and FROWN corpora of modern British and American English. The LCMC sampled 15 written text genres including news, literary texts, academic prose, and official documents, published in the People's Republic of China in the 1990s. Following FLOB/FROWN, the corpus contains five hundred 2,000-word samples taken disproportionally from 15 genres in written Mandarin Chinese, totaling one million words.

The corpus data for this study were obtained exclusively from the LCMC. I obtained the 50 most frequent verbs, the tokens of which occur no fewer than 300 times, and searched them as key words using the web-based concordancer. If the number of the hits which were obtained using a particular key verb search was greater than 300, I randomized the results to get 300 hits. The 15,000 hits which I obtained in this way (50 key verbs multiplied by 300 tokens) form the basis of my corpus analysis. Each clause which contains the key word (verb) in the query hit was individually examined in the context of its sentence to see if it was a serial verb construction. The range of multi-verb sequences which were identified from the corpus searches is rich and covers a wider range of construction types. According to form-meaning pairings in which particular forms which subsume the surface syntactic features of constructions are linked to certain meanings, eight types of SVCs were identified from the corpus.

4.1 Motion Construction

One type of SVC which motion verbs often enter into is a motion construction which has the form [V1$_{motion}$ V2$_{event}$]. The schematic meaning of this construction is movement-for-event—that is, a movement is carried out in order to conduct another event. In motion constructions, typically the first verb is *lai* 'come' or *qu* 'go' and the two verbs share a tight situational inter-dependence. It is often the case that movement is accompanied by a purpose which is expressed by another verb, as shown in (13).

(13) **Qu   chi**   fan.
     Go   eat   food.
     'Go eat.'

4.2 Directional Construction

Motion verbs are very frequently used as V2 to indicate direction to form directional constructions (e.g., Li & Thompson 1981). This type of SVC has the schematic nature [V1$_{\text{MOTION/ACTION}}$ V2$_{\text{DIRECTION}}$], in which the second verb signifies the path or direction of the first verb, as illustrated in (14). In this case, the verbs in the V2 position do not specify motion in their own right, but only the direction or the path of the motion or action suggested by the first verb, the main verb.

(14) Jiang Xiaoyan   tongzhi   da   bu   **zou lai**
      Jiang Xiaoyan   comrade   big   step   **walk come**
      'Comrade Jiang Xiaoyan walked over here in big steps'

4.3 Resultative Construction

In the corpus, we can see another construction—the resultative construction—in which the V2 is also quite restricted lexically. This construction has the schematic form [V1$_{\text{ACTION}}$ V2$_{\text{RESULT}}$], such that the second verb indicates the result or end state of the action denoted by the first verb. In (15) the result of wiping the dirty things is that the dirty things drop away

(15) Zhangsan   **mo   diao**   le   zang   dongxi.
      Zhangsan   **wipe drop**   PERF   dirty   thing
      'Zhangsan wiped the dirty things away.'

4.4 Pivotal Construction

In the Chinese linguistics literature, there is one common SVC called the pivotal construction. Such a construction has the canonical form [NP1 V1 NP2 VP2] with the NP2 serving both as the landmark—the secondary participant for the first event and the trajector—the primary participant for the second event. As (16) shows, *wo* 'me' acts as both the landmark of V1 *rang* 'let' and trajector of V2 ganhuo 'work'. In pivotal constructions, it is often the case that V1 causes V2 to happen in a direct or indirect way.

(16) Ta   yi   tian   dao   wan   **rang**   wo   **gan**   huo.
      3SG   one   day   till   night **let**   me   **do**   chore
      'S/he let me do chores from morning till night.'

4.5 Complement Construction

A complement construction has the schematic form [V1 V2$_{\text{COMPLEMENT}}$]. In complement constructions, the first verb is generally a communicative or cognitive/desiderative verb, while the second verb is subordinate and the entire clause it heads serves as the complement for the main verb, as the example in (17). In (17), the VP *youguo leisi de jingli* 'had similar experiences' functions as the complement of the main verb *shuo* 'say'.

