

A Comparison of Event Framing in Japanese and Chinese

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Abstract

In light of recent work on 'scale structure', this paper provides a new perspective on event framing in Japanese and Chinese. It has a focus on motion as well as result as sub-domains of event representation. Lexical resources, such as verb compounds, serial verb constructions (SVC) and open / closed-scale adjectival predicates (APs) are revisited. It is postulated that different lexical resources present distinct event framing patterns. Japanese change-of-state (COS) events show sensitivity to the scalar structure of APs, i.e. closed-scale APs give rise to *satellite framing* and open-scale APs invite *verb framing*. The distribution of Chinese motion events denoted by SVCs is not arbitrary but restricted i.e. the order of motion morphemes must be [open / closed - scale change morpheme + closed-scale change morpheme], meaning the second constituent has to be closed-scale morpheme. This study argues that the distinct event framing patterns intralinguistic and crosslinguistic are based on the diversity of lexical resources of motion/resultative event framing and preferences for event-encoding options by selecting different linguistic resources.

Keywords: Cognitive semantics, Event framing, Japanese, Chinese



1. Introduction

Ever since Leonard Talmy's (1975, 1985, 1991, 2000) intriguing proposal that languages fall into two types, namely *satellite-framed* and *verb-framed* languages, a number of studies on event framing in various languages have been published. Japanese and Chinese are the two languages focused on in the present study because they belong to two opposing types according to Talmy's typology. Japanese habitually frames the Path of motion in the verb, and hence is allegedly a *verb-framed* language. Chinese, on the other hand, belongs to *satellite-framed* group because the Path is typically expressed in 'satellites' while Manner is expressed in verbs. This view, however, is called into question if attention is paid to the following verb compounds of Japanese and Chinese.

- (1) a. Taroo wa yamano o kakemeguru Taroo-TOP hills fields ACC run about 'Taroo runs about on the fields'
 - b. Zhāng sān zài bēn păo
 Zhāng sān PROG run-run
 'Zhāng sān is running'

In (1), Japanese kakemeguru 'run-run' and Chinese bēnpǎo 'run-run' are both verb

compounds, involving changes of locations. The motion constituents in the two compounds

are not bound, i.e. both V1s kakeru; bēn, and V2s meguru; pǎo can be used separately.

Moreover, they are all atelic verbs. This similarity gives rise to a question as to whether

Japanese and Chinese display the same event-framing pattern?

Talmy's dichotomous typology has been criticised by many scholars in points of detail (see, for example, Matsumoto1996, Ramchand & Folli 2005, Croft 2009). Among the critics, Slobin (2004b) and Zlatev and Yangklang (2004) are the most important. They propose a third class: *equipollent framing*, which seems to apply to languages that entail productive verb compounds or serial verb constructions. In Slobin's (2004) view, manner and path in Chinese and other serial verb languages receive equal weight. However, concerning example (1), the following should be considered.

(a) Whether Japanese utilises an additional *equipollent framing* as well?

(b) The spirit of Slobin's proposal of *equipollent framing* is that multiple verbs have the same status. However, if one of the verbs behaves as the grammatical head and the rest of the verbs function as subordinates, his proposal fails. Therefore, a crucial question arises as to which criteria are used for judging the main verb status. Specifically, are serial verb constructions (SVC), verb compounds of Chinese and Japanese truly equipollent?

This paper provides a new perspective on the typology of event framing in Japanese and



Chinese with a focus on motion as well as result as sub-domains of event representation. Furthermore, a typology of event framing in Japanese and Chinese is postulated as follows.

- i. Different lexical resources exhibit distinct event framing patterns.
- ii. The distinct event-framing patterns both intralinguistic and crosslinguistic are based on the diversity of lexical resources of motion/non-motion event framing and preferences for event-encoding options by selecting different lexical resources.