(17) Pengyou   du   **shuo you**   guo   leisi   de jingli.
      friends   all   **say   have**   EXP   similar   POSS experiences

'All the friends said that (they) had similar experiences.'

4.6   Instrument Construction

Syntactically, the instrument construction has the schematic form [V1 NP$_{INSTRUMENT}$ V2] and in this construction the object of V1 is some nominal instrument used to carry out V2. In instrument constructions like (18), the first event functions as a precursor event whereby an instrument is obtained for the purpose of executing the second event. In (18), the purpose of taking a piece of iron is to pry the lock open. In instrument constructions, the first event always involves an instrument or tool.

(18) Wo   jiu   **na**   ge   tie   pian   **qiao**   suo.
      I   then   **take** CL   iron   piece   **pry**   lock
      'I then took a piece of iron (to) pry the lock.'

4.7   Shared Object Construction

SVCs with shared objects are what Baker (1989) defines as double-headed constructions. In this kind of construction, the two verbs establish a tight purposive relationship. The basic form of SVCs with shared objects is [V$_1$ NP$_{OBJ-V1/OBJ-V2}$ V$_2$]. In shared object constructions, an intervening object is shared by V1 and V2 as (19) illustrates.

(19) Wo   gai   **shao** fan   **chi** le
      I   should **cook** rice **eat** PRT
      'I should cook rice (to) eat.'

4.8   Coordinate Construction

There are instances of multi-verb sequences in which two verbs share a subject and each verb profiles an individual event to form a coordinate construction. In coordinate constructions, there is only a weak semantic relation without any tight causal or purposive relationship between them. The following example from the LCMC illustrates a coordinate construction with a shared subject.

(20) Jiajia   **zhu**   xin   fang **mai** dianshi.
      Every family **live**   new   house **buy**   TV
      'Every family lived in a new house (and) bought a TV.'

The two events in (20) seem to be in a sequential relation. However, the two verbs in each of these examples are relatively independent and they do not stand in a main/subordinate relationship. The two events denoted by the two events in these examples do not hold a purposive or causal relation.

5.   Event Integration

From the discussion of construction types, it can be found that there is a tendency for multi-verb sequences in Mandarin to encode a single but complex

event or two phases of one overall macro event rather than two separate events, as might be expected by the presence of two verbs. Moreover, there are just not many instances of serial verb constructions without purposive or other semantic interpretations in the corpus data. In fact, in those multi-verb sequences which have been traditionally considered SVCs in the literature, mostly V1 and V2 bear a kind of semantic relation. Thus, multi-verb sequences in Mandarin Chinese are frequently employed to code one overall event with two phases or two related sub-events under one semantic umbrella though the degree and nature of event integration can vary from construction to construction.

In this study, I propose that degrees of event integration are the key idea to account for serial verb constructions, an idea that takes its inspiration from the cognitive framework, which claims that the organization of language is not form-driven but meaning-driven and that many linguistic units are of a graded phenomenon. Conceptually, there is a continuum regarding multi-verb sequences running from highly autonomous (lexically open and semantically independent events) to highly integrated (lexically fixed and semantically dependent) events. Mandarin speakers conventionalize constructions to express complex events that lie on different portions of this continuum. Thus, the idea of event integration associated with multi-verb sequences enables us to develop an account for all types of SVCs, whether they are specialized, idiomatized, and fully integrated expressions or productive, analyzable, and fully independent syntactic patterns.

Among serial verb constructions, some express a single event encompassing multiple phases, while others express two distinct events each being construed as having only a single phase. A multi-verb sequence like (21) represents the limiting case of complete event independence of two events denoted by two verbs, while the multi-verb sequence in (22) represents the limiting case of complete event integration of two sub-events denoted by two verbs.

(21) Ta   meitian   **duanlian**   shenti **xuexi** yingyu.
     3SG   everyday   exercise   body study English
     'S/he exercises (and) studies English every day.'

(22) Ta   **na   qu**   le   yi   ben   shu.
     3SG   take   go   PERF one   CL   book
     'S/he took away a book.'