To consider (a) and (b) above, and in support of the above-mentioned hypothesis, this paper is mapped out as follows: In section 2, we reevaluate Talmy's typology based on relevant data. Section 3 provides the framework, i.e. the 'scalar structure', which is adopted in this study. Section 4 is devoted to Japanese event framing. Discussions are focused on open/closed-scale adjectival predicates (APs), verb compounds and boundary markers. In section 5 we examine the event-framing behaviours of Chinese motion /change-of-state (COS) events that are denoted by SVC and verb compounds. Finally, in section 6, we discuss the role of lexical and morpholexical resources that govern the event framing and conclude this paper.

2. Review of the two-category typology

Talmy defines a satellite as a grammatical constituent, other than a nominal argument, that has a sister relation to the verb: 'The satellite can be either a bound affix or a free word' (Talmy 2000:222). Incorporating this, Chinese is a *satellite-framed* language, in which manner is framed by the main verb, and path by a satellite (i.e., particles). On the other hand, Japanese is a *verb-framed* language, as its path is framed by the verb and manner by a subordinate adjunct. Now we are in the position of reevaluating this dichotomous typology. The examples in Table 1 are in accordance with Talmy's hypothesis on Japanese and Chinese event framing, and Table 2 foregrounds some problems with Talmy's hypothesis.

	Motion Event	Result Event	Framing pattern
a. Japanese	Taroo wa ie ni aruiteitta	Taroo wa oboreshinda	v^{I} -f
	Taroo Top home DAT	Taroo Top drown-die PAST	
	walk-PAST	'Taroo drowned'	
	'Taroo walked home'		
b. Chinese	gŏu tiào guò le zà lán	miànbāo kăo-hăo le	s-f
	dog jump across PAST the fence	'bread bake-PAST'	
	'The dog jumped across the	'The bread was baked'	
	fence'		

Table 1. Framing	natterns in	accordance	with T's	almy's typolo	σv
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The spirit of Talmy's original hypothesis is asymmetric in its framing of the semantic components of an event: 'one component is expressed by a verb / main predicate, and the other component by an element that cannot independently function as a verb / main predicate'.

¹ *v-f*: verb framing; *s-f*: satellite framing



Given this, regarding the motion events of (a) and (b) above, in Chinese, the manner is expressed by the main verb *tiào* 'jump' and the path is expressed by an element other than a verb – which Talmy calls a satellite – such as $gu\partial$, 'across'. It is worth pointing out that $gu\partial$, 'across' used to be a verb with both transitive and intransitive use in the Shangzhou Dynasty (14 BC -11 BC). After a long-term grammaticalisation, its verbal feature weakened and it came to behave more like a directional complement. In Japanese, *aruiteitta*, 'walked' expresses path instead of manner in the main verb. Such data supports Talmy's dichotomous typology.

If attention is paid to Table 2 below, Japanese ablative case marker or postposition *kara*, 'from', and *made*, 'until' bind the path and this effectively entails a goal function (Aske 1989; Beavers et al.). This inspires us to ponder whether Japanese reprents *satellite framing* as well? Moreover, examples b in Table 2 are composed by two synonymous morphemes, which contribute to exactly the same motion event as well as COS events. This raises a question as to whether Chinese performs *equipollent framing*?

 Table 2. Inconsistencies in Talmy's typology

	Motion Eve	ent	Result Event	Pattern
a. J^2	Taroo wa eki	made	Kabe wo masshir ni naru made nurituketa	s-f
	aruiteita		Wall Acc red into turn until paint-PAST	
	Taroo Top statio	on ablative	'Paint the wall until it becomes red'	
	walk-PAST			
	'Taroo walked to the	station'		
b. C	Zhāng sān zài bēn	pǎo	Diàn yuán qiē-duàn le	e-f
	Zhāng sān PROG run-	run	Electricity cut-off PAST	
	'Zhāng sān is running		'The electricity was cut off'	

The observations suggest how, even within the same language, the framing pattern can differ strikingly. The observations suggest how, even within the same language, the framing pattern can differ strikingly. For a better understanding of Japanese and Chinese event-framing typology, in the following sections we discuss different lexical resources, i.e. verb compounds, SVCs, APs and boundary markers of the two languages.

3. Framework: 'scale structure'

The framework adopted in the present study is 'scale structure'. It is considered essential in determining telicity as well as event classification since it plays a significant role in determining the verb meanings (see Levin 2010). Kennedy (2001) and Kennedy and McNally (2005) give the definition of 'scale structure':

'a scale as composed of a set of ordered points or intervals indicating measuring values on a dimension, e.g. height, distance, or temperature'

² J: Japanese; C: Chinese; *e-f*: equipollent framing



Incorporating this, Rappaport Hovav and Levin (2010) indicates that motion verbs and COS verbs can be classified into four types according to the scalar structure of the verbs. In the domain of motion, a scale is understood on the dimension of distance, that is, the distance of the moving object with respect to the reference object (Rappaport Hovav & Levin 2010: 29). For example, the points in the scale of *arrive* are ordered in a direction from the reference object, i.e. the starting point of the departure and the event we are heading towards. In the domain of COS, the relation to the standard correlates with the direction of change, i.e. increase or decrease in value of the attribute, e.g. 'We froze the ice cream solid' (Rappaport Hovav & Levin 2010: 29).

Furthermore, Levin (2010) points out a crucial property of scalar structure, which is boundedness, i.e. whether a scale has an endpoint or not. Given this, the scalar change morphemes in motion/COS events can further be divided into open-scale morphemes (e.g. *recede, long*) and closed-scale morpheme (e.g. *return, die*). The closed-scale motion and COS events morphemes can further be divided into multi-value closed-scale morphemes (e.g. *come, drunk*) and two-value closed scale morphemes (e.g. *enter, die*) Levin (2010).

In light of 'scalar structure', this study tentatively classifies the motion as well as COS morphemes and looks at how the path / resultative components are framed in Japanese and Chinese.

4. Event framing in Japanese

Japanese motion and COS events are mainly realised through three means: (a) verb compounds; (b) adjective predicates (open-scale and closed-scale APs); and (c) boundary markers. To answer the question as to whether Japanese additionally displays a *satellite framing* or an *event framing*, the above three lexical resources are investigated.

4.1 Framing strategies of resultative events denoted by APs

We begin by examining motion and COS events denoted by adjective predicates.

4.1.1 Open-Scale/Closed-Scale Adjectives

Before the discussion of event-framing behaviours, it might be worth taking a look onto the nature of adjectives. Wechsler (2000) divided adjectives into two macro groups in terms of telicity, i.e. gradable and non-gradable. Gradable adjectives can furthermore be divided into open-scale adjectives and closed-scale adjectives. Open-scale APs have no endpoint, e.g. *long*, *big*, whereas closed-scale APs do, e.g. *empty*, *dead*.

In Japanese, both open-scale and closed-scale APs are licensed in COS events, as illustrated in (2).

(2) a. Taroo wa gomu o nagaku nobashita.	(Open-scale AP)
Taroo TOP rubber ACC long stretch-PAST	
'Taroo stretched the rubber dough long'	
b. Taroo wa himo o massugu ni nobashita.	(Closed-Scale AP)



Taroo TOP string ACC straight COP stretch-PAST 'Taroo stretched the string completely straight'

In (2a), the result *nagai* 'long' is an open-scale AP. It is worth pointing out that English does not permit open-scale APs. The reason open-scale APs are allowed in Japanese COS events is down to a grammatical condition, termed 'a disposition to change' (see Ono 2010). That is, the verb *nobasu* 'stretch' carries the implication that results in *nagai* 'long'. In this regard, the resultative path denoted by an open-scale AP seems lexicalised into the verb root. Therefore, the events denoted by open-scale APs represent *verb framing*.