However, most multi-verb sequences have interpretations which lie somewhere between the extremes of integration and independence of the two verbs/events. The two verbs/events in many such sequences may be causally, sequentially, or otherwise related to various degrees. Multi-verb sequences in Mandarin are a graded phenomenon and reveal a continuum of event integration/independence. By analyzing multi-verb sequences from the perspective of a continuum of event integration/independence, all types of such sequences can be comfortably accounted for.

In terms of the continuum of event integration of the verbal sub-parts of SVCs, coordinate constructions as in (21) and directional constructions as in (22) anchor the two ends of the scale of event integration/independence. Shared object constructions display tighter event integration than coordinate

constructions. In coordinate constructions, there is no obvious semantic relation or only a weak one between the two verbs. In such constructions, the two events expressed by the two verbs are in effect independent of each other. In contrast to coordinate constructions, shared object constructions signal a sense of purposive relation between the two events denoted by the two verbs. The instrument construction in which the instrument is involved in both events signals a tight purposive relation as well between its sub-events. However, instrument constructions in which the two sub-events happen more or less simultaneously display tighter event integration than shared object constructions in which two events happen sequentially. In instrument constructions, the two verbs have a tighter purposive relation with the first verb affecting the instrument to perform another action or activity and the first verb *yong* 'use' might be in the process of grammaticalizing into an instrumental marker. It is been commonly thought that *na* 'take' is widely used in instrument constructions. However, quite surprisingly, there is only one case of an instrument construction involving the verb *na* as V1 out of all the corpus returns. Instead, my corpus search indicates that the verb *yong* is the most common and probably the most prototypical verb used in instrument constructions in contemporary Mandarin.

Pivotal constructions and complement constructions seem to be localized in the middle portion of the continuum of event integration. Pivotal constructions in which two events have a causal relation and complement constructions in which the main event subsumes the subordinate event suggest tighter degrees of event integration of their (sub)-events than shared object constructions or instrument constructions. Complement constructions in which EVENT$_2$ denoted by the subordinate verb is not quite dependent on EVENT$_1$ denoted by the main verb and the integration resulting from the subordination of EVENT$_2$ to the profile of EVENT$_1$ display lower event integration characteristics than pivotal constructions. The event integration of pivotal constructions and complement constructions is not as tight as that of motion constructions. In motion constructions, two verbs which are typically *lai* 'come' or *qu* 'go' are frequently contiguous, reflecting a high degree of event integration. In some cases, *lai* 'come' or *qu* 'go' in motion constructions is more likely to express fictive motion rather than real motion to indicate purposefulness or intentionality. The event integration expressed in resultative constructions and directional constructions places them at the highly integrated end of the continuum. In these two constructions, V1 and V2 are usually immediately adjacent to one another. Directional constructions in which a tiny subset of V2 motion verbs have grammaticalized to some extent to indicate direction or path are the limiting case of event integration among SVCs. The continuum of event integration/independence reflected in various SVCs is illustrated in Table 2.

Event Integration Scale	Construction Type
Event Interdependence	Directional construction
	Resultative construction
	Motion construction
	Pivotal construction
	Complement construction
	Instrument construction
	Shared object construction
Event Independence	Coordinate construction

Table 2   Degrees of event integration/independence manifested in various
serial verb constructions

6.   Conclusions

This paper has addressed different kinds of serial verb constructions in Mandarin Chinese, seeking to solve a long-standing problem in Chinese linguistics, namely how to classify and account for the plethora of constructions that have been called serial verb constructions (SVCs) at one time or another. In the literature, many previous analyses have focused on one type or on a very limited set of multi-verb sequences and little effort was made to account for the whole range of SVCs in Mandarin. This study has aimed to provide an integrated account for all types of SVCs.

This study has provided evidence to support one of the basic Cognitive Grammar assumptions that many linguistic units are of a graded phenomenon by demonstrating that multi-verb sequences in Mandarin Chinese do not belong to a homogeneous category but display varying degrees of event integration/independence. This paper has demonstrated that, by analyzing SVCs from the perspective of a continuum of event integration/independence, the goal of providing an integrated account for all types of SVCs in Mandarin Chinese could be achieved.

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