The COS event in (2b) is denoted by a closed-scale AP, i.e. *massugu*. To note, *ni* here functions as a resultative copula. Therefore, the event denoted by *ni* has its resultative path expressed by a copula phrase rather than by the head verb *nobasu* 'stretch'. Hence, events denoted by closed-scale APs may perform *satellite framing*.

4.2 Framing strategies of COS events denoted by boundary markers

Furthermore, boundary markers contributes to motion and COS events. Two 'until' markers, *made* and *ni* 'into' are employed. A distinction between *made* and *ni* lies in that *made* is not compatible with resultative readings, whereas *ni* has both motion and resultative domains. The distinction of the two markers is illustrated by (3):

- (3) a. *Kabe o masshiro made nutta.Wall ACC white until paint-PAST'Paint the wall until it is white'
 - b. Kabe o masshiro ni nutta.Wall ACC white into paint-PAST 'Paint the wall white'

What prevents the *made* construction from encoding COS events? Pustejovsky (1991) points out that a sentence denoting a process has been transformed into a transition by the presence of a prepositional phrase denoting a bounded path. Essentially, in COS events, the process must be durative. That is, when the verb denotes a process, and there is a phrase that denotes a function from process to state, during this process, the route-path must be explicated or demonstrated by route-path compensation. Thus events denoted by verb phrase can be regarded as a durative transition (Pustejovsky1991). Crucially *made* describes the resulting state of spatial transition and is incompatible with the profiling of the process of motion along a path (also see Ono 2010). Two solutions are found to make *made* bear a resultative reading: (a) add a light verb *ni naru* as compensation (see 4); (b). Meet a grammatical condition 'a disposition to change' (see 5) (Ono 2010).

- (4) Kabe o masshiro ni naru made nuttaWall ACC white into turn until paint-PAST'Paint the wall until it becomes white'
- (5) a. Taroo ga chokkaku **made** kinzokuboo o mageta.



Taroo NOM square until metal bar ACC bend-PAST 'Taroo bent the metal bar to square' cf. b. Taroo wa kinzokuboo o chokkaku **ni** mageta

Taroo NOM metal bar ACC square to bend-PAST Lit: 'Taroo bent the metal bar to square'

(Ono 2010)

Supplied with a light verb *ni naru*, the lacking route-path of the COS event in (4) is compensated for, making the result into an accomplishment. Crucially, *ninaru made* (in 4) is a supplement to the COS event and thus should be considered a satellite. Given this, it seems that the resultative path is framed outside of the head verb and the COS events denoted by the light verb *ni naru* exhibits *satellite framing*.

Regarding (5), the supplementing of the grammatical condition 'disposition to change' makes *made phrase* open to a resultative reading. However it should be stated that the supplement must coincide with the manner verb, otherwise the sentence is ill formed, as shown in (6):

- (6) *Taroo ga usuku **made** kinzokuboo o mageta.
 - Taroo NOM thin until metal bar ACC bend-PAST

'Taroo bent the metal bar to thin'

Given this, let us go back to (5). (5a) is switchable with (5b), which is denoted by a copula phrase. In this sense, *made* somehow behaves like a copula rather than an allative marker. Given this, we could assume the resultative path here is framed outside of the verb root. Thus, the COS events denoted by *made* phrase (e.g. 5) suggest *satellite framing*.

4.3 Framing strategies of events denoted by verb compounds

Finally, we come to verb compounds. Generally, verb compounds in Japanese are classified into two types: syntactic compounds and lexical compounds (Kageyama 1993).

In lexical compounds, as exemplified by *furi-tsumoru* 'fall-accumulate'³, V1 *furu* 'fall' and V2 *tsumoru* 'accumulate' seem to be assigned equal semantic status. Kageyama (1999: 195) indicates that the events denoted by V1 and V2 take place simultaneously and, syntactically, V1 and V2 function as a head (Kageyama (1993: 99); Fukushima (2005)). Both are substantive verbs. All these comments suggest that lexical verb compounds may perform *equipollent framing*. However Japanese is an inflectional language. Despite the equipollent semantic status V1 and V2 share, the tense, aspect, voice, modality and honorific inflections of the whole compound all rely on V2. Given this, the two morphemes should no longer be considered equal, but rather we might suggest V2 ranks higher than V1 in a morphological respect. Therefore Japanese lexical verb compounds do not display *equipollent framing*. On the other hand, the resultative path denoted by V2 is lexicalised into the verb root, thus *verb framing* is suggested.

³ This verb compound is quoted from Kageyama (1999: 195).

Syntactic compounds can be further categorised into three types: rising type, control type, and complementation type. Among them, rising and complementation types involve motion/COS events. (7) provides examples for each type:

(7) a. [Rising type]

Taroo ga kabin o wari-kake-ta
Taroo NOM vase ACC break-kake-PAST
'Taro was about to break the vase'
b. [Complementation type]
Taroo ga kabe o nurinaosita
Taroo NOM wall ACC paint-again-PAST

'Taroo painted the wall again'

In (7a), V1 *waru* 'break' denotes the manner of the action and V2 *kakeru* 'about to' contributes to the resultative path. Crucially, a weakening of the verb is seen in the second morpheme. It behaves like a verbal suffixal aspectual form that refers to the inchoative point of activity or change. As a result, it should be regarded as a resultative complement.

Likewise, in (7b), the resultative path is denoted by the second morpheme naosu, which expresses the accomplishment of the action denoted by V1.

Given this, we argue that this COS event lexicalises the path information by a resultative complement rather than a head verb. Crucially, such a resultative complement behaves like a satellite, inspiring us to tentatively propose that *satellite framing* may potentially exist in Japanese.

5. Event framing in Chinese

In this section, our attention is turned to Chinese event framing. Chinese motion events are commonly expressed through multi-morpheme motion morphemes, which are termed SVC. Furthermore, verb compounds also contribute to motion/COS events.

5.1 Framing strategies of events denoted by SVC

Inspired by Slobin et. al's intriguing proposal of *equipollent framing*, Chen and Guo (2009) conducted an examination of motion event descriptions in Chinese novels. Their results show that Chinese should be categorised as an *equipollent-framed* language. This view is not on the right track, as it is not supported by syntactic or semantic evidence, as we shall now see.

After long-term grammaticalisation, contemporary Chinese has the following inventory of path verbs:

(8) jìn, 'enter'; chū, 'exit'; shàng, 'ascend'; qǐ, 'ascend'; xià, 'descend'; guò, 'cross'; huí, 'return'; dào, 'reach'; lái, 'come'; qù, 'go'

In light of the property of 'scalar structure' (i.e. boundedness), these morphemes can be divided into three groups: (a) non-scalar change morphemes; (b) open-scale morphemes; and (c) closed-scale morphemes. The classification is demonstrated in (9) below:

- (9) (a). Non-scalar change morpheme: fēi xiáng 'fly-fly'; bēn pǎo 'run-run'
 - (b). Open-scale change morpheme: *shàng*, 'ascend'; *xià*, 'descend'; *qĭ*, 'ascend';

huí, 'return';

(c). Closed-scale change morpheme: jin, 'enter'; $ch\bar{u}$, 'exit'; $gu\dot{o}$, 'cross';

dào, 'reach'; lái, 'come'; qù, 'go'

Essentially, the order of the forming path verb is not arbitrary, but restricted to the order of [Open-scale change M+ Closed-scale change M] or [Closed-scale change M + Closed-scale change M]. That is, the second constituent has to be closed-scale change morpheme. Nonetheless, interestingly, any such combinations, when preceded by a non-scalar change morpheme (i.e. an unergative verb or a transitive verb) can form a SVC (see 11).

(10) a. [Open-scale change M+ Closed-scale change M]

e.g. shàng lái 'up-come'/*lái shàng 'come-ascend'

- b. [Closed-scale change M + Closed-scale change M]
 e.g. *jìn-qù* 'enter-go'
- (11) a. [Non-scalar change M (unergative V) +Open-scale change M + Closed-scale change M]
 e.g. pá-shàng-lái 'creep-up-come'
 - b. [Non-scalar change M (transitive V) + Closed-scale change M + Closed-scale change M] e.g. $ch\overline{i}$ - jin- $q\dot{u}$ 'eat-in-go'

Due to the restriction of morpheme order, it seems that the multi-morphemes in SVCs are not equipollent, i.e, closed-scale change morphemes rank lower than open-scale change morphemes. This may be caused by the grammaticalisation that closed-scale change morphemes receive. Essentially, it is the first constituent that determines the transitivity of the whole serial verb construction and thus should be considered as the semantic core. The other two constituents do not entail causativities. In this sense, the Chinese SVC does not suggest *equipollent framing*. But due to the fact that the motion manner is lexicalised by the head verb, i.e. the first constituent, and the path is conflated by the rest two constituents, meaning the SVC displays *satellite framing*.

5.2 Framing strategies of events denoted by verb compounds

Previous accounts of Chinese compounds fall into two groups. In the first group, all compounds are viewed as lexically formed; among this group are Chang (1998) and Yafei Li (1990,1991). In the second group, Chinese compounds are analysed as syntactically derived, representatives of this group being Dexi Zhu (1982: 32-33). Accordingly, five types are identified, namely, Subject-Predicate Type, Predicate-Object Type, Modifier-Predicate Type, Predicate-Complement Type and Coordinate type. Base on previous accounts, the study proposes two macro-groups according to the distinctions of productivity, transitivity and semantic composition. The classification is give in (12) and (13).



(12) Lexically formed group:	(Paratactic-Structure Type) (e.g. <i>bēn-pǎo</i> , 'run-run')			
	(Predicate-Object Type) (e.g. chong-dian, 'charge')			
(13) Syntactically derived group: (Predicate-Complement Type) (e.g. <i>zuò-hǎo</i> , 'make-over')				
(Modifier-Predicate Type) (e.g. hé-chàng, 'together-sing')				
	(Subject-Predicate Type) (e.g. tóu-téng, 'head-pain')			

Among these compounds, three types of verb compounds tolerate 'translational motion' (Talmy 2000: 35-36), i.e. (i) Paratactic structure types; (ii) Predicate-complement types; (iii) Modifier-Predicate Type. In the coming paragraphs, the framing strategies of these three types of compounds are discussed.

The lexically formed group, represented by the paratactic-structure type of compounds, can be exemplified by the motion verb $b\bar{e}n$ - $p\check{a}o$, 'run-run', shown in (14):

(14) Zhāng sān zài bēn-pǎoZhāng sān PROG run-run'Zhāng sān is running'

This type of compound is composed by two non-scalar change motion morphemes, i.e. V1 $b\bar{e}n$ 'run' and V2 $p\check{a}o$ 'run'. The two morphemes have the same meaning and scalar properties. They are considered a synonymous lexicon. The events represented by V1 and V2 are classified as the same categories (i.e. both of them are motion events). Moreover, phonologically, such compounds usually appear as bisyllabic words. Therefore, syntactically, semantically and phonologically, the two motion morphemes are equipollent. Given this, we consider the [non-scalar change motion morphemes] pattern of motion events perform *equipollent framing*. Other examples include *fēi-xiáng* 'fly-fly'.

Predicate-complement compounds are produced by adding a resultative complement to a transitive verb V1, such as, *kǎo-hǎo* 'bake over', as exemplified by (15):

(15) Dàngão kǎo-hǎo le
 cake bake PAST
 'The cake has been baked'

The compound is composed of an action verb V1 *kǎo* 'bake', which does not imply an accomplishment or an achievement. V2 plays the role of resultative complements, expressing a state or the result of an action. They are regarded as adjectives (Li and Thompson et al., 1981). In a recent work, they are argued to be stative verbs Palmer (2005). Despite such debate, there is no doubt that this verbal weakening is a typical manifestation of grammaticalisation and, hence, these complements should be considered satellites rather than substantive verbs.

This is also backed up by the 'scalar structure' perspective. V2s can be open-scale APs (e.g., $h\check{a}o$ 'good') or closed-scale APs ($m\check{a}n$ 'full'; $gu\bar{a}ng$, 'over'). A variety of such V2s are allowed by V1 and crucially these Vs are not able to occur by themselves. In this regard, we can assume that it is the first constituent that determines the transitivity of the whole and thus

it should be viewed as the head. The resultative path (V2) should be considered as being framed outside of the verb roots, behaving as a satellite. Therefore, the event-framing performance should be *satellite framing*. We believe this prototypical compound contributes to Talmy's hypothesis that Chinese is a *satellite -framed* language.

Now we come to the modifier-head type of compounds, exemplified by (16):

(16) Gōng sūn zàn bèi Wén chŏu zhuī shā

Gōng sūn zàn Pass Wén chǒu chase-kill

'Gongsunzan is chased by Wenchou, and Wenchou intends to kill him'

The compound exhibits two events, i.e. a motion event denoted by the first morpheme and a COS event denoted by the second morpheme. The two morphemes are not bound and both are atelic. The former event (represented by V1) plays the roles of explanation, description and restriction in relation to the latter event (represented by V2). As shown in the above example, V1 *zhuī*, 'chase' is a modifier, describing the manner of the action, carried by V2 *shā*, 'kill'. Furthermore, the whole compound seems headed by V2 since when V2 is an intransitive verb the whole compound is intransitive and V2 is predicated of the subject. In this respect, this type of verb compounds suggests *verb framing*, and somehow it comes to resemble a Japanese compound.

6. The compatibility of sequential path

Japanese and Chinese further differ in terms of the compatibility of sequential paths. First of all, sequential paths seem ruled out in Japanese:

(17) Sequential paths in Japanese

*Taroo ga ie no naka kara toshokan ni deta Taroo NOM house GEN inside allative library DAT enter

Lit: 'Taroo walked out of the house and went to the library'

To make a distinct sequential path available in Japanese, periphrastic expressions should be employed, thus giving rise to a range of head verbs in the coordinate position:

(18) Taroo ga ie kara dete toshokan ni itta Taroo NOM house allative exit GER library DAT go PAST Lit: 'Taroo walked out of the house and went to the library'

On the contrary, sequential paths seem to be well formed in Chinese, as we can see from the expression corresponding to (17) which is given in (19):

(19) Sequential paths in Chinese
māma cóng jiā lǐ chū laí, qù le túshūguǎn
mother from house exit-out go PAST library
'Mother walked out of the house and went to the library'

In fact, Chinese allows a combination of non-spatial and spatial paths as long as they contribute to a single entity. Three patterns of such combinations have been observed: (a)



[spatial path + spatial path]; (b) [spatial path + non-spatial path]; and (c) [non-spatial path + spatial path], which are exemplified by (20):

(20) a) [Spatial path + spatial path] māma cóng jiā lǐ chū laí, qù le túshūguǎn mother from house exit-out go PAST library 'Mother walked out of the house and went to the library'
b) [Spatial path + non-spatial path] Zhāngsān dào le Dōngjīng chéng le wǔ nǚ Zhāngsān reach PAST Tokyo become PAST prostitute 'Zhangsan reached Tokyo and became a prostitute'
c) [Non-spatial path + spatial path] Fēng chuī zhe luòyè màn tiān fēi Wind blow PROG leaves full-sky fly 'The wind is blowing the leaves, (causing them to) fly in the air'

The distinction regarding the possibility of sequential complex paths embodies the idea that Japanese motion events mainly encode the path with verb roots, which gives rise to a restriction, i.e. one verb can only encode an endpoint in a single clause. Only when a range of head verbs are in the coordinate position can multiple paths be permitted.

On the other hand, event framing in contemporary Chinese is more flexible, i.e. manner can be conflated either in the main verb or by a satellite. This provides a less restrictive environment for encoding the path and thus leads to sequential paths being well formed in Chinese.

7. Conclusions

The role of linguistic resources that govern the distinction of event framing can be various,

such as lexical, syntactical and morpholexical. This paper has focused on verb compounds,

SVCs, APs and boundary markers. Observations suggest that different lexical resources show

distinct behaviours of event-framing patterns. The result can be summarised as follows.

(a). Contemporary Chinese contains rich resultative satellites, particles, verb compounds and serial verb constructions. Three options of *event framing* are exhibited.

First, three types of verb compounds tolerate 'translational motion' (Talmy 2000: 35-36), i.e. (i) Paratactic structure types; (ii) Predicate-complement types; (iii) Modifier-Predicate Type. In terms of predicate-complement compounds, the verbal weakening suggests that the grammaticalised V2 is a satellite rather than a substantive verb, meaning the predicate-complement type of compounds display *satellite framing*. Moreover, paratactic-structure type compounds suggest *equipollent framing* as, syntactically, semantically and phonologically, the two synonymous morphemes receive equal weight. In addition, the modifier-head type of compounds exhibits two events, i.e. a motion event



denoted by the first morpheme and a COS event denoted by the second morpheme. The former event (represented by V1) plays the roles of explanation, description and restriction in relation to the latter event (represented by V2). It seems that the whole compound is intransitive and V2 is predicated of the subject. In this respect, this type of verb compounds suggests *verb framing*.

Second, regarding SVCs, the combination order of the multi-morphemes in SVC is not arbitrary, but restricted to the pattern [open / closed - scale change morpheme + closed-scale change morpheme], meaning the second constituent has to be closed-scale morpheme. This gives rise to closed-scale change morphemes ranking lower than open-scale change morphemes and thus suggests the multi-morphemes are not assigned to the same status either syntactically or semantically. Incorporating this, *event framing* is not valid in SVC.

(b). Japanese lacks particles and resultative complements, but has a rich inventory of morph syntactic devices and boundary markers, e.g. APs, verb compounding and boundary markers.

The COS events show sensitivity to the scalar structure of APs, i.e. closed-scale APs give rise to *satellite framing* and open-scale APs invite *verb framing*.

In lexical compounds, V1 and V2 function as a head and both are substantive verbs. They seem to be assigned an equal semantic status but, morphologically speaking, V2 bears the inflections. This leads to the conclusion that *equipollent framing* is not acceptable in Japanese. In terms of COS events denoted by syntactic compounds, V1 denotes the manner of the action and V2 contributes to the resultative path. Crucially, weakening of the verb is seen in the second morpheme. It behaves like a verbal suffixal aspectual form that refers to the inchoative point of activity or change. As a result, it should be seen as a resultative complement. Given this, the COS events denoted by syntactic compounds appear to lexicalise the path information by a resultative complement rather than a head verb. This inspires us to propose that *satellite framing* may potentially exist in Japanese.

Finally, with regard to the COS events denoted by boundary markers, the supplementary light verbs and the grammatical condition 'disposition to change', which make *made* available for a resultative reading, suggest *satellite framing*. Furthermore, motion events denoted by the ablative case marker *kara*, 'from' and allative case marker *made* display *satellite framing*. Table 3 gives a comparison of the distinct event-framing patterns in Japanese and Chinese.

Linguistic resources	Chinese ME	Japanese ME	Chinese COSE	Japanese COSE
Verb compounding	sf; ef	vf	sf; ef	vf
SVC	vf	Ø	vf	Ø
Open-scale AP	Ø	Ø	Ø	vf
Closed-scale AP	Ø	Ø	Ø	sf
Boundary marker	sf	sf	Ø	sf

Table 3. Lexical resources in line with the event-framing strategies in motion and COS events



